

January 8, 2014

**RECEIVED**

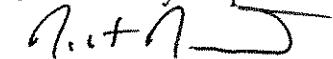
*By Alameda County Environmental Health at 3:10 pm, Jan 13, 2014*

Subject: Jordan Ranch Property – Former Leaking Underground Storage Tank  
Dublin, California

**PERJURY STATEMENT**

"I declare, that to the best of my knowledge at the present time, the information and/or recommendations contained in the attached document are true and correct."

Submitted by Responsible Party:



ROBERT RADANOVICH  
BJP-ROF Jordan Ranch, LLC  
5000 Hopyard Road, #170  
Pleasanton, CA 94588

FOURTH QUARTER 2013  
GROUNDWATER MONITORING REPORT  
JORDAN RANCH – PARCEL H  
DUBLIN, CALIFORNIA



Submitted to:  
Mr. Jerry Wickham  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

Prepared by:  
ENGEO Incorporated

Project No.  
7828.000.001

January 8, 2014

Project No.  
**7828.000.001**

January 8, 2014

Mr. Jerry Wickham  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

Subject: Jordan Ranch Parcel H – Former Leaking Underground Storage Tank  
Dublin, California  
ACEH Case No. R00002918

## **FOURTH QUARTER 2013 GROUNDWATER MONITORING REPORT**

Dear Mr. Wickham:

This letter summarizes the results of the fourth quarter 2013 groundwater monitoring event completed for the Jordan Ranch – Parcel H (Site) located in Dublin, California. This is the fifth monitoring event following completion of the soil and groundwater remediation activities performed in Fall 2011. The Site is located at the east side of the intersection of Central Parkway and Fallon Road. A vicinity map is attached as Figure 1.

### **WELL INSTALLATIONS**

During the fourth quarter 2013, we installed four additional groundwater monitoring wells to assess groundwater conditions at the east and south perimeter of the impacted groundwater area (Figure 2). The monitoring well installations were performed in accordance with the following methodology:

- The monitoring wells were constructed in general accordance with the California Code of Regulations, Title 23, Division 3, Chapter 16, Article 4, Section 2649. Prior to beginning the work, we obtained a well installation permit from Zone 7 Water Agency.
- The well borings were advanced using 8-inch-diameter hollow stem augers. The wells were grouped in pairs. At each pair, the two wells were spaced approximately 5 feet apart. All cuttings were drummed for offsite disposal.
- MW-6A and MW-7A were screened from 9 to 19 feet below the ground surface. MW-6B and MW-7B were screened from 20 to 30 feet below ground surface. The monitoring wells were constructed with 2-inch-diameter PVC casing and a screen slot size of 0.020 inches. The annular space surrounding the screen zone was filled with a sand pack

(typical #3 lonestar). A two foot layer of hydrated bentonite was placed above the sand pack and a grout seal was installed above the bentonite to the ground surface. The wells were completed with a standard flush-mount well box.

- Forty-eight hours following installation, the wells were developed using a surge block, and a minimum of 10 well casing volumes were purged with a bailer and submersible pump.
- The new monitoring wells and existing monitoring wells were surveyed to provide the latitude, longitude, and elevation of the top of casing.

## **GROUNDWATER MONITORING**

### **Groundwater Elevations**

ENGEO measured and recorded groundwater depths from the top of well casings (TOC) for wells MW-1, MW-2, MW-4, MW-5, MW-6A, MW-6B, MW-7A, and MW-7B on November 22, 2013. The monitoring well locations are shown on Figure 2.

Prior to recording the depth to water, we removed the well caps and allowed the water levels in each well to equilibrate.

The depth to groundwater in the Site monitoring wells ranged from 7.37 feet below the TOC in MW-7B to 12.18 feet below the TOC in MW-6A.

During this sampling event, the groundwater flow appears to be toward the south with a gradient of approximately 0.031 feet per foot (ft/ft). Groundwater elevation contours for this event are depicted on Figure 2. The cumulative groundwater elevation data from this event is summarized in Table 1 (attached).

### **Well Sampling**

After recording groundwater depth measurements, we collected groundwater samples from wells MW-1, MW-2, MW-4, MW-5, MW-6A, MW-6B, MW-7A, and MW-7B. Well sampling logs are attached.

ENGEO conducted the following activities during sampling:

- Purged three well casing volumes from each well using a submersible pump.
- Monitored and recorded pH, temperature, and conductivity measurements during purging.
- Contained the purge water in labeled 55-gallon drums.

- Obtained groundwater samples using new disposable bailers.
- Transferred the groundwater to laboratory-provided, pre-preserved sample containers, which were labeled to include sample identification, date, and time of collection and requested analyses.
- Stored the groundwater samples on ice during transportation to TestAmerica Laboratories, Inc. in Pleasanton, California under documented chain of custody.
- Submitted the samples for the analysis of total petroleum hydrocarbons as gasoline (TPHg) and volatile organic compounds (VOCs), including naphthalene, methanol, ethanol, *tert*-butyl alcohol (TBA), methyl *tert*-butyl ether (MTBE), ethyl *tert*-butyl ether (ETBE), *tert*-amyl methyl ether (TAME), and diisopropyl ether (DIPE) by EPA Test Method 8260B, and total petroleum hydrocarbons as diesel (TPHd) by EPA Test Method 8015B using silica gel cleanup by EPA Test Method 3630. Additional carbon chain breakdown analysis was performed for the sample collected from MW-5.

### Groundwater Analytical Results

Concentrations of petroleum hydrocarbons and VOCs detected during the fourth quarter 2013 monitoring event are tabulated below:

Well Location	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-Benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	Naphthalene (ug/L)
MW-1	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0
MW-2	<50	1,000	1.4	1.9	13	36	1.7	56
MW-4	<50	<50	<0.50	<0.50	2.4	6.7	2.9	<1.0
MW-5	96 <sup>1</sup>	16,000	290	340	2,300	4,000	62	610
MW-6A	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0
MW-6B	<50	160	<0.50	1.0	6.0	16	<0.50	3.0
MW-7A	<50	<50	<0.50	<0.50	<0.50	<1.0	5.4	<1.0
MW-7B	<50	<50	<0.50	<0.50	<0.50	<1.0	7.2	<1.0

(1) Represents C10-C11, which overlaps with TPHg range. Carbon Chain breakdown indicates no diesel.

Cumulative groundwater monitoring well data is summarized in Table 2, attached. Copies of the groundwater laboratory report and chain-of-custody record are attached.

## FINDINGS

The carbon chain breakdown analysis performed for the sample from MW-5 identified that detectable concentrations are limited to the C4-C11 ranges. The fact that no detectable concentrations were detected in the C12 to C40 range is a strong indicator that diesel is not a chemical of concern (COC) in groundwater.

As shown in the comparison table below, concentrations of TPHg have decreased 78% to 93% since implementation of the soil and groundwater remediation in fall 2011.

Well Location	August 2010 (Pre)			November 2013 (Post)			Percent Decrease		
	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE
MW-1	<50	<0.5	<0.5	<50	<0.50	<0.50	---	---	---
MW-2	<b>15,000</b>	<b>780</b>	<b>170</b>	<b>1,000</b>	<b>1.4</b>	<b>1.7</b>	-93%	-99.8%	-99%
MW-4	<50	<0.5	<b>80</b>	<50	<0.50	<b>2.9</b>	---	---	-96%
MW-5	<b>74,000</b>	<b>7,500</b>	<b>100</b>	<b>16,000</b>	<b>290</b>	<b>62</b>	-78%	-96%	-38%

## FUTURE WORK

A minimum of three additional quarterly groundwater sampling events will be conducted to provide data from a complete hydrological cycle for new wells MW-6A, 6B, 7A, and 7B.

We are currently reviewing the ACEH correspondence letter dated December 5, 2013 and plan to address the comments by the listed due dates.

## LIMITATIONS

At the time we performed our professional services, they were consistent with those generally accepted environmental engineering principles and practices currently employed in Northern California. ENGEO does not express or imply any other warranty. Findings in this report are valid as of the day of monitoring. However, changes in groundwater conditions can occur with the passage of time, whether due to natural processes or human activity on the Site or on surrounding properties. ENGEO prepared this report for the exclusive use of our client. This report is applicable only for the subject property. We are not responsible for others' interpretations of this report's data. This report does not represent a legal opinion.

Alameda County Environmental Health  
Jordan Ranch Parcel H – Former Leaking Underground Storage Tank  
FOURTH QUARTER 2013 GROUNDWATER MONITORING REPORT

7828.000.001  
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Page 5

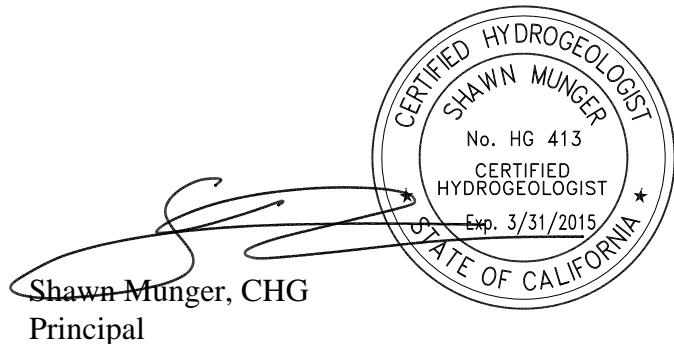
If you have any questions or comments regarding this report, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated



Morgan Johnson  
Environmental Scientist



Shawn Munger, CHG  
Principal



Jeffrey A. Adams, PhD, PE  
Associate  
mj/sm/jaa/cjn

Attachments: Figure 1 – Vicinity Map  
Figure 2 – Groundwater Elevation Contour Map – November 2013  
Figure 3 – Concentrations of Petroleum Hydrocarbons in Groundwater – November 2013  
Table 1 – Groundwater Elevations  
Table 2 – Groundwater Analytical Data  
Monitoring Well Sampling Logs  
Groundwater Laboratory Analytical Report and Chain-of-Custody Record

cc: Mr. Ravi Nandwana, BJP-ROF Jordan Ranch, LLC



0 FEET 2000  
0 METERS 1000

BASE MAP SOURCE: GOOGLE EARTH

**ENGEO**  
Expect Excellence

VICINITY MAP  
JORDAN RANCH - PARCEL H  
DUBLIN, CALIFORNIA

PROJECT NO.: 7828.000.001

DATE: AS SHOWN

DRAWN BY: SRP CHECKED BY: SM

FIGURE NO.  
1



A scale bar at the bottom of the page. The top part is labeled "FEET" and has tick marks at 0 and 20. The bottom part is labeled "METERS" and also has tick marks at 0 and 20. Both scales are represented by horizontal black bars.

#### **EXPLANATION**

## **EXPLANATION**

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**MW-7B**  APPROXIMATE LOCATION OF MONITORING WELL WITH GROUND  
WATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

400.02

**400.02** APPROXIMATE LOCATION OF MONITOR  
WATER ELEVATION (FEET ABOVE MEAN S.



N  
0 FEET 20 METERS 10

BASE MAP SOURCE: GOOGLE EARTH

**EN GEO**  
Expect Excellence

PROJECT NO.: 7828.000.001

FIGURE NO. 3

CONCENTRATION OF PETROLEUM HYDROCARBONS IN GROUNDWATER - NOVEMBER 2013

JORDAN RANCH - PARCEL H

DUBLIN, CALIFORNIA

SCALE: AS SHOWN

DRAWN BY: LL

CHECKED BY: SM

ORIGINAL FIGURE PRINTED IN COLOR

## **FIGURES**

**Figure 1 – Vicinity Map**

**Figure 2 – Groundwater Elevation Contour Map**

**Figure 3 – Concentrations of Petroleum Hydrocarbons in Groundwater**

## TABLES

**Table 1 – Groundwater Elevations**  
**Table 2 – Groundwater Analytical Data**

Table 1  
Groundwater Elevations  
Jordan Ranch  
Dublin, California

Well Number	Date	Depth to Groundwater <sup>(1)</sup> (feet bgs)	Top of Casing Elevation <sup>(2)</sup> (feet)	Groundwater Elevation (feet msl)
MW-1	12/6/2005	17.08	425.73	408.65
	7/26/2006	13.92	425.73	411.81
	4/10/2008	11.64	425.73	414.09
	8/24/2010	11.75	425.73	413.98
	1/10/2012	10.52	425.73	415.21
	4/30/2012	10.40	425.73	415.33
	7/26/2012	10.58	425.73	415.15
	10/4/2012	11.51	425.73	414.22
	2/22/2013	10.20	425.73	415.53
	11/22/2013	8.20	421.48	413.28
MW-2	12/6/2005	18.01	424.98	406.97
	7/26/2006	15.44	424.98	409.54
	4/10/2008	14.02	424.98	410.96
	8/24/2010	14.17	424.98	410.81
	1/10/2012	12.83	424.98	412.15
	4/30/2012	12.20	424.98	412.78
	7/26/2012	12.60	424.98	412.38
	10/4/2012	13.68	424.98	411.30
	2/22/2013	12.20	424.98	412.78
	11/22/2013	10.64	420.73	410.09
MW-3	12/6/2005	17.35	421.47	404.12
	7/26/2006	14.20	421.47	407.27
	4/10/2008	12.31	421.47	409.16
	8/24/2010	12.29	421.47	409.18
	1/10/2012	Inadverntantly Covered by Grading Operations		
MW-4	12/6/2005	18.58	421.60	403.02
	7/26/2006	15.75	421.60	405.85
	4/10/2008	13.89	421.60	407.71
	8/24/2010	13.88	421.60	407.72
	1/10/2012	Obstruction in Casing		
	4/30/2012	11.52	421.60	410.08
	7/26/2012	11.80	421.60	409.80
	10/4/2012	12.55	421.60	409.05
	2/22/2013	11.20	421.60	410.40
	11/22/2013	10.42	417.38	406.96
MW-5	12/6/2005	16.40	424.04	407.64
	7/26/2006	13.89	424.04	410.15
	4/10/2008	12.24	424.04	411.80
	8/24/2010	12.20	424.04	411.84
	1/10/2012	11.11	424.04	412.93
	4/30/2012	10.50	424.04	413.54
	7/26/2012	10.85	424.04	413.19
	10/4/2012	12.24	424.04	411.80
	2/22/2013	10.40	424.04	413.64
	11/22/2013	9.06	419.80	410.74
MW-6A	11/22/2013	12.18	420.27	408.09
MW-6B	11/22/2013	11.98	420.12	408.14
MW-7A	11/22/2013	7.95	407.72	399.77
MW-7B	11/22/2013	7.37	407.39	400.02
<b>NOTES:</b>				
bgs = Below ground surface msl = Mean sea level				
(1) Depth to groundwater measured from top of well casing.				

**TABLE 2**  
**Cumulative Monitoring Well Analytical Data**  
**Jordan Ranch Monitoring Wells**

Well ID	Date	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-Benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	Naphthalene (ug/L)
MW-1	12/6/2005	NA	<b>64</b>	<b>2</b>	<0.5	<0.5	<0.5	<0.5	<0.5
	7/26/2006	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
	4/10/2008	NA	<50	<0.5	<0.5	<0.5	<0.5	<50	NA
	8/24/2010	<50	<50	<0.5	<0.5	<0.5	<1.0	<0.5	NA
	1/10/2012	<50	<50	<1	<b>1.1</b>	<b>1.1</b>	<b>2.4</b>	<4	NA
	4/30/2012	<50	<50	<0.5	<0.5	<0.5	<1	<0.5	NA
	7/26/2012	<50	<50	<0.5	<0.5	<0.5	<1	<0.5	NA
	10/4/2012	<50	<50	<0.5	<0.5	<0.5	<1	<0.5	<1
	02/22/13	<51	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0
	11/22/2013	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0
MW-2	12/6/2005	NA	<b>3,400</b>	<b>470</b>	<25	<b>55</b>	<b>120</b>	<b>800</b>	<b>60</b>
	7/26/2006	<b>150</b>	<b>650</b>	<b>130</b>	<0.5	<0.5	<0.5	<b>510</b>	<b>15</b>
	4/10/2008	NA	<b>8,700</b>	<b>1,600</b>	<b>350</b>	<b>370</b>	<b>790</b>	<b>810</b>	NA
	8/24/2010	<50	<b>15,000</b>	<b>780</b>	<b>93</b>	<b>1,200</b>	<b>2,600</b>	<b>170</b>	NA
	1/10/2012	<b>1,100</b>	<b>4,200</b>	<b>32</b>	<b>10</b>	<b>210</b>	<b>337</b>	<4	NA
	4/30/2012	<b>620</b>	<b>4,100</b>	<b>14</b>	<b>10</b>	<b>340</b>	<b>660</b>	<b>21</b>	NA
	7/26/2012	<b>1,200</b>	<b>15,000</b>	<b>73</b>	<b>71</b>	<b>980</b>	<b>1,900</b>	<b>260</b>	NA
	10/4/2012	<b>250</b>	<b>1,300</b>	<b>16</b>	<b>3</b>	<b>150</b>	<b>120</b>	<b>11</b>	<b>46</b>
	02/22/13	<b>340</b>	<b>4,200</b>	<b>12</b>	<b>7.8</b>	<b>320</b>	<b>590</b>	<b>30</b>	<b>120</b>
	11/22/2013	<50	<b>1,000</b>	<b>1.4</b>	<b>1.9</b>	<b>13</b>	<b>36</b>	<b>1.7</b>	<b>56</b>
MW-3	12/6/2005	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	7/26/2006	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
	4/10/2008	NA	<b>430</b>	<b>45</b>	<b>34</b>	<b>22</b>	<b>90</b>	<0.5	NA
	8/24/2010	<50	<50	<0.5	<0.5	<0.5	<1.0	<0.5	NA
	1/10/2012	Well inadvertently covered by grading operations							NA
MW-4	12/6/2005	NA	<b>70</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	7/26/2006	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	<0.5
	4/10/2008	NA	<b>830</b>	<b>29</b>	<b>19</b>	<b>16</b>	<b>54</b>	<b>1,200</b>	NA
	8/24/2010	<50	<50	<0.5	<0.5	<0.5	<1.0	<b>80</b>	NA
	1/10/2012	Obstruction in well casing							NA
	4/30/2012	<50	<50	<0.5	<0.5	<0.5	<1.0	<b>14</b>	NA
	7/26/2012	<50	<50	<0.5	<0.5	<0.5	<1.0	<b>14</b>	NA
	10/4/2012	<50	<50	<0.5	<0.5	<0.5	<1.0	<b>3.9</b>	<1
	02/22/13	<50	<50	<0.50	<0.50	<0.50	<1.0	<b>6.3</b>	<1.0
	11/22/2013	<50	<50	<0.50	<0.50	2.4	6.7	2.9	<1.0
MW-5	12/6/2005	NA	<b>53,000</b>	<b>13,000</b>	<b>1,300</b>	<b>930</b>	<b>4,400</b>	<b>7,000</b>	<b>560</b>
	7/26/2006	<b>560</b>	<b>15,000</b>	<b>4,100</b>	<b>580</b>	<b>200</b>	<b>870</b>	<b>2,200</b>	<b>130</b>
	4/10/2008	NA	<b>66,000</b>	<b>24,000</b>	<b>7,600</b>	<b>2,200</b>	<b>9,200</b>	<130	NA
	8/24/2010	<50	<b>74,000</b>	<b>7,500</b>	<b>11,000</b>	<b>2,700</b>	<b>13,000</b>	<b>100</b>	NA
	1/10/2012	<b>2,100</b>	<b>60,000</b>	<b>1,600</b>	<b>3,700</b>	<b>1,800</b>	<b>5,400</b>	<4	NA
	4/30/2012	<b>2,600</b>	<b>37,000</b>	<b>880</b>	<b>2,500</b>	<b>3,200</b>	<b>15,000</b>	<b>140</b>	NA
	7/26/2012	<b>2,200</b>	<b>45,000</b>	<b>940</b>	<b>2,300</b>	<b>3,300</b>	<b>14,000</b>	<b>290</b>	NA
	10/4/2012	<b>2,100</b>	<b>29,000</b>	<b>750</b>	<b>1,500</b>	<b>2,400</b>	<b>760</b>	<b>140</b>	<b>690</b>
	02/22/13	<b>1,100</b>	<b>30,000</b>	<b>710</b>	<b>1,200</b>	<b>2,400</b>	<b>8,800</b>	<25	<b>680</b>
	11/22/2013	<b>96<sup>1</sup></b>	<b>16,000</b>	<b>290</b>	<b>340</b>	<b>2,300</b>	<b>4,000</b>	<b>62</b>	<b>610</b>

**TABLE 2**  
**Cumulative Monitoring Well Analytical Data**  
**Jordan Ranch Monitoring Wells**

Well ID	Date	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-Benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	Naphthalene (ug/L)
MW-6A	11/22/2013	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0
MW-6B	11/22/2013	<50	160	<0.50	<b>1.0</b>	<b>6.0</b>	<b>16</b>	<0.50	<b>3.0</b>
MW-7A	11/22/2013	<50	<50	<0.50	<0.50	<0.50	<1.0	<b>5.4</b>	<1.0
MW-7B	11/22/2013	<50	<50	<0.50	<0.50	<0.50	<1.0	<b>7.2</b>	<1.0

**NOTES:**

(1) Represents C10-C11, which overlaps with TPHg range. Carbon Chain breakdown indicates no diesel.

TPHg = Total petroleum hydrocarbons as gasoline

TPHd = Total petroleum hydrocarbons as diesel \*Multiple labs reported that detections don't resemble the typical diesel chromatogram

MTBE = Methyl tert-butyl ether

(ug/L) = micrograms per liter or parts per billion

----- Remedial excavation and groundwater remediation implemented Fall 2011.

## **Monitoring Well Sampling Logs**

7828.000.001  
January 8, 2014

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch		<b>Well ID</b>	<b>MW-1</b>				
Project No.	7828.000.001							
Location:	Dublin, CA							
Technician:	R. Peck							
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling		<input type="checkbox"/> Develop/Sample					
<b>WELL SECURITY</b>				Date 11/22/2013				
Well Box Set in Concrete?		Yes	Comments					
Box Cover Equipped With Bolts and Gasket?		Yes						
Well Casing Equipped With Well Seal and Lock?		No	No lock					
<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>				Date 11/22/2013				
Well Type	<input checked="" type="checkbox"/> Monitoring		<input type="checkbox"/> Extraction Well with Pump	<input type="checkbox"/> Other				
Well Diameter (in)	2	<b>Free Product Measurement</b>						
BOC (fbtoc)	29.40	(Enter measurements for wells with free product history)						
DTW = Depth to Water	8.2	Enter "0.0" if no measurable free product →						
WC (f)	21.20	DTFP (fbtoc)	2"	= 0.17				
WCV (gal)	3.6	DTW (fbtoc)	4"	= 0.66				
3 X WCV (Purge Vol)	10.8	FPT (ft)	6"	= 1.50				
<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>				Date 11/22/2013				
Purging:	<input type="checkbox"/> Disposable	<input type="checkbox"/> 12-V	<input checked="" type="checkbox"/> Subm.	Comments				
	Bailer	Pump	Pump					
Sampling:	<input checked="" type="checkbox"/> Disposable	<input type="checkbox"/> 12-V	<input type="checkbox"/> Subm.	Other				
	Bailer	Pump	Pump					
Decon:	Was purge pump decontaminated before and after this use?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No				
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox		Decon Rinse:					
<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>				Date 11/22/2013				
Drums Onsite Arrival	10	Drums All Labeled?	Yes					
Drums Used This Event	3	Drums Leaking?	No					
Total Drums Onsite Now	13	Purge Water Processed Through GWTS?		No				
<b>PHYSICAL PARAMETERS</b>				Date 11/22/2013				
Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
11:35	6	20.3	6.73	1022				
<input type="checkbox"/> Sample collected through groundwater treatment system using active extraction pump; no purging required.								
<b>LABORATORY ANALYSIS</b>								
Number/Type Containers		9	VOA's	1-liter Ambers		500ml Plastic		
Preservative:		HCl						
Analysis:		TPH-g; VOCs, TPH-d, w/silica gel clean up						
Laboratory/TAT:		Test America/ 5-day						

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch	Well ID	MW-2
Project No.	7828.000.001		
Location:	Dublin, CA		
Technician:	R. Peck		
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling <input type="checkbox"/> Develop/Sample		

<b>WELL SECURITY</b>		Date	11/22/2013
Well Box Set in Concrete?		Yes	Comments
Box Cover Equipped With Bolts and Gasket?		Yes	
Well Casing Equipped With Well Seal and Lock?		No	No lock

<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>		Date	11/22/2013
--	--	------	------------

Well Type	<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Extraction Well with Pump <input type="checkbox"/> Other		
Well Diameter (in)	2	<b>Free Product Measurement</b>	
BOC (fbtoc)	29.60	(Enter measurements for wells with free product history)	
DTW = Depth to Water	10.64	Enter "0.0" if no measurable free product → <input type="text"/>	
WC (f)	18.96	DTFP (fbtoc)	2" = 0.17
WCV (gal)	3.2	DTW (fbtoc)	4" = 0.66
3 X WCV (Purge Vol)	9.6	FPT (ft)	6" = 1.50

<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>		Date	11/22/2013
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Purging:	<input type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input checked="" type="checkbox"/> Subm. Pump	Comments
Sampling:	<input checked="" type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input type="checkbox"/> Subm. Pump	Other
Decon:	Was purge pump decontaminated before and after this use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox		Decon Rinse:	

<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>		Date	11/22/2013
--	--	------	------------

Drums Onsite Arrival	10	Drums All Labeled?	Yes
Drums Used This Event	3	Drums Leaking?	No
Total Drums Onsite Now	13	Purge Water Processed Through GWTS?	No

<b>PHYSICAL PARAMETERS</b>		Date	11/22/2013
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Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
13:25	5	21.6	6.9	985				

Sample collected through groundwater treatment system using active extraction pump; no purging required.

## LABORATORY ANALYSIS

Number/Type Containers	9	VOA's	1-liter Ambers	500ml Plastic
Preservative:	HCl			
Analysis:	TPH-g; VOCs, TPH-d, w/silica gel clean up			
Laboratory/TAT:	Test America/ 5-day			

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch	Well ID	MW-4
Project No.	7828.000.001		
Location:	Dublin, CA		
Technician:	R. Peck		
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling <input type="checkbox"/> Develop/Sample		

<b>WELL SECURITY</b>		Date	11/22/2013
Well Box Set in Concrete?		Yes	Comments
Box Cover Equipped With Bolts and Gasket?		Yes	
Well Casing Equipped With Well Seal and Lock?		No	No lock

<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>		Date	11/22/2013
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Well Type	<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Extraction Well with Pump <input type="checkbox"/> Other		
Well Diameter (in)	2	<b>Free Product Measurement</b>	
BOC (fbtoc)	27.91	(Enter measurements for wells with free product history)	
DTW = Depth to Water	10.42	Enter "0.0" if no measurable free product → <input type="text"/>	
WC (f)	17.49	DTFP (fbtoc)	2" = 0.17
WCV (gal)	3.0	DTW (fbtoc)	4" = 0.66
3 X WCV (Purge Vol)	9.0	FPT (ft)	6" = 1.50

<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>		Date	11/22/2013
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Purging:	<input type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input checked="" type="checkbox"/> Subm. Pump	Comments
Sampling:	<input checked="" type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input type="checkbox"/> Subm. Pump	Other
Decon:	Was purge pump decontaminated before and after this use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox		Decon Rinse:	

<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>		Date	11/22/2013
--	--	------	------------

Drums Onsite Arrival	Drums All Labeled?	Yes
Drums Used This Event	Drums Leaking?	No
Total Drums Onsite Now	Purge Water Processed Through GWTS?	No

<b>PHYSICAL PARAMETERS</b>		Date	11/22/2013
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Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
14:10	4	20.80	6.85	1080				

Sample collected through groundwater treatment system using active extraction pump; no purging required.

<b>LABORATORY ANALYSIS</b>								
----------------------------	--	--	--	--	--	--	--	--

Number/Type Containers	9	VOA's	1-liter Ambers	500ml Plastic
Preservative:	HCl			
Analysis:	TPH-g; VOCs, TPH-d, w/silica gel clean up			
Laboratory/TAT:	Test America/ 5-day			

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch	Well ID	MW-5
Project No.	7828.000.001		
Location:	Dublin, CA		
Technician:	R. Peck		
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling <input type="checkbox"/> Develop/Sample		

<b>WELL SECURITY</b>		Date	11/22/2013
Well Box Set in Concrete?		Yes	Comments
Box Cover Equipped With Bolts and Gasket?		Yes	
Well Casing Equipped With Well Seal and Lock?		No	

<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>		Date	11/22/2013
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Well Type	<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Extraction Well with Pump <input type="checkbox"/> Other		
Well Diameter (in)	2	<b>Free Product Measurement</b>	
BOC (fbtoc)	29.48	(Enter measurements for wells with free product history)	
DTW = Depth to Water	9.06	Enter "0.0" if no measurable free product → <input type="text"/>	
WC (f)	20.42	DTFP (fbtoc)	2" = 0.17
WCV (gal)	3.4	DTW (fbtoc)	4" = 0.66
3 X WCV (Purge Vol)	10.2	FPT (ft)	6" = 1.50

<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>		Date	11/22/2013
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Purging:	<input type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input checked="" type="checkbox"/> Subm. Pump	Comments
Sampling:	<input checked="" type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input type="checkbox"/> Subm. Pump	Other
Decon:	Was purge pump decontaminated before and after this use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox		Decon Rinse:	

<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>		Date	11/22/2013
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Drums Onsite Arrival	Drums All Labeled?	Yes
Drums Used This Event	Drums Leaking?	No
Total Drums Onsite Now	Purge Water Processed Through GWTS?	No

<b>PHYSICAL PARAMETERS</b>		Date	11/22/2013
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Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
12:30	5	21.00	6.50	1027				

Sample collected through groundwater treatment system using active extraction pump; no purging required.

<b>LABORATORY ANALYSIS</b>								
----------------------------	--	--	--	--	--	--	--	--

Number/Type Containers	11	VOA's	1-liter Ambers	500ml Plastic
Preservative:	HCl			
Analysis:	TPH-g; VOCs, TPH-d, w/silica gel clean up			
Laboratory/TAT:	Test America/ 5-day			

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch	<b>Well ID</b>	<b>MW-6A</b>
Project No.	7828.000.001		
Location:	Dublin, CA		
Technician:	R. Peck		
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling <input type="checkbox"/> Develop/Sample		

<b>WELL SECURITY</b>		<b>Date</b>	11/22/2013
Well Box Set in Concrete?		Yes Yes No	Comments
Box Cover Equipped With Bolts and Gasket?			
Well Casing Equipped With Well Seal and Lock?			No lock

<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>		<b>Date</b>	11/22/2013
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Well Type	<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Extraction Well with Pump <input type="checkbox"/> Other		
Well Diameter (in)	2	<b>Free Product Measurement</b>	
BOC (fbtoc)	19.00	(Enter measurements for wells with free product history)	
DTW = Depth to Water	12.18	Enter "0.0" if no measurable free product → <input type="text"/>	
WC (f)	6.82	DTFP (fbtoc) _____	2" = 0.17
WCV (gal)	1.2	DTW (fbtoc) _____	4" = 0.66
3 X WCV (Purge Vol)	3.6	FPT (ft)	6" = 1.50

<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>		<b>Date</b>	11/22/2013
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Purging:	<input type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input checked="" type="checkbox"/> Subm. Pump	Comments
Sampling:	<input checked="" type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input type="checkbox"/> Subm. Pump	Other
Decon:	Was purge pump decontaminated before and after this use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox		Decon Rinse: <input type="checkbox"/>	

<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>		<b>Date</b>	11/22/2013
--	--	-------------	------------

Drums Onsite Arrival	10	Drums All Labeled?	Yes
Drums Used This Event	3	Drums Leaking?	No
Total Drums Onsite Now	13	Purge Water Processed Through GWTS?	No

<b>PHYSICAL PARAMETERS</b>		<b>Date</b>	11/22/2013
----------------------------	--	-------------	------------

Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
15:40	1.5	20.40	6.77	1600				

Sample collected through groundwater treatment system using active extraction pump; no purging required.

<b>LABORATORY ANALYSIS</b>				
Number/Type Containers	9	VOA's	1-liter Ambers	500ml Plastic
Preservative:	HCl			
Analysis:	TPH-g; VOCs, TPH-d, w/silica gel clean up			
Laboratory/TAT:	Test America/ 5-day			

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch		<b>Well ID</b>	<b>MW-6B</b>				
Project No.	7828.000.001							
Location:	Dublin, CA							
Technician:	R. Peck							
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling		<input type="checkbox"/> Develop/Sample					
<b>WELL SECURITY</b>				Date 11/22/2013				
Well Box Set in Concrete?		Yes	Comments					
Box Cover Equipped With Bolts and Gasket?		Yes						
Well Casing Equipped With Well Seal and Lock?		No	No lock					
<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>				Date 11/22/2013				
Well Type	<input checked="" type="checkbox"/> Monitoring		<input type="checkbox"/> Extraction Well with Pump	<input type="checkbox"/> Other				
Well Diameter (in)	2	<b>Free Product Measurement</b>						
BOC (fbtoc)	30.00	(Enter measurements for wells with free product history)						
DTW = Depth to Water	11.98	Enter "0.0" if no measurable free product →						
WC (f)	18.02	DTFP (fbtoc)	_____	2" = 0.17				
WCV (gal)	3.1	DTW (fbtoc)	_____	4" = 0.66				
<b>3 X WCV (Purge Vol)</b>	<b>9.3</b>	FPT (ft)	_____	6" = 1.50				
<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>				Date 11/22/2013				
Purging:	<input type="checkbox"/> Disposable	<input type="checkbox"/> 12-V	<input checked="" type="checkbox"/> Subm.	Comments				
	Bailer	Pump	Pump					
Sampling:	<input checked="" type="checkbox"/> Disposable	<input type="checkbox"/> 12-V	<input type="checkbox"/> Subm.	Other				
	Bailer	Pump	Pump					
Decon:	Was purge pump decontaminated before and after this use?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No				
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox		Decon Rinse:					
<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>				Date 11/22/2013				
Drums Onsite Arrival	Drums All Labeled?		Yes					
Drums Used This Event	Drums Leaking?		No					
Total Drums Onsite Now	Purge Water Processed Through GWTS?			Gallons				
<b>PHYSICAL PARAMETERS</b>				Date 11/22/2013				
Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
15:00	4	20.20	6.82	950				
<input type="checkbox"/> Sample collected through groundwater treatment system using active extraction pump; no purging required.								
<b>LABORATORY ANALYSIS</b>								
Number/Type Containers		9	VOA's	1-liter Ambers		500ml Plastic		
Preservative:		HCl						
Analysis:		TPH-g; VOCs, TPH-d, w/silica gel clean up						
Laboratory/TAT:		Test America/ 5-day						

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch		<b>Well ID</b>	<b>MW-7A</b>				
Project No.	7828.000.001							
Location:	Dublin, CA							
Technician:	R. Peck							
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling <input type="checkbox"/> Develop/Sample							
<b>WELL SECURITY</b>				Date 11/22/2013				
Well Box Set in Concrete?		Yes	<b>Comments</b>					
Box Cover Equipped With Bolts and Gasket?		Yes						
Well Casing Equipped With Well Seal and Lock?		No	No lock					
<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>				Date 11/22/2013				
Well Type	<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Extraction Well with Pump		<input type="checkbox"/> Other					
Well Diameter (in)  BOC (fbtoc)  DTW = Depth to Water  WC (f)  WCV (gal)  3 X WCV (Purge Vol)	2	<b>Free Product Measurement</b>						
	19.00	(Enter measurements for wells with free product history)  Enter "0.0" if no measurable free product → <input type="text"/>						
	7.95				<b>WCV Factors</b>			
	11.05						DTFP (fbtoc) <input type="text"/>	2" = 0.17
	1.9						DTW (fbtoc) <input type="text"/>	4" = 0.66
	5.7						FPT (ft) <input type="text"/>	6" = 1.50
<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>				Date 11/22/2013				
Purging:	<input type="checkbox"/> Disposable  <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input checked="" type="checkbox"/> Subm. Pump	<b>Comments</b>				
Sampling:	<input checked="" type="checkbox"/> Disposable  <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input type="checkbox"/> Subm. Pump					
Decon:	Was purge pump decontaminated before and after this use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox		Decon Rinse: <input type="checkbox"/>					
<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>				Date 11/22/2013				
Drums Onsite Arrival	Drums All Labeled?		Yes					
Drums Used This Event	Drums Leaking?		No					
Total Drums Onsite Now	Purge Water Processed Through GWTS?			No				
<b>PHYSICAL PARAMETERS</b>				Date 11/22/2013				
Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
9:10	3.5	19.70	6.57	2461				
<input type="checkbox"/> Sample collected through groundwater treatment system using active extraction pump; no purging required.								
<b>LABORATORY ANALYSIS</b>								
Number/Type Containers		9	VOA's	1-liter Ambers		500ml Plastic		
Preservative:		HCl						
Analysis:		TPH-g; VOCs, TPH-d, w/silica gel clean up						
Laboratory/TAT:		Test America/ 5-day						

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

# MONITORING WELL FIELD SAMPLING LOG

**EN GEO**  
INCORPORATED

Project:	Jordan Ranch	<b>Well ID</b>	<b>MW-7B</b>
Project No.	7828.000.001		
Location:	Dublin, CA		
Technician:	R. Peck		
Activity:	<input checked="" type="checkbox"/> Quarterly Sampling <input type="checkbox"/> Develop/Sample		

<b>WELL SECURITY</b>		<b>Date</b>	11/22/2013
Well Box Set in Concrete?		Yes	<b>Comments</b>
Box Cover Equipped With Bolts and Gasket?		Yes	
Well Casing Equipped With Well Seal and Lock?		No	

<b>WELL CONSTRUCTION AND WATER LEVEL DETAILS</b>		<b>Date</b>	11/22/2013
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Well Type	<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Extraction Well with Pump <input type="checkbox"/> Other		
Well Diameter (in)	2	<b>Free Product Measurement</b>	
BOC (fbtoc)	30.00	(Enter measurements for wells with free product history)	
DTW = Depth to Water	7.37	Enter "0.0" if no measurable free product → <input type="text"/>	
WC (f)	22.63	DTFP (fbtoc)	2" = 0.17
WCV (gal)	3.8	DTW (fbtoc)	4" = 0.66
3 X WCV (Purge Vol)	11.4	FPT (ft)	6" = 1.50

<b>PURGING, SAMPLING AND DECON EQUIPMENT</b>		<b>Date</b>	11/22/2013
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Purging:	<input type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input checked="" type="checkbox"/> Subm. Pump	<b>Comments</b>
Sampling:	<input checked="" type="checkbox"/> Disposable <input type="checkbox"/> Bailer	<input type="checkbox"/> 12-V Pump	<input type="checkbox"/> Subm. Pump	
Decon:	Was purge pump decontaminated before and after this use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Decon Product:	<input checked="" type="checkbox"/> TSP/Alconox      Decon Rinse:			

<b>PURGE WATER STORAGE/DISPOSAL (For Last Well Sampled Only)</b>		<b>Date</b>	11/22/2013
--	--	-------------	------------

Drums Onsite Arrival	<input type="checkbox"/> Drums All Labeled?	Yes
Drums Used This Event	<input type="checkbox"/> Drums Leaking?	No
Total Drums Onsite Now	Purge Water Processed Through GWTS? <input type="checkbox"/> No	

<b>PHYSICAL PARAMETERS</b>		<b>Date</b>	11/22/2013
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Time	Volume Purged (gal)	Temp (C degrees )	pH	EC (microS/cm)	DO (mg/L)	Salinity (%)	Turbidity (NTU)	Other ORP
10:00	6	18.30	6.74	1571				

Sample collected through groundwater treatment system using active extraction pump; no purging required.

<b>LABORATORY ANALYSIS</b>				
Number/Type Containers	9	VOA's	1-liter Ambers	500ml Plastic
Preservative:	HCl			
Analysis:	TPH-g; VOCs, TPH-d, w/silica gel clean up			
Laboratory/TAT:	Test America/ 5-day			

DTW = Depth to Water

fbtoc = feet below top of casing

BOC = Bottom of Well Casing

WC = Water Column Height

DTFP = Depth to Free Product

WCV = Water Column Volume (gallons) = WC X WCV Factor

FPT = Free Product Thickness

**Groundwater Laboratory Analytical Report  
and Chain-of-Custody Record**

7828.000.001  
January 8, 2014

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-54005-1

Client Project/Site: Jordan Ranch

For:

Engeo, Inc.

2213 Plaza Drive

Rocklin, California 95765

Attn: Ms. Morgan Johnson

Authorized for release by:

12/6/2013 1:24:06 PM

Afsaneh Salimpour, Senior Project Manager

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

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

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## Definitions/Glossary

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

### 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)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

### Job ID: 720-54005-1

Laboratory: TestAmerica Pleasanton

#### Narrative

Job Narrative  
720-54005-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/22/2013 5:27 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 8.0° C.

#### GC/MS VOA

No other analytical or quality issues were noted.

#### GC Semi VOA

No analytical or quality issues were noted.

# Detection Summary

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Client Sample ID: MW-1

## Lab Sample ID: 720-54005-1

No Detections.

## Client Sample ID: MW-2

## Lab Sample ID: 720-54005-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.7		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Benzene	1.4		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
n-Butylbenzene	8.7		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
sec-Butylbenzene	3.7		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	13		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Isopropylbenzene	15		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
4-Isopropyltoluene	1.5		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	56		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
N-Propylbenzene	8.1		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Toluene	1.9		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	47		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
1,3,5-Trimethylbenzene	30		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	36		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	1000		50		ug/L	1		8260B/CA_LUFT MS	Total/NA

## Client Sample ID: MW-4

## Lab Sample ID: 720-54005-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.9		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	2.4		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	0.85		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	6.7		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA

## Client Sample ID: MW-5

## Lab Sample ID: 720-54005-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	62		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Benzene	290		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	2300		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Isopropylbenzene	89		25		ug/L	50		8260B/CA_LUFT MS	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

## Detection Summary

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

### Client Sample ID: MW-5 (Continued)

### Lab Sample ID: 720-54005-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	610		50		ug/L	50		8260B/CA_LUFT MS	Total/NA
N-Propylbenzene	250		50		ug/L	50		8260B/CA_LUFT MS	Total/NA
Toluene	340		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	1100		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
1,3,5-Trimethylbenzene	240		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	4000		50		ug/L	50		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	16000		2500		ug/L	50		8260B/CA_LUFT MS	Total/NA

### Client Sample ID: MW-6A

### Lab Sample ID: 720-54005-5

No Detections.

### Client Sample ID: MW-6B

### Lab Sample ID: 720-54005-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	6.0		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Isopropylbenzene	0.65		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	3.0		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
N-Propylbenzene	1.2		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Toluene	1.0		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	8.6		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
1,3,5-Trimethylbenzene	4.6		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	16		1.0		ug/L	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	160		50		ug/L	1		8260B/CA_LUFT MS	Total/NA

### Client Sample ID: MW-7A

### Lab Sample ID: 720-54005-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	5.4		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA

### Client Sample ID: MW-7B

### Lab Sample ID: 720-54005-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	7.2		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-1**

**Date Collected: 11/22/13 11:40**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-1**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/25/13 16:48	1
Acetone	ND		50		ug/L			11/25/13 16:48	1
Benzene	ND		0.50		ug/L			11/25/13 16:48	1
Dichlorobromomethane	ND		0.50		ug/L			11/25/13 16:48	1
Bromobenzene	ND		1.0		ug/L			11/25/13 16:48	1
Chlorobromomethane	ND		1.0		ug/L			11/25/13 16:48	1
Bromoform	ND		1.0		ug/L			11/25/13 16:48	1
Bromomethane	ND		1.0		ug/L			11/25/13 16:48	1
2-Butanone (MEK)	ND		50		ug/L			11/25/13 16:48	1
n-Butylbenzene	ND		1.0		ug/L			11/25/13 16:48	1
sec-Butylbenzene	ND		1.0		ug/L			11/25/13 16:48	1
tert-Butylbenzene	ND		1.0		ug/L			11/25/13 16:48	1
Carbon disulfide	ND		5.0		ug/L			11/25/13 16:48	1
Carbon tetrachloride	ND		0.50		ug/L			11/25/13 16:48	1
Chlorobenzene	ND		0.50		ug/L			11/25/13 16:48	1
Chloroethane	ND		1.0		ug/L			11/25/13 16:48	1
Chloroform	ND		1.0		ug/L			11/25/13 16:48	1
Chloromethane	ND		1.0		ug/L			11/25/13 16:48	1
2-Chlorotoluene	ND		0.50		ug/L			11/25/13 16:48	1
4-Chlorotoluene	ND		0.50		ug/L			11/25/13 16:48	1
Chlorodibromomethane	ND		0.50		ug/L			11/25/13 16:48	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/25/13 16:48	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/25/13 16:48	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/25/13 16:48	1
1,3-Dichloropropane	ND		1.0		ug/L			11/25/13 16:48	1
1,1-Dichloropropene	ND		0.50		ug/L			11/25/13 16:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/25/13 16:48	1
Ethylene Dibromide	ND		0.50		ug/L			11/25/13 16:48	1
Dibromomethane	ND		0.50		ug/L			11/25/13 16:48	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/25/13 16:48	1
1,1-Dichloroethane	ND		0.50		ug/L			11/25/13 16:48	1
1,2-Dichloroethane	ND		0.50		ug/L			11/25/13 16:48	1
1,1-Dichloroethene	ND		0.50		ug/L			11/25/13 16:48	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 16:48	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 16:48	1
1,2-Dichloropropane	ND		0.50		ug/L			11/25/13 16:48	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 16:48	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 16:48	1
Ethylbenzene	ND		0.50		ug/L			11/25/13 16:48	1
Hexachlorobutadiene	ND		1.0		ug/L			11/25/13 16:48	1
2-Hexanone	ND		50		ug/L			11/25/13 16:48	1
Isopropylbenzene	ND		0.50		ug/L			11/25/13 16:48	1
4-Isopropyltoluene	ND		1.0		ug/L			11/25/13 16:48	1
Methylene Chloride	ND		5.0		ug/L			11/25/13 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/25/13 16:48	1
Naphthalene	ND		1.0		ug/L			11/25/13 16:48	1
N-Propylbenzene	ND		1.0		ug/L			11/25/13 16:48	1
Styrene	ND		0.50		ug/L			11/25/13 16:48	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/25/13 16:48	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-1**

**Date Collected: 11/22/13 11:40**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-1**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/25/13 16:48	1
Tetrachloroethene	ND		0.50		ug/L			11/25/13 16:48	1
Toluene	ND		0.50		ug/L			11/25/13 16:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/25/13 16:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/25/13 16:48	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/25/13 16:48	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/25/13 16:48	1
Trichloroethene	ND		0.50		ug/L			11/25/13 16:48	1
Trichlorofluoromethane	ND		1.0		ug/L			11/25/13 16:48	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/25/13 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/25/13 16:48	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/25/13 16:48	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/25/13 16:48	1
Vinyl acetate	ND		10		ug/L			11/25/13 16:48	1
Vinyl chloride	ND		0.50		ug/L			11/25/13 16:48	1
Xylenes, Total	ND		1.0		ug/L			11/25/13 16:48	1
2,2-Dichloropropane	ND		0.50		ug/L			11/25/13 16:48	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/25/13 16:48	1
TBA	ND		10		ug/L			11/25/13 16:48	1
Ethyl tert-butyl ether	ND		0.50		ug/L			11/25/13 16:48	1
DIPE	ND		0.50		ug/L			11/25/13 16:48	1
Ethanol	ND		250		ug/L			11/25/13 16:48	1
TAME	ND		0.50		ug/L			11/25/13 16:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	91		67 - 130					11/25/13 16:48	1
1,2-Dichloroethane-d4 (Surr)	95		72 - 130					11/25/13 16:48	1
Toluene-d8 (Surr)	96		70 - 130					11/25/13 16:48	1

**Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/26/13 22:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	94		70 - 130					11/26/13 22:11	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-2**

Date Collected: 11/22/13 13:35

Date Received: 11/22/13 17:27

**Lab Sample ID: 720-54005-2**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	1.7		0.50		ug/L			11/26/13 21:05	1
Acetone	ND		50		ug/L			11/26/13 21:05	1
Benzene	1.4		0.50		ug/L			11/26/13 21:05	1
Dichlorobromomethane	ND		0.50		ug/L			11/26/13 21:05	1
Bromobenzene	ND		1.0		ug/L			11/26/13 21:05	1
Chlorobromomethane	ND		1.0		ug/L			11/26/13 21:05	1
Bromoform	ND		1.0		ug/L			11/26/13 21:05	1
Bromomethane	ND		1.0		ug/L			11/26/13 21:05	1
2-Butanone (MEK)	ND		50		ug/L			11/26/13 21:05	1
n-Butylbenzene	8.7		1.0		ug/L			11/26/13 21:05	1
sec-Butylbenzene	3.7		1.0		ug/L			11/26/13 21:05	1
tert-Butylbenzene	ND		1.0		ug/L			11/26/13 21:05	1
Carbon disulfide	ND		5.0		ug/L			11/26/13 21:05	1
Carbon tetrachloride	ND		0.50		ug/L			11/26/13 21:05	1
Chlorobenzene	ND		0.50		ug/L			11/26/13 21:05	1
Chloroethane	ND		1.0		ug/L			11/26/13 21:05	1
Chloroform	ND		1.0		ug/L			11/26/13 21:05	1
Chloromethane	ND		1.0		ug/L			11/26/13 21:05	1
2-Chlorotoluene	ND		0.50		ug/L			11/26/13 21:05	1
4-Chlorotoluene	ND		0.50		ug/L			11/26/13 21:05	1
Chlorodibromomethane	ND		0.50		ug/L			11/26/13 21:05	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/26/13 21:05	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/26/13 21:05	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/26/13 21:05	1
1,3-Dichloropropane	ND		1.0		ug/L			11/26/13 21:05	1
1,1-Dichloropropene	ND		0.50		ug/L			11/26/13 21:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/26/13 21:05	1
Ethylene Dibromide	ND		0.50		ug/L			11/26/13 21:05	1
Dibromomethane	ND		0.50		ug/L			11/26/13 21:05	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/26/13 21:05	1
1,1-Dichloroethane	ND		0.50		ug/L			11/26/13 21:05	1
1,2-Dichloroethane	ND		0.50		ug/L			11/26/13 21:05	1
1,1-Dichloroethene	ND		0.50		ug/L			11/26/13 21:05	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 21:05	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 21:05	1
1,2-Dichloropropane	ND		0.50		ug/L			11/26/13 21:05	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 21:05	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 21:05	1
<b>Ethylbenzene</b>	<b>13</b>		0.50		ug/L			11/26/13 21:05	1
Hexachlorobutadiene	ND		1.0		ug/L			11/26/13 21:05	1
2-Hexanone	ND		50		ug/L			11/26/13 21:05	1
<b>Isopropylbenzene</b>	<b>15</b>		0.50		ug/L			11/26/13 21:05	1
<b>4-Isopropyltoluene</b>	<b>1.5</b>		1.0		ug/L			11/26/13 21:05	1
Methylene Chloride	ND		5.0		ug/L			11/26/13 21:05	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/26/13 21:05	1
<b>Naphthalene</b>	<b>56</b>		1.0		ug/L			11/26/13 21:05	1
<b>N-Propylbenzene</b>	<b>8.1</b>		1.0		ug/L			11/26/13 21:05	1
Styrene	ND		0.50		ug/L			11/26/13 21:05	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 21:05	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-2**

**Lab Sample ID: 720-54005-2**

Date Collected: 11/22/13 13:35

Matrix: Water

Date Received: 11/22/13 17:27

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 21:05	1
Tetrachloroethene	ND		0.50		ug/L			11/26/13 21:05	1
<b>Toluene</b>	<b>1.9</b>		0.50		ug/L			11/26/13 21:05	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/26/13 21:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/26/13 21:05	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/26/13 21:05	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/26/13 21:05	1
Trichloroethene	ND		0.50		ug/L			11/26/13 21:05	1
Trichlorofluoromethane	ND		1.0		ug/L			11/26/13 21:05	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/26/13 21:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/26/13 21:05	1
<b>1,2,4-Trimethylbenzene</b>	<b>47</b>		0.50		ug/L			11/26/13 21:05	1
<b>1,3,5-Trimethylbenzene</b>	<b>30</b>		0.50		ug/L			11/26/13 21:05	1
Vinyl acetate	ND		10		ug/L			11/26/13 21:05	1
Vinyl chloride	ND		0.50		ug/L			11/26/13 21:05	1
<b>Xylenes, Total</b>	<b>36</b>		1.0		ug/L			11/26/13 21:05	1
2,2-Dichloropropane	ND		0.50		ug/L			11/26/13 21:05	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>1000</b>		50		ug/L			11/26/13 21:05	1
TBA	ND		10		ug/L			11/26/13 21:05	1
Ethyl tert-butyl ether	ND		0.50		ug/L			11/26/13 21:05	1
DIPE	ND		0.50		ug/L			11/26/13 21:05	1
Ethanol	ND		250		ug/L			11/26/13 21:05	1
TAME	ND		0.50		ug/L			11/26/13 21:05	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	98		67 - 130					11/26/13 21:05	1
1,2-Dichloroethane-d4 (Surr)	93		72 - 130					11/26/13 21:05	1
Toluene-d8 (Surr)	100		70 - 130					11/26/13 21:05	1

## Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/26/13 22:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	93		70 - 130					11/26/13 22:44	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-4**

Date Collected: 11/22/13 14:25

Date Received: 11/22/13 17:27

**Lab Sample ID: 720-54005-3**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	2.9		0.50		ug/L			11/25/13 17:46	1
Acetone	ND		50		ug/L			11/25/13 17:46	1
Benzene	ND		0.50		ug/L			11/25/13 17:46	1
Dichlorobromomethane	ND		0.50		ug/L			11/25/13 17:46	1
Bromobenzene	ND		1.0		ug/L			11/25/13 17:46	1
Chlorobromomethane	ND		1.0		ug/L			11/25/13 17:46	1
Bromoform	ND		1.0		ug/L			11/25/13 17:46	1
Bromomethane	ND		1.0		ug/L			11/25/13 17:46	1
2-Butanone (MEK)	ND		50		ug/L			11/25/13 17:46	1
n-Butylbenzene	ND		1.0		ug/L			11/25/13 17:46	1
sec-Butylbenzene	ND		1.0		ug/L			11/25/13 17:46	1
tert-Butylbenzene	ND		1.0		ug/L			11/25/13 17:46	1
Carbon disulfide	ND		5.0		ug/L			11/25/13 17:46	1
Carbon tetrachloride	ND		0.50		ug/L			11/25/13 17:46	1
Chlorobenzene	ND		0.50		ug/L			11/25/13 17:46	1
Chloroethane	ND		1.0		ug/L			11/25/13 17:46	1
Chloroform	ND		1.0		ug/L			11/25/13 17:46	1
Chloromethane	ND		1.0		ug/L			11/25/13 17:46	1
2-Chlorotoluene	ND		0.50		ug/L			11/25/13 17:46	1
4-Chlorotoluene	ND		0.50		ug/L			11/25/13 17:46	1
Chlorodibromomethane	ND		0.50		ug/L			11/25/13 17:46	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/25/13 17:46	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/25/13 17:46	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/25/13 17:46	1
1,3-Dichloropropane	ND		1.0		ug/L			11/25/13 17:46	1
1,1-Dichloropropene	ND		0.50		ug/L			11/25/13 17:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/25/13 17:46	1
Ethylene Dibromide	ND		0.50		ug/L			11/25/13 17:46	1
Dibromomethane	ND		0.50		ug/L			11/25/13 17:46	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/25/13 17:46	1
1,1-Dichloroethane	ND		0.50		ug/L			11/25/13 17:46	1
1,2-Dichloroethane	ND		0.50		ug/L			11/25/13 17:46	1
1,1-Dichloroethene	ND		0.50		ug/L			11/25/13 17:46	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 17:46	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 17:46	1
1,2-Dichloropropane	ND		0.50		ug/L			11/25/13 17:46	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 17:46	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 17:46	1
<b>Ethylbenzene</b>	<b>2.4</b>		0.50		ug/L			11/25/13 17:46	1
Hexachlorobutadiene	ND		1.0		ug/L			11/25/13 17:46	1
2-Hexanone	ND		50		ug/L			11/25/13 17:46	1
Isopropylbenzene	ND		0.50		ug/L			11/25/13 17:46	1
4-Isopropyltoluene	ND		1.0		ug/L			11/25/13 17:46	1
Methylene Chloride	ND		5.0		ug/L			11/25/13 17:46	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/25/13 17:46	1
Naphthalene	ND		1.0		ug/L			11/25/13 17:46	1
N-Propylbenzene	ND		1.0		ug/L			11/25/13 17:46	1
Styrene	ND		0.50		ug/L			11/25/13 17:46	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/25/13 17:46	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-4**

**Date Collected: 11/22/13 14:25**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-3**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/25/13 17:46	1
Tetrachloroethene	ND		0.50		ug/L			11/25/13 17:46	1
Toluene	ND		0.50		ug/L			11/25/13 17:46	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/25/13 17:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/25/13 17:46	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/25/13 17:46	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/25/13 17:46	1
Trichloroethene	ND		0.50		ug/L			11/25/13 17:46	1
Trichlorofluoromethane	ND		1.0		ug/L			11/25/13 17:46	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/25/13 17:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/25/13 17:46	1
<b>1,2,4-Trimethylbenzene</b>	<b>0.85</b>		0.50		ug/L			11/25/13 17:46	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/25/13 17:46	1
Vinyl acetate	ND		10		ug/L			11/25/13 17:46	1
Vinyl chloride	ND		0.50		ug/L			11/25/13 17:46	1
<b>Xylenes, Total</b>	<b>6.7</b>		1.0		ug/L			11/25/13 17:46	1
2,2-Dichloropropane	ND		0.50		ug/L			11/25/13 17:46	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/25/13 17:46	1
TBA	ND		10		ug/L			11/25/13 17:46	1
Ethyl tert-butyl ether	ND		0.50		ug/L			11/25/13 17:46	1
DIPE	ND		0.50		ug/L			11/25/13 17:46	1
Ethanol	ND		250		ug/L			11/25/13 17:46	1
TAME	ND		0.50		ug/L			11/25/13 17:46	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	93		67 - 130					11/25/13 17:46	1
1,2-Dichloroethane-d4 (Surr)	92		72 - 130					11/25/13 17:46	1
Toluene-d8 (Surr)	97		70 - 130					11/25/13 17:46	1

**Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/26/13 23:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	79		70 - 130					11/26/13 23:01	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Client Sample ID: MW-5

Date Collected: 11/22/13 12:45  
Date Received: 11/22/13 17:27

## Lab Sample ID: 720-54005-4

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	62		25		ug/L			11/25/13 23:23	50
Acetone	ND		2500		ug/L			11/25/13 23:23	50
Benzene	290		25		ug/L			11/25/13 23:23	50
Dichlorobromomethane	ND		25		ug/L			11/25/13 23:23	50
Bromobenzene	ND		50		ug/L			11/25/13 23:23	50
Chlorobromomethane	ND		50		ug/L			11/25/13 23:23	50
Bromoform	ND		50		ug/L			11/25/13 23:23	50
Bromomethane	ND		50		ug/L			11/25/13 23:23	50
2-Butanone (MEK)	ND		2500		ug/L			11/25/13 23:23	50
n-Butylbenzene	ND		50		ug/L			11/25/13 23:23	50
sec-Butylbenzene	ND		50		ug/L			11/25/13 23:23	50
tert-Butylbenzene	ND		50		ug/L			11/25/13 23:23	50
Carbon disulfide	ND		250		ug/L			11/25/13 23:23	50
Carbon tetrachloride	ND		25		ug/L			11/25/13 23:23	50
Chlorobenzene	ND		25		ug/L			11/25/13 23:23	50
Chloroethane	ND		50		ug/L			11/25/13 23:23	50
Chloroform	ND		50		ug/L			11/25/13 23:23	50
Chloromethane	ND		50		ug/L			11/25/13 23:23	50
2-Chlorotoluene	ND		25		ug/L			11/25/13 23:23	50
4-Chlorotoluene	ND		25		ug/L			11/25/13 23:23	50
Chlorodibromomethane	ND		25		ug/L			11/25/13 23:23	50
1,2-Dichlorobenzene	ND		25		ug/L			11/25/13 23:23	50
1,3-Dichlorobenzene	ND		25		ug/L			11/25/13 23:23	50
1,4-Dichlorobenzene	ND		25		ug/L			11/25/13 23:23	50
1,3-Dichloropropane	ND		50		ug/L			11/25/13 23:23	50
1,1-Dichloropropene	ND		25		ug/L			11/25/13 23:23	50
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			11/25/13 23:23	50
Ethylene Dibromide	ND		25		ug/L			11/25/13 23:23	50
Dibromomethane	ND		25		ug/L			11/25/13 23:23	50
Dichlorodifluoromethane	ND		25		ug/L			11/25/13 23:23	50
1,1-Dichloroethane	ND		25		ug/L			11/25/13 23:23	50
1,2-Dichloroethane	ND		25		ug/L			11/25/13 23:23	50
1,1-Dichloroethene	ND		25		ug/L			11/25/13 23:23	50
cis-1,2-Dichloroethene	ND		25		ug/L			11/25/13 23:23	50
trans-1,2-Dichloroethene	ND		25		ug/L			11/25/13 23:23	50
1,2-Dichloropropane	ND		25		ug/L			11/25/13 23:23	50
cis-1,3-Dichloropropene	ND		25		ug/L			11/25/13 23:23	50
trans-1,3-Dichloropropene	ND		25		ug/L			11/25/13 23:23	50
<b>Ethylbenzene</b>	<b>2300</b>		25		ug/L			11/25/13 23:23	50
Hexachlorobutadiene	ND		50		ug/L			11/25/13 23:23	50
2-Hexanone	ND		2500		ug/L			11/25/13 23:23	50
<b>Isopropylbenzene</b>	<b>89</b>		25		ug/L			11/25/13 23:23	50
4-Isopropyltoluene	ND		50		ug/L			11/25/13 23:23	50
Methylene Chloride	ND		250		ug/L			11/25/13 23:23	50
4-Methyl-2-pentanone (MIBK)	ND		2500		ug/L			11/25/13 23:23	50
<b>Naphthalene</b>	<b>610</b>		50		ug/L			11/25/13 23:23	50
<b>N-Propylbenzene</b>	<b>250</b>		50		ug/L			11/25/13 23:23	50
Styrene	ND		25		ug/L			11/25/13 23:23	50
1,1,1,2-Tetrachloroethane	ND		25		ug/L			11/25/13 23:23	50

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-5**

**Date Collected: 11/22/13 12:45**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-4**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		25		ug/L			11/25/13 23:23	50
Tetrachloroethene	ND		25		ug/L			11/25/13 23:23	50
<b>Toluene</b>	<b>340</b>		25		ug/L			11/25/13 23:23	50
1,2,3-Trichlorobenzene	ND		50		ug/L			11/25/13 23:23	50
1,2,4-Trichlorobenzene	ND		50		ug/L			11/25/13 23:23	50
1,1,1-Trichloroethane	ND		25		ug/L			11/25/13 23:23	50
1,1,2-Trichloroethane	ND		25		ug/L			11/25/13 23:23	50
Trichloroethene	ND		25		ug/L			11/25/13 23:23	50
Trichlorofluoromethane	ND		50		ug/L			11/25/13 23:23	50
1,2,3-Trichloropropane	ND		25		ug/L			11/25/13 23:23	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25		ug/L			11/25/13 23:23	50
<b>1,2,4-Trimethylbenzene</b>	<b>1100</b>		25		ug/L			11/25/13 23:23	50
<b>1,3,5-Trimethylbenzene</b>	<b>240</b>		25		ug/L			11/25/13 23:23	50
Vinyl acetate	ND		500		ug/L			11/25/13 23:23	50
Vinyl chloride	ND		25		ug/L			11/25/13 23:23	50
<b>Xylenes, Total</b>	<b>4000</b>		50		ug/L			11/25/13 23:23	50
2,2-Dichloropropane	ND		25		ug/L			11/25/13 23:23	50
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>16000</b>		2500		ug/L			11/25/13 23:23	50
TBA	ND		500		ug/L			11/25/13 23:23	50
Ethyl tert-butyl ether	ND		25		ug/L			11/25/13 23:23	50
DIPE	ND		25		ug/L			11/25/13 23:23	50
Ethanol	ND		13000		ug/L			11/25/13 23:23	50
TAME	ND		25		ug/L			11/25/13 23:23	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	94		67 - 130					11/25/13 23:23	50
1,2-Dichloroethane-d4 (Surr)	93		72 - 130					11/25/13 23:23	50
Toluene-d8 (Surr)	97		70 - 130					11/25/13 23:23	50

**Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/26/13 23:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	88		70 - 130					11/26/13 23:18	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-6A**

**Date Collected: 11/22/13 15:50**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-5**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/25/13 23:52	1
Acetone	ND		50		ug/L			11/25/13 23:52	1
Benzene	ND		0.50		ug/L			11/25/13 23:52	1
Dichlorobromomethane	ND		0.50		ug/L			11/25/13 23:52	1
Bromobenzene	ND		1.0		ug/L			11/25/13 23:52	1
Chlorobromomethane	ND		1.0		ug/L			11/25/13 23:52	1
Bromoform	ND		1.0		ug/L			11/25/13 23:52	1
Bromomethane	ND		1.0		ug/L			11/25/13 23:52	1
2-Butanone (MEK)	ND		50		ug/L			11/25/13 23:52	1
n-Butylbenzene	ND		1.0		ug/L			11/25/13 23:52	1
sec-Butylbenzene	ND		1.0		ug/L			11/25/13 23:52	1
tert-Butylbenzene	ND		1.0		ug/L			11/25/13 23:52	1
Carbon disulfide	ND		5.0		ug/L			11/25/13 23:52	1
Carbon tetrachloride	ND		0.50		ug/L			11/25/13 23:52	1
Chlorobenzene	ND		0.50		ug/L			11/25/13 23:52	1
Chloroethane	ND		1.0		ug/L			11/25/13 23:52	1
Chloroform	ND		1.0		ug/L			11/25/13 23:52	1
Chloromethane	ND		1.0		ug/L			11/25/13 23:52	1
2-Chlorotoluene	ND		0.50		ug/L			11/25/13 23:52	1
4-Chlorotoluene	ND		0.50		ug/L			11/25/13 23:52	1
Chlorodibromomethane	ND		0.50		ug/L			11/25/13 23:52	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/25/13 23:52	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/25/13 23:52	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/25/13 23:52	1
1,3-Dichloropropane	ND		1.0		ug/L			11/25/13 23:52	1
1,1-Dichloropropene	ND		0.50		ug/L			11/25/13 23:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/25/13 23:52	1
Ethylene Dibromide	ND		0.50		ug/L			11/25/13 23:52	1
Dibromomethane	ND		0.50		ug/L			11/25/13 23:52	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/25/13 23:52	1
1,1-Dichloroethane	ND		0.50		ug/L			11/25/13 23:52	1
1,2-Dichloroethane	ND		0.50		ug/L			11/25/13 23:52	1
1,1-Dichloroethene	ND		0.50		ug/L			11/25/13 23:52	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 23:52	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 23:52	1
1,2-Dichloropropane	ND		0.50		ug/L			11/25/13 23:52	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 23:52	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 23:52	1
Ethylbenzene	ND		0.50		ug/L			11/25/13 23:52	1
Hexachlorobutadiene	ND		1.0		ug/L			11/25/13 23:52	1
2-Hexanone	ND		50		ug/L			11/25/13 23:52	1
Isopropylbenzene	ND		0.50		ug/L			11/25/13 23:52	1
4-Isopropyltoluene	ND		1.0		ug/L			11/25/13 23:52	1
Methylene Chloride	ND		5.0		ug/L			11/25/13 23:52	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/25/13 23:52	1
Naphthalene	ND		1.0		ug/L			11/25/13 23:52	1
N-Propylbenzene	ND		1.0		ug/L			11/25/13 23:52	1
Styrene	ND		0.50		ug/L			11/25/13 23:52	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/25/13 23:52	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-6A**

**Lab Sample ID: 720-54005-5**

**Date Collected: 11/22/13 15:50**

**Matrix: Water**

**Date Received: 11/22/13 17:27**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/25/13 23:52	1
Tetrachloroethene	ND		0.50		ug/L			11/25/13 23:52	1
Toluene	ND		0.50		ug/L			11/25/13 23:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/25/13 23:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/25/13 23:52	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/25/13 23:52	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/25/13 23:52	1
Trichloroethene	ND		0.50		ug/L			11/25/13 23:52	1
Trichlorofluoromethane	ND		1.0		ug/L			11/25/13 23:52	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/25/13 23:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/25/13 23:52	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/25/13 23:52	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/25/13 23:52	1
Vinyl acetate	ND		10		ug/L			11/25/13 23:52	1
Vinyl chloride	ND		0.50		ug/L			11/25/13 23:52	1
Xylenes, Total	ND		1.0		ug/L			11/25/13 23:52	1
2,2-Dichloropropane	ND		0.50		ug/L			11/25/13 23:52	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/25/13 23:52	1
TBA	ND		10		ug/L			11/25/13 23:52	1
Ethyl tert-butyl ether	ND		0.50		ug/L			11/25/13 23:52	1
DIPE	ND		0.50		ug/L			11/25/13 23:52	1
Ethanol	ND		250		ug/L			11/25/13 23:52	1
TAME	ND		0.50		ug/L			11/25/13 23:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	90		67 - 130					11/25/13 23:52	1
1,2-Dichloroethane-d4 (Surr)	94		72 - 130					11/25/13 23:52	1
Toluene-d8 (Surr)	96		70 - 130					11/25/13 23:52	1

**Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/26/13 23:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	87		70 - 130					11/26/13 23:34	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-6B**

**Date Collected: 11/22/13 15:15**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-6**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/13 00:21	1
Acetone	ND		50		ug/L			11/26/13 00:21	1
Benzene	ND		0.50		ug/L			11/26/13 00:21	1
Dichlorobromomethane	ND		0.50		ug/L			11/26/13 00:21	1
Bromobenzene	ND		1.0		ug/L			11/26/13 00:21	1
Chlorobromomethane	ND		1.0		ug/L			11/26/13 00:21	1
Bromoform	ND		1.0		ug/L			11/26/13 00:21	1
Bromomethane	ND		1.0		ug/L			11/26/13 00:21	1
2-Butanone (MEK)	ND		50		ug/L			11/26/13 00:21	1
n-Butylbenzene	ND		1.0		ug/L			11/26/13 00:21	1
sec-Butylbenzene	ND		1.0		ug/L			11/26/13 00:21	1
tert-Butylbenzene	ND		1.0		ug/L			11/26/13 00:21	1
Carbon disulfide	ND		5.0		ug/L			11/26/13 00:21	1
Carbon tetrachloride	ND		0.50		ug/L			11/26/13 00:21	1
Chlorobenzene	ND		0.50		ug/L			11/26/13 00:21	1
Chloroethane	ND		1.0		ug/L			11/26/13 00:21	1
Chloroform	ND		1.0		ug/L			11/26/13 00:21	1
Chloromethane	ND		1.0		ug/L			11/26/13 00:21	1
2-Chlorotoluene	ND		0.50		ug/L			11/26/13 00:21	1
4-Chlorotoluene	ND		0.50		ug/L			11/26/13 00:21	1
Chlorodibromomethane	ND		0.50		ug/L			11/26/13 00:21	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/26/13 00:21	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/26/13 00:21	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/26/13 00:21	1
1,3-Dichloropropane	ND		1.0		ug/L			11/26/13 00:21	1
1,1-Dichloropropene	ND		0.50		ug/L			11/26/13 00:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/26/13 00:21	1
Ethylene Dibromide	ND		0.50		ug/L			11/26/13 00:21	1
Dibromomethane	ND		0.50		ug/L			11/26/13 00:21	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/26/13 00:21	1
1,1-Dichloroethane	ND		0.50		ug/L			11/26/13 00:21	1
1,2-Dichloroethane	ND		0.50		ug/L			11/26/13 00:21	1
1,1-Dichloroethene	ND		0.50		ug/L			11/26/13 00:21	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 00:21	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 00:21	1
1,2-Dichloropropane	ND		0.50		ug/L			11/26/13 00:21	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 00:21	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 00:21	1
<b>Ethylbenzene</b>	<b>6.0</b>		0.50		ug/L			11/26/13 00:21	1
Hexachlorobutadiene	ND		1.0		ug/L			11/26/13 00:21	1
2-Hexanone	ND		50		ug/L			11/26/13 00:21	1
<b>Isopropylbenzene</b>	<b>0.65</b>		0.50		ug/L			11/26/13 00:21	1
4-Isopropyltoluene	ND		1.0		ug/L			11/26/13 00:21	1
Methylene Chloride	ND		5.0		ug/L			11/26/13 00:21	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/26/13 00:21	1
<b>Naphthalene</b>	<b>3.0</b>		1.0		ug/L			11/26/13 00:21	1
<b>N-Propylbenzene</b>	<b>1.2</b>		1.0		ug/L			11/26/13 00:21	1
Styrene	ND		0.50		ug/L			11/26/13 00:21	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 00:21	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-6B**

**Lab Sample ID: 720-54005-6**

Date Collected: 11/22/13 15:15

Matrix: Water

Date Received: 11/22/13 17:27

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 00:21	1
Tetrachloroethene	ND		0.50		ug/L			11/26/13 00:21	1
<b>Toluene</b>	<b>1.0</b>		0.50		ug/L			11/26/13 00:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/26/13 00:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/26/13 00:21	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/26/13 00:21	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/26/13 00:21	1
Trichloroethene	ND		0.50		ug/L			11/26/13 00:21	1
Trichlorofluoromethane	ND		1.0		ug/L			11/26/13 00:21	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/26/13 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/26/13 00:21	1
<b>1,2,4-Trimethylbenzene</b>	<b>8.6</b>		0.50		ug/L			11/26/13 00:21	1
<b>1,3,5-Trimethylbenzene</b>	<b>4.6</b>		0.50		ug/L			11/26/13 00:21	1
Vinyl acetate	ND		10		ug/L			11/26/13 00:21	1
Vinyl chloride	ND		0.50		ug/L			11/26/13 00:21	1
<b>Xylenes, Total</b>	<b>16</b>		1.0		ug/L			11/26/13 00:21	1
2,2-Dichloropropane	ND		0.50		ug/L			11/26/13 00:21	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>160</b>		50		ug/L			11/26/13 00:21	1
TBA	ND		10		ug/L			11/26/13 00:21	1
Ethyl tert-butyl ether	ND		0.50		ug/L			11/26/13 00:21	1
DIPE	ND		0.50		ug/L			11/26/13 00:21	1
Ethanol	ND		250		ug/L			11/26/13 00:21	1
TAME	ND		0.50		ug/L			11/26/13 00:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	92		67 - 130					11/26/13 00:21	1
1,2-Dichloroethane-d4 (Surr)	92		72 - 130					11/26/13 00:21	1
Toluene-d8 (Surr)	96		70 - 130					11/26/13 00:21	1

## Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/26/13 23:51	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	90		70 - 130					11/26/13 23:51	1

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-7A**

**Date Collected: 11/22/13 09:20**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-7**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	5.4		0.50		ug/L			11/26/13 00:49	1
Acetone	ND		50		ug/L			11/26/13 00:49	1
Benzene	ND		0.50		ug/L			11/26/13 00:49	1
Dichlorobromomethane	ND		0.50		ug/L			11/26/13 00:49	1
Bromobenzene	ND		1.0		ug/L			11/26/13 00:49	1
Chlorobromomethane	ND		1.0		ug/L			11/26/13 00:49	1
Bromoform	ND		1.0		ug/L			11/26/13 00:49	1
Bromomethane	ND		1.0		ug/L			11/26/13 00:49	1
2-Butanone (MEK)	ND		50		ug/L			11/26/13 00:49	1
n-Butylbenzene	ND		1.0		ug/L			11/26/13 00:49	1
sec-Butylbenzene	ND		1.0		ug/L			11/26/13 00:49	1
tert-Butylbenzene	ND		1.0		ug/L			11/26/13 00:49	1
Carbon disulfide	ND		5.0		ug/L			11/26/13 00:49	1
Carbon tetrachloride	ND		0.50		ug/L			11/26/13 00:49	1
Chlorobenzene	ND		0.50		ug/L			11/26/13 00:49	1
Chloroethane	ND		1.0		ug/L			11/26/13 00:49	1
Chloroform	ND		1.0		ug/L			11/26/13 00:49	1
Chloromethane	ND		1.0		ug/L			11/26/13 00:49	1
2-Chlorotoluene	ND		0.50		ug/L			11/26/13 00:49	1
4-Chlorotoluene	ND		0.50		ug/L			11/26/13 00:49	1
Chlorodibromomethane	ND		0.50		ug/L			11/26/13 00:49	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/26/13 00:49	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/26/13 00:49	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/26/13 00:49	1
1,3-Dichloropropane	ND		1.0		ug/L			11/26/13 00:49	1
1,1-Dichloropropene	ND		0.50		ug/L			11/26/13 00:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/26/13 00:49	1
Ethylene Dibromide	ND		0.50		ug/L			11/26/13 00:49	1
Dibromomethane	ND		0.50		ug/L			11/26/13 00:49	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/26/13 00:49	1
1,1-Dichloroethane	ND		0.50		ug/L			11/26/13 00:49	1
1,2-Dichloroethane	ND		0.50		ug/L			11/26/13 00:49	1
1,1-Dichloroethene	ND		0.50		ug/L			11/26/13 00:49	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 00:49	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 00:49	1
1,2-Dichloropropane	ND		0.50		ug/L			11/26/13 00:49	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 00:49	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 00:49	1
Ethylbenzene	ND		0.50		ug/L			11/26/13 00:49	1
Hexachlorobutadiene	ND		1.0		ug/L			11/26/13 00:49	1
2-Hexanone	ND		50		ug/L			11/26/13 00:49	1
Isopropylbenzene	ND		0.50		ug/L			11/26/13 00:49	1
4-Isopropyltoluene	ND		1.0		ug/L			11/26/13 00:49	1
Methylene Chloride	ND		5.0		ug/L			11/26/13 00:49	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/26/13 00:49	1
Naphthalene	ND		1.0		ug/L			11/26/13 00:49	1
N-Propylbenzene	ND		1.0		ug/L			11/26/13 00:49	1
Styrene	ND		0.50		ug/L			11/26/13 00:49	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 00:49	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-7A**

**Lab Sample ID: 720-54005-7**

**Date Collected: 11/22/13 09:20**

**Matrix: Water**

**Date Received: 11/22/13 17:27**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 00:49	1
Tetrachloroethene	ND		0.50		ug/L			11/26/13 00:49	1
Toluene	ND		0.50		ug/L			11/26/13 00:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/26/13 00:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/26/13 00:49	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/26/13 00:49	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/26/13 00:49	1
Trichloroethene	ND		0.50		ug/L			11/26/13 00:49	1
Trichlorofluoromethane	ND		1.0		ug/L			11/26/13 00:49	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/26/13 00:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/26/13 00:49	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/26/13 00:49	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/26/13 00:49	1
Vinyl acetate	ND		10		ug/L			11/26/13 00:49	1
Vinyl chloride	ND		0.50		ug/L			11/26/13 00:49	1
Xylenes, Total	ND		1.0		ug/L			11/26/13 00:49	1
2,2-Dichloropropane	ND		0.50		ug/L			11/26/13 00:49	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/26/13 00:49	1
TBA	ND		10		ug/L			11/26/13 00:49	1
Ethyl tert-butyl ether	ND		0.50		ug/L			11/26/13 00:49	1
DIPE	ND		0.50		ug/L			11/26/13 00:49	1
Ethanol	ND		250		ug/L			11/26/13 00:49	1
TAME	ND		0.50		ug/L			11/26/13 00:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	89		67 - 130					11/26/13 00:49	1
1,2-Dichloroethane-d4 (Surr)	100		72 - 130					11/26/13 00:49	1
Toluene-d8 (Surr)	96		70 - 130					11/26/13 00:49	1

## Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/27/13 00:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	84		70 - 130					11/27/13 00:08	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-7B**

**Date Collected: 11/22/13 10:00**

**Date Received: 11/22/13 17:27**

**Lab Sample ID: 720-54005-8**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	7.2		0.50		ug/L			11/26/13 01:18	1
Acetone	ND		50		ug/L			11/26/13 01:18	1
Benzene	ND		0.50		ug/L			11/26/13 01:18	1
Dichlorobromomethane	ND		0.50		ug/L			11/26/13 01:18	1
Bromobenzene	ND		1.0		ug/L			11/26/13 01:18	1
Chlorobromomethane	ND		1.0		ug/L			11/26/13 01:18	1
Bromoform	ND		1.0		ug/L			11/26/13 01:18	1
Bromomethane	ND		1.0		ug/L			11/26/13 01:18	1
2-Butanone (MEK)	ND		50		ug/L			11/26/13 01:18	1
n-Butylbenzene	ND		1.0		ug/L			11/26/13 01:18	1
sec-Butylbenzene	ND		1.0		ug/L			11/26/13 01:18	1
tert-Butylbenzene	ND		1.0		ug/L			11/26/13 01:18	1
Carbon disulfide	ND		5.0		ug/L			11/26/13 01:18	1
Carbon tetrachloride	ND		0.50		ug/L			11/26/13 01:18	1
Chlorobenzene	ND		0.50		ug/L			11/26/13 01:18	1
Chloroethane	ND		1.0		ug/L			11/26/13 01:18	1
Chloroform	ND		1.0		ug/L			11/26/13 01:18	1
Chloromethane	ND		1.0		ug/L			11/26/13 01:18	1
2-Chlorotoluene	ND		0.50		ug/L			11/26/13 01:18	1
4-Chlorotoluene	ND		0.50		ug/L			11/26/13 01:18	1
Chlorodibromomethane	ND		0.50		ug/L			11/26/13 01:18	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/26/13 01:18	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/26/13 01:18	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/26/13 01:18	1
1,3-Dichloropropane	ND		1.0		ug/L			11/26/13 01:18	1
1,1-Dichloropropene	ND		0.50		ug/L			11/26/13 01:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/26/13 01:18	1
Ethylene Dibromide	ND		0.50		ug/L			11/26/13 01:18	1
Dibromomethane	ND		0.50		ug/L			11/26/13 01:18	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/26/13 01:18	1
1,1-Dichloroethane	ND		0.50		ug/L			11/26/13 01:18	1
1,2-Dichloroethane	ND		0.50		ug/L			11/26/13 01:18	1
1,1-Dichloroethene	ND		0.50		ug/L			11/26/13 01:18	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 01:18	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/26/13 01:18	1
1,2-Dichloropropane	ND		0.50		ug/L			11/26/13 01:18	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 01:18	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/26/13 01:18	1
Ethylbenzene	ND		0.50		ug/L			11/26/13 01:18	1
Hexachlorobutadiene	ND		1.0		ug/L			11/26/13 01:18	1
2-Hexanone	ND		50		ug/L			11/26/13 01:18	1
Isopropylbenzene	ND		0.50		ug/L			11/26/13 01:18	1
4-Isopropyltoluene	ND		1.0		ug/L			11/26/13 01:18	1
Methylene Chloride	ND		5.0		ug/L			11/26/13 01:18	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/26/13 01:18	1
Naphthalene	ND		1.0		ug/L			11/26/13 01:18	1
N-Propylbenzene	ND		1.0		ug/L			11/26/13 01:18	1
Styrene	ND		0.50		ug/L			11/26/13 01:18	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 01:18	1

TestAmerica Pleasanton

# Client Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

**Client Sample ID: MW-7B**

**Lab Sample ID: 720-54005-8**

**Date Collected: 11/22/13 10:00**

**Matrix: Water**

**Date Received: 11/22/13 17:27**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/26/13 01:18	1
Tetrachloroethene	ND		0.50		ug/L			11/26/13 01:18	1
Toluene	ND		0.50		ug/L			11/26/13 01:18	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/26/13 01:18	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/26/13 01:18	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/26/13 01:18	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/26/13 01:18	1
Trichloroethene	ND		0.50		ug/L			11/26/13 01:18	1
Trichlorofluoromethane	ND		1.0		ug/L			11/26/13 01:18	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/26/13 01:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/26/13 01:18	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/26/13 01:18	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/26/13 01:18	1
Vinyl acetate	ND		10		ug/L			11/26/13 01:18	1
Vinyl chloride	ND		0.50		ug/L			11/26/13 01:18	1
Xylenes, Total	ND		1.0		ug/L			11/26/13 01:18	1
2,2-Dichloropropane	ND		0.50		ug/L			11/26/13 01:18	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/26/13 01:18	1
TBA	ND		10		ug/L			11/26/13 01:18	1
Ethyl tert-butyl ether	ND		0.50		ug/L			11/26/13 01:18	1
DIPE	ND		0.50		ug/L			11/26/13 01:18	1
Ethanol	ND		250		ug/L			11/26/13 01:18	1
TAME	ND		0.50		ug/L			11/26/13 01:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	88		67 - 130					11/26/13 01:18	1
1,2-Dichloroethane-d4 (Surr)	95		72 - 130					11/26/13 01:18	1
Toluene-d8 (Surr)	96		70 - 130					11/26/13 01:18	1

## Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/27/13 00:24	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Pentanol	89		70 - 130					11/27/13 00:24	1

TestAmerica Pleasanton

## Surrogate Summary

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (67-130)	12DCE (72-130)	TOL (70-130)
720-54005-1	MW-1	91	95	96
720-54005-2	MW-2	98	93	100
720-54005-3	MW-4	93	92	97
720-54005-4	MW-5	94	93	97
720-54005-5	MW-6A	90	94	96
720-54005-6	MW-6B	92	92	96
720-54005-7	MW-7A	89	100	96
720-54005-8	MW-7B	88	95	96
LCS 720-148913/6	Lab Control Sample	95	86	97
LCS 720-148913/8	Lab Control Sample	95	90	98
LCS 720-148961/6	Lab Control Sample	94	88	96
LCS 720-148961/8	Lab Control Sample	93	90	98
LCS 720-149056/5	Lab Control Sample	95	88	97
LCS 720-149056/7	Lab Control Sample	95	95	99
LCSD 720-148913/7	Lab Control Sample Dup	93	86	97
LCSD 720-148913/9	Lab Control Sample Dup	94	90	98
LCSD 720-148961/7	Lab Control Sample Dup	94	90	98
LCSD 720-148961/9	Lab Control Sample Dup	91	88	96
LCSD 720-149056/6	Lab Control Sample Dup	94	88	98
LCSD 720-149056/8	Lab Control Sample Dup	93	90	99
MB 720-148913/5	Method Blank	89	87	96
MB 720-148961/5	Method Blank	90	91	96
MB 720-149056/4	Method Blank	90	91	96

#### Surrogate Legend

BFB = 4-Bromofluorobenzene

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

TOL = Toluene-d8 (Surr)

### Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		1Pent2 (70-130)		
720-54005-1	MW-1	94		
720-54005-2	MW-2	93		
720-54005-3	MW-4	79		
720-54005-4	MW-5	88		
720-54005-5	MW-6A	87		
720-54005-6	MW-6B	90		
720-54005-7	MW-7A	84		
720-54005-8	MW-7B	89		
LCS 440-147102/8	Lab Control Sample	91		
MB 440-147102/7	Method Blank	93		

#### Surrogate Legend

1Pent = 1-Pentanol

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-148913/5

Matrix: Water

Analysis Batch: 148913

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			11/25/13 09:22	1
Acetone	ND		50		ug/L			11/25/13 09:22	1
Benzene	ND		0.50		ug/L			11/25/13 09:22	1
Dichlorobromomethane	ND		0.50		ug/L			11/25/13 09:22	1
Bromobenzene	ND		1.0		ug/L			11/25/13 09:22	1
Chlorobromomethane	ND		1.0		ug/L			11/25/13 09:22	1
Bromoform	ND		1.0		ug/L			11/25/13 09:22	1
Bromomethane	ND		1.0		ug/L			11/25/13 09:22	1
2-Butanone (MEK)	ND		50		ug/L			11/25/13 09:22	1
n-Butylbenzene	ND		1.0		ug/L			11/25/13 09:22	1
sec-Butylbenzene	ND		1.0		ug/L			11/25/13 09:22	1
tert-Butylbenzene	ND		1.0		ug/L			11/25/13 09:22	1
Carbon disulfide	ND		5.0		ug/L			11/25/13 09:22	1
Carbon tetrachloride	ND		0.50		ug/L			11/25/13 09:22	1
Chlorobenzene	ND		0.50		ug/L			11/25/13 09:22	1
Chloroethane	ND		1.0		ug/L			11/25/13 09:22	1
Chloroform	ND		1.0		ug/L			11/25/13 09:22	1
Chloromethane	ND		1.0		ug/L			11/25/13 09:22	1
2-Chlorotoluene	ND		0.50		ug/L			11/25/13 09:22	1
4-Chlorotoluene	ND		0.50		ug/L			11/25/13 09:22	1
Chlorodibromomethane	ND		0.50		ug/L			11/25/13 09:22	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/25/13 09:22	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/25/13 09:22	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/25/13 09:22	1
1,3-Dichloropropane	ND		1.0		ug/L			11/25/13 09:22	1
1,1-Dichloropropene	ND		0.50		ug/L			11/25/13 09:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/25/13 09:22	1
Ethylene Dibromide	ND		0.50		ug/L			11/25/13 09:22	1
Dibromomethane	ND		0.50		ug/L			11/25/13 09:22	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/25/13 09:22	1
1,1-Dichloroethane	ND		0.50		ug/L			11/25/13 09:22	1
1,2-Dichloroethane	ND		0.50		ug/L			11/25/13 09:22	1
1,1-Dichloroethene	ND		0.50		ug/L			11/25/13 09:22	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 09:22	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/25/13 09:22	1
1,2-Dichloropropene	ND		0.50		ug/L			11/25/13 09:22	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 09:22	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/25/13 09:22	1
Ethylbenzene	ND		0.50		ug/L			11/25/13 09:22	1
Hexachlorobutadiene	ND		1.0		ug/L			11/25/13 09:22	1
2-Hexanone	ND		50		ug/L			11/25/13 09:22	1
Isopropylbenzene	ND		0.50		ug/L			11/25/13 09:22	1
4-Isopropyltoluene	ND		1.0		ug/L			11/25/13 09:22	1
Methylene Chloride	ND		5.0		ug/L			11/25/13 09:22	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/25/13 09:22	1
Naphthalene	ND		1.0		ug/L			11/25/13 09:22	1
N-Propylbenzene	ND		1.0		ug/L			11/25/13 09:22	1
Styrene	ND		0.50		ug/L			11/25/13 09:22	1

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-148913/5**

**Matrix: Water**

**Analysis Batch: 148913**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
1,1,1,2-Tetrachloroethane	ND	ND			0.50		ug/L			11/25/13 09:22	1
1,1,2,2-Tetrachloroethane	ND	ND			0.50		ug/L			11/25/13 09:22	1
Tetrachloroethene	ND	ND			0.50		ug/L			11/25/13 09:22	1
Toluene	ND	ND			0.50		ug/L			11/25/13 09:22	1
1,2,3-Trichlorobenzene	ND	ND			1.0		ug/L			11/25/13 09:22	1
1,2,4-Trichlorobenzene	ND	ND			1.0		ug/L			11/25/13 09:22	1
1,1,1-Trichloroethane	ND	ND			0.50		ug/L			11/25/13 09:22	1
1,1,2-Trichloroethane	ND	ND			0.50		ug/L			11/25/13 09:22	1
Trichloroethene	ND	ND			0.50		ug/L			11/25/13 09:22	1
Trichlorofluoromethane	ND	ND			1.0		ug/L			11/25/13 09:22	1
1,2,3-Trichloropropane	ND	ND			0.50		ug/L			11/25/13 09:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND			0.50		ug/L			11/25/13 09:22	1
1,2,4-Trimethylbenzene	ND	ND			0.50		ug/L			11/25/13 09:22	1
1,3,5-Trimethylbenzene	ND	ND			0.50		ug/L			11/25/13 09:22	1
Vinyl acetate	ND	ND			10		ug/L			11/25/13 09:22	1
Vinyl chloride	ND	ND			0.50		ug/L			11/25/13 09:22	1
Xylenes, Total	ND	ND			1.0		ug/L			11/25/13 09:22	1
2,2-Dichloropropane	ND	ND			0.50		ug/L			11/25/13 09:22	1
Gasoline Range Organics (GRO) -C5-C12	ND	ND			50		ug/L			11/25/13 09:22	1
TBA	ND	ND			10		ug/L			11/25/13 09:22	1
Ethyl tert-butyl ether	ND	ND			0.50		ug/L			11/25/13 09:22	1
DIPE	ND	ND			0.50		ug/L			11/25/13 09:22	1
Ethanol	ND	ND			250		ug/L			11/25/13 09:22	1
TAME	ND	ND			0.50		ug/L			11/25/13 09:22	1

### MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		67 - 130		11/25/13 09:22	1
1,2-Dichloroethane-d4 (Surr)	87		72 - 130		11/25/13 09:22	1
Toluene-d8 (Surr)	96		70 - 130		11/25/13 09:22	1

**Lab Sample ID: LCS 720-148913/6**

**Matrix: Water**

**Analysis Batch: 148913**

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

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Methyl tert-butyl ether	25.0	25.3		ug/L		101	62 - 130
Acetone	125	131		ug/L		105	26 - 180
Benzene	25.0	26.5		ug/L		106	79 - 130
Dichlorobromomethane	25.0	26.1		ug/L		105	70 - 130
Bromobenzene	25.0	28.1		ug/L		113	70 - 130
Chlorobromomethane	25.0	27.1		ug/L		109	70 - 130
Bromoform	25.0	31.9		ug/L		128	68 - 136
Bromomethane	25.0	24.9		ug/L		99	43 - 151
2-Butanone (MEK)	125	134		ug/L		107	54 - 130
n-Butylbenzene	25.0	31.6		ug/L		126	70 - 142
sec-Butylbenzene	25.0	30.1		ug/L		120	70 - 134
tert-Butylbenzene	25.0	30.3		ug/L		121	70 - 135

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-148913/6**

**Matrix: Water**

**Analysis Batch: 148913**

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

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Carbon disulfide	25.0	25.3		ug/L		101	58 - 130
Carbon tetrachloride	25.0	30.2		ug/L		121	70 - 146
Chlorobenzene	25.0	28.7		ug/L		115	70 - 130
Chloroethane	25.0	25.5		ug/L		102	62 - 138
Chloroform	25.0	25.0		ug/L		100	70 - 130
Chloromethane	25.0	22.7		ug/L		91	52 - 175
2-Chlorotoluene	25.0	28.8		ug/L		115	70 - 130
4-Chlorotoluene	25.0	28.3		ug/L		113	70 - 130
Chlorodibromomethane	25.0	31.0		ug/L		124	70 - 145
1,2-Dichlorobenzene	25.0	28.3		ug/L		113	70 - 130
1,3-Dichlorobenzene	25.0	30.3		ug/L		121	70 - 130
1,4-Dichlorobenzene	25.0	30.0		ug/L		120	70 - 130
1,3-Dichloropropane	25.0	27.7		ug/L		111	70 - 130
1,1-Dichloropropene	25.0	29.4		ug/L		118	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	30.7		ug/L		123	70 - 136
Ethylene Dibromide	25.0	29.2		ug/L		117	70 - 130
Dibromomethane	25.0	25.8		ug/L		103	70 - 130
Dichlorodifluoromethane	25.0	20.9		ug/L		84	34 - 132
1,1-Dichloroethane	25.0	25.1		ug/L		100	70 - 130
1,2-Dichloroethane	25.0	23.8		ug/L		95	61 - 132
1,1-Dichloroethene	25.0	25.1		ug/L		100	64 - 128
cis-1,2-Dichloroethene	25.0	25.8		ug/L		103	70 - 130
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	68 - 130
1,2-Dichloropropane	25.0	25.9		ug/L		104	70 - 130
cis-1,3-Dichloropropene	25.0	29.5		ug/L		118	70 - 130
trans-1,3-Dichloropropene	25.0	31.4		ug/L		126	70 - 140
Ethylbenzene	25.0	27.6		ug/L		110	80 - 120
Hexachlorobutadiene	25.0	28.2		ug/L		113	70 - 130
2-Hexanone	125	139		ug/L		111	60 - 164
Isopropylbenzene	25.0	30.4		ug/L		122	70 - 130
4-Isopropyltoluene	25.0	30.7		ug/L		123	70 - 130
Methylene Chloride	25.0	25.5		ug/L		102	70 - 147
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	58 - 130
Naphthalene	25.0	28.9		ug/L		116	70 - 130
N-Propylbenzene	25.0	29.2		ug/L		117	70 - 130
Styrene	25.0	31.3		ug/L		125	70 - 130
1,1,1,2-Tetrachloroethane	25.0	31.4		ug/L		126	70 - 130
1,1,2,2-Tetrachloroethane	25.0	29.3		ug/L		117	70 - 130
Tetrachloroethene	25.0	28.5		ug/L		114	70 - 130
Toluene	25.0	26.0		ug/L		104	78 - 120
1,2,3-Trichlorobenzene	25.0	27.3		ug/L		109	70 - 130
1,2,4-Trichlorobenzene	25.0	28.9		ug/L		116	70 - 130
1,1,1-Trichloroethane	25.0	28.0		ug/L		112	70 - 130
1,1,2-Trichloroethane	25.0	27.6		ug/L		110	70 - 130
Trichloroethene	25.0	27.9		ug/L		112	70 - 130
Trichlorofluoromethane	25.0	25.7		ug/L		103	66 - 132
1,2,3-Trichloropropane	25.0	28.1		ug/L		113	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-148913/6**

**Matrix: Water**

**Analysis Batch: 148913**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier				112		
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.0		ug/L					
1,2,4-Trimethylbenzene	25.0	30.8		ug/L			123	70 - 132	
1,3,5-Trimethylbenzene	25.0	30.2		ug/L			121	70 - 130	
Vinyl acetate	25.0	33.3		ug/L			133	43 - 163	
Vinyl chloride	25.0	23.2		ug/L			93	54 - 135	
m-Xylene & p-Xylene	50.0	56.8		ug/L			114	70 - 142	
o-Xylene	25.0	28.4		ug/L			114	70 - 130	
2,2-Dichloropropane	25.0	33.2		ug/L			133	70 - 140	
TBA	500	534		ug/L			107	70 - 130	
Ethyl tert-butyl ether	25.0	25.1		ug/L			100	70 - 130	
DIPE	25.0	23.8		ug/L			95	69 - 134	
Ethanol	500	576		ug/L			115	31 - 216	
TAME	25.0	26.9		ug/L			108	79 - 130	
<hr/>									
Surrogate	LCS	LCS	Limits						
	%Recovery	Qualifier							
4-Bromofluorobenzene	95		67 - 130						
1,2-Dichloroethane-d4 (Surr)	86		72 - 130						
Toluene-d8 (Surr)	97		70 - 130						

**Lab Sample ID: LCS 720-148913/8**

**Matrix: Water**

**Analysis Batch: 148913**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier				95		
Gasoline Range Organics (GRO) -C5-C12	500	476		ug/L					
<hr/>									
Surrogate	LCS	LCS	Limits						
	%Recovery	Qualifier							
4-Bromofluorobenzene	95		67 - 130						
1,2-Dichloroethane-d4 (Surr)	90		72 - 130						
Toluene-d8 (Surr)	98		70 - 130						

**Lab Sample ID: LCSD 720-148913/7**

**Matrix: Water**

**Analysis Batch: 148913**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier				99		
Methyl tert-butyl ether	25.0	24.6		ug/L					
Acetone	125	119		ug/L			95	26 - 180	10
Benzene	25.0	26.4		ug/L			106	79 - 130	0
Dichlorobromomethane	25.0	25.6		ug/L			102	70 - 130	2
Bromobenzene	25.0	25.8		ug/L			103	70 - 130	9
Chlorobromomethane	25.0	26.8		ug/L			107	70 - 130	1
Bromoform	25.0	27.9		ug/L			112	68 - 136	13
Bromomethane	25.0	24.6		ug/L			98	43 - 151	1
2-Butanone (MEK)	125	121		ug/L			97	54 - 130	11
n-Butylbenzene	25.0	28.6		ug/L			114	70 - 142	10

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

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-148913/7**

**Matrix: Water**

**Analysis Batch: 148913**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD
	Added	Result	Qualifier				Limits	Limit		
sec-Butylbenzene	25.0	27.9		ug/L		112	70 - 134		7	20
tert-Butylbenzene	25.0	28.2		ug/L		113	70 - 135		7	20
Carbon disulfide	25.0	25.1		ug/L		101	58 - 130		1	20
Carbon tetrachloride	25.0	30.7		ug/L		123	70 - 146		2	20
Chlorobenzene	25.0	27.6		ug/L		110	70 - 130		4	20
Chloroethane	25.0	25.1		ug/L		100	62 - 138		2	20
Chloroform	25.0	24.8		ug/L		99	70 - 130		1	20
Chloromethane	25.0	22.7		ug/L		91	52 - 175		0	20
2-Chlorotoluene	25.0	27.0		ug/L		108	70 - 130		7	20
4-Chlorotoluene	25.0	26.1		ug/L		105	70 - 130		8	20
Chlorodibromomethane	25.0	28.8		ug/L		115	70 - 145		7	20
1,2-Dichlorobenzene	25.0	24.6		ug/L		99	70 - 130		14	20
1,3-Dichlorobenzene	25.0	27.1		ug/L		108	70 - 130		11	20
1,4-Dichlorobenzene	25.0	27.1		ug/L		108	70 - 130		10	20
1,3-Dichloropropane	25.0	26.0		ug/L		104	70 - 130		7	20
1,1-Dichloropropene	25.0	29.4		ug/L		118	70 - 130		0	20
1,2-Dibromo-3-Chloropropane	25.0	25.4		ug/L		102	70 - 136		19	20
Ethylene Dibromide	25.0	27.4		ug/L		109	70 - 130		7	20
Dibromomethane	25.0	25.0		ug/L		100	70 - 130		3	20
Dichlorodifluoromethane	25.0	21.0		ug/L		84	34 - 132		0	20
1,1-Dichloroethane	25.0	24.9		ug/L		100	70 - 130		1	20
1,2-Dichloroethane	25.0	23.3		ug/L		93	61 - 132		2	20
1,1-Dichloroethene	25.0	25.3		ug/L		101	64 - 128		1	20
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	70 - 130		1	20
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	68 - 130		0	20
1,2-Dichloropropene	25.0	25.6		ug/L		103	70 - 130		1	20
cis-1,3-Dichloropropene	25.0	28.7		ug/L		115	70 - 130		3	20
trans-1,3-Dichloropropene	25.0	30.1		ug/L		120	70 - 140		4	20
Ethylbenzene	25.0	26.7		ug/L		107	80 - 120		3	20
Hexachlorobutadiene	25.0	24.2		ug/L		97	70 - 130		15	20
2-Hexanone	125	116		ug/L		93	60 - 164		18	20
Isopropylbenzene	25.0	28.8		ug/L		115	70 - 130		6	20
4-Isopropyltoluene	25.0	28.1		ug/L		112	70 - 130		9	20
Methylene Chloride	25.0	25.3		ug/L		101	70 - 147		1	20
4-Methyl-2-pentanone (MIBK)	125	117		ug/L		94	58 - 130		15	20
Naphthalene	25.0	23.9		ug/L		96	70 - 130		19	20
N-Propylbenzene	25.0	27.5		ug/L		110	70 - 130		6	20
Styrene	25.0	29.1		ug/L		116	70 - 130		7	20
1,1,1,2-Tetrachloroethane	25.0	29.8		ug/L		119	70 - 130		5	20
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	70 - 130		19	20
Tetrachloroethene	25.0	28.1		ug/L		112	70 - 130		1	20
Toluene	25.0	25.8		ug/L		103	78 - 120		1	20
1,2,3-Trichlorobenzene	25.0	23.1		ug/L		92	70 - 130		17	20
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	70 - 130		16	20
1,1,1-Trichloroethane	25.0	27.9		ug/L		112	70 - 130		0	20
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 130		7	20
Trichloroethene	25.0	27.8		ug/L		111	70 - 130		1	20
Trichlorofluoromethane	25.0	25.8		ug/L		103	66 - 132		0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-148913/7**

**Matrix: Water**

**Analysis Batch: 148913**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
1,2,3-Trichloropropane	25.0	24.0		ug/L		96	70 - 130	16	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.5		ug/L		114	42 - 162	2	20
1,2,4-Trimethylbenzene	25.0	28.4		ug/L		114	70 - 132	8	20
1,3,5-Trimethylbenzene	25.0	28.4		ug/L		114	70 - 130	6	20
Vinyl acetate	25.0	31.5		ug/L		126	43 - 163	5	20
Vinyl chloride	25.0	23.8		ug/L		95	54 - 135	2	20
m-Xylene & p-Xylene	50.0	54.4		ug/L		109	70 - 142	4	20
o-Xylene	25.0	26.9		ug/L		108	70 - 130	5	20
2,2-Dichloropropane	25.0	32.9		ug/L		132	70 - 140	1	20
TBA	500	476		ug/L		95	70 - 130	11	20
Ethyl tert-butyl ether	25.0	24.5		ug/L		98	70 - 130	2	20
DIPE	25.0	23.5		ug/L		94	69 - 134	1	20
Ethanol	500	531		ug/L		106	31 - 216	8	30
TAME	25.0	26.0		ug/L		104	79 - 130	4	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	86		72 - 130
Toluene-d8 (Surr)	97		70 - 130

**Lab Sample ID: LCSD 720-148913/9**

**Matrix: Water**

**Analysis Batch: 148913**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	500	479		ug/L		96	62 - 120	1	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	90		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: MB 720-148961/5**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			11/25/13 19:33	1
Acetone	ND		50		ug/L			11/25/13 19:33	1
Benzene	ND		0.50		ug/L			11/25/13 19:33	1
Dichlorobromomethane	ND		0.50		ug/L			11/25/13 19:33	1
Bromobenzene	ND		1.0		ug/L			11/25/13 19:33	1
Chlorobromomethane	ND		1.0		ug/L			11/25/13 19:33	1
Bromoform	ND		1.0		ug/L			11/25/13 19:33	1
Bromomethane	ND		1.0		ug/L			11/25/13 19:33	1
2-Butanone (MEK)	ND		50		ug/L			11/25/13 19:33	1

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-148961/5**

**Matrix: Water**

**Analysis Batch: 148961**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
n-Butylbenzene	ND	ND			1.0		ug/L			11/25/13 19:33	1
sec-Butylbenzene	ND	ND			1.0		ug/L			11/25/13 19:33	1
tert-Butylbenzene	ND	ND			1.0		ug/L			11/25/13 19:33	1
Carbon disulfide	ND	ND			5.0		ug/L			11/25/13 19:33	1
Carbon tetrachloride	ND	ND			0.50		ug/L			11/25/13 19:33	1
Chlorobenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
Chloroethane	ND	ND			1.0		ug/L			11/25/13 19:33	1
Chloroform	ND	ND			1.0		ug/L			11/25/13 19:33	1
Chloromethane	ND	ND			1.0		ug/L			11/25/13 19:33	1
2-Chlorotoluene	ND	ND			0.50		ug/L			11/25/13 19:33	1
4-Chlorotoluene	ND	ND			0.50		ug/L			11/25/13 19:33	1
Chlorodibromomethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,2-Dichlorobenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,3-Dichlorobenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,4-Dichlorobenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,3-Dichloropropane	ND	ND			1.0		ug/L			11/25/13 19:33	1
1,1-Dichloropropene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,2-Dibromo-3-Chloropropane	ND	ND			1.0		ug/L			11/25/13 19:33	1
Ethylene Dibromide	ND	ND			0.50		ug/L			11/25/13 19:33	1
Dibromomethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
Dichlorodifluoromethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,1-Dichloroethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,2-Dichloroethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,1-Dichloroethene	ND	ND			0.50		ug/L			11/25/13 19:33	1
cis-1,2-Dichloroethene	ND	ND			0.50		ug/L			11/25/13 19:33	1
trans-1,2-Dichloroethene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,2-Dichloropropane	ND	ND			0.50		ug/L			11/25/13 19:33	1
cis-1,3-Dichloropropene	ND	ND			0.50		ug/L			11/25/13 19:33	1
trans-1,3-Dichloropropene	ND	ND			0.50		ug/L			11/25/13 19:33	1
Ethylbenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
Hexachlorobutadiene	ND	ND			1.0		ug/L			11/25/13 19:33	1
2-Hexanone	ND	ND			50		ug/L			11/25/13 19:33	1
Isopropylbenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
4-Isopropyltoluene	ND	ND			1.0		ug/L			11/25/13 19:33	1
Methylene Chloride	ND	ND			5.0		ug/L			11/25/13 19:33	1
4-Methyl-2-pentanone (MIBK)	ND	ND			50		ug/L			11/25/13 19:33	1
Naphthalene	ND	ND			1.0		ug/L			11/25/13 19:33	1
N-Propylbenzene	ND	ND			1.0		ug/L			11/25/13 19:33	1
Styrene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,1,1,2-Tetrachloroethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,1,2,2-Tetrachloroethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
Tetrachloroethene	ND	ND			0.50		ug/L			11/25/13 19:33	1
Toluene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,2,3-Trichlorobenzene	ND	ND			1.0		ug/L			11/25/13 19:33	1
1,2,4-Trichlorobenzene	ND	ND			1.0		ug/L			11/25/13 19:33	1
1,1,1-Trichloroethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,1,2-Trichloroethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
Trichloroethene	ND	ND			0.50		ug/L			11/25/13 19:33	1

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-148961/5**

**Matrix: Water**

**Analysis Batch: 148961**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
Trichlorofluoromethane	ND	ND			1.0		ug/L			11/25/13 19:33	1
1,2,3-Trichloropropane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,2,4-Trimethylbenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
1,3,5-Trimethylbenzene	ND	ND			0.50		ug/L			11/25/13 19:33	1
Vinyl acetate	ND	ND			10		ug/L			11/25/13 19:33	1
Vinyl chloride	ND	ND			0.50		ug/L			11/25/13 19:33	1
Xylenes, Total	ND	ND			1.0		ug/L			11/25/13 19:33	1
2,2-Dichloropropane	ND	ND			0.50		ug/L			11/25/13 19:33	1
Gasoline Range Organics (GRO) -C5-C12	ND	ND			50		ug/L			11/25/13 19:33	1
TBA	ND	ND			10		ug/L			11/25/13 19:33	1
Ethyl tert-butyl ether	ND	ND			0.50		ug/L			11/25/13 19:33	1
DiPE	ND	ND			0.50		ug/L			11/25/13 19:33	1
Ethanol	ND	ND			250		ug/L			11/25/13 19:33	1
TAME	ND	ND			0.50		ug/L			11/25/13 19:33	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	90	67 - 130							
4-Bromofluorobenzene	91	72 - 130						11/25/13 19:33	1
1,2-Dichloroethane-d4 (Surr)	96	70 - 130						11/25/13 19:33	1
Toluene-d8 (Surr)								11/25/13 19:33	1

**Lab Sample ID: LCS 720-148961/6**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike Added	LCs	LCs	Unit	D	%Rec	Limits
		Result	Qualifier				
Methyl tert-butyl ether	25.0	25.2		ug/L		101	62 - 130
Acetone	125	139		ug/L		111	26 - 180
Benzene	25.0	26.5		ug/L		106	79 - 130
Dichlorobromomethane	25.0	25.0		ug/L		100	70 - 130
Bromobenzene	25.0	26.1		ug/L		104	70 - 130
Chlorobromomethane	25.0	26.6		ug/L		107	70 - 130
Bromoform	25.0	28.0		ug/L		112	68 - 136
Bromomethane	25.0	25.0		ug/L		100	43 - 151
2-Butanone (MEK)	125	144		ug/L		115	54 - 130
n-Butylbenzene	25.0	28.9		ug/L		116	70 - 142
sec-Butylbenzene	25.0	29.1		ug/L		116	70 - 134
tert-Butylbenzene	25.0	29.1		ug/L		117	70 - 135
Carbon disulfide	25.0	25.9		ug/L		104	58 - 130
Carbon tetrachloride	25.0	31.3		ug/L		125	70 - 146
Chlorobenzene	25.0	27.4		ug/L		110	70 - 130
Chloroethane	25.0	25.5		ug/L		102	62 - 138
Chloroform	25.0	24.8		ug/L		99	70 - 130
Chloromethane	25.0	23.1		ug/L		92	52 - 175
2-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130
4-Chlorotoluene	25.0	26.3		ug/L		105	70 - 130
Chlorodibromomethane	25.0	28.0		ug/L		112	70 - 145

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-148961/6**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits		
	Added	Result	Qualifier						
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130		
1,3-Dichlorobenzene	25.0	27.0		ug/L		108	70 - 130		
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	70 - 130		
1,3-Dichloropropane	25.0	26.6		ug/L		106	70 - 130		
1,1-Dichloropropene	25.0	30.5		ug/L		122	70 - 130		
1,2-Dibromo-3-Chloropropane	25.0	28.9		ug/L		116	70 - 136		
Ethylene Dibromide	25.0	27.9		ug/L		112	70 - 130		
Dibromomethane	25.0	25.4		ug/L		102	70 - 130		
Dichlorodifluoromethane	25.0	22.2		ug/L		89	34 - 132		
1,1-Dichloroethane	25.0	25.2		ug/L		101	70 - 130		
1,2-Dichloroethane	25.0	23.8		ug/L		95	61 - 132		
1,1-Dichloroethene	25.0	26.2		ug/L		105	64 - 128		
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	70 - 130		
trans-1,2-Dichloroethene	25.0	26.6		ug/L		106	68 - 130		
1,2-Dichloropropane	25.0	25.4		ug/L		102	70 - 130		
cis-1,3-Dichloropropene	25.0	28.0		ug/L		112	70 - 130		
trans-1,3-Dichloropropene	25.0	29.6		ug/L		119	70 - 140		
Ethylbenzene	25.0	27.0		ug/L		108	80 - 120		
Hexachlorobutadiene	25.0	24.8		ug/L		99	70 - 130		
2-Hexanone	125	134		ug/L		107	60 - 164		
Isopropylbenzene	25.0	29.2		ug/L		117	70 - 130		
4-Isopropyltoluene	25.0	28.8		ug/L		115	70 - 130		
Methylene Chloride	25.0	26.9		ug/L		108	70 - 147		
4-Methyl-2-pentanone (MIBK)	125	134		ug/L		108	58 - 130		
Naphthalene	25.0	26.1		ug/L		104	70 - 130		
N-Propylbenzene	25.0	28.3		ug/L		113	70 - 130		
Styrene	25.0	28.9		ug/L		115	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	29.1		ug/L		116	70 - 130		
1,1,2,2-Tetrachloroethane	25.0	27.2		ug/L		109	70 - 130		
Tetrachloroethene	25.0	28.4		ug/L		114	70 - 130		
Toluene	25.0	26.2		ug/L		105	78 - 120		
1,2,3-Trichlorobenzene	25.0	23.5		ug/L		94	70 - 130		
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		97	70 - 130		
1,1,1-Trichloroethane	25.0	28.3		ug/L		113	70 - 130		
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	70 - 130		
Trichloroethene	25.0	28.1		ug/L		112	70 - 130		
Trichlorofluoromethane	25.0	26.8		ug/L		107	66 - 132		
1,2,3-Trichloropropane	25.0	27.2		ug/L		109	70 - 130		
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	30.0		ug/L		120	42 - 162		
1,2,4-Trimethylbenzene	25.0	28.6		ug/L		114	70 - 132		
1,3,5-Trimethylbenzene	25.0	29.0		ug/L		116	70 - 130		
Vinyl acetate	25.0	35.4		ug/L		142	43 - 163		
Vinyl chloride	25.0	24.6		ug/L		98	54 - 135		
m-Xylene & p-Xylene	50.0	55.3		ug/L		111	70 - 142		
o-Xylene	25.0	27.0		ug/L		108	70 - 130		
2,2-Dichloropropane	25.0	31.8		ug/L		127	70 - 140		
TBA	500	459		ug/L		92	70 - 130		

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-148961/6**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike Added	LCS			Unit	D	%Rec.	Limits
		Result	Qualifier	LCS				
Ethyl tert-butyl ether	25.0	24.6		ug/L		98	70 - 130	
DIPE	25.0	23.4		ug/L		94	69 - 134	
Ethanol	500	491		ug/L		98	31 - 216	
TAME	25.0	26.0		ug/L		104	79 - 130	

**Surrogate**      **LCS**      **LCS**

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	88		72 - 130
Toluene-d8 (Surr)	96		70 - 130

**Lab Sample ID: LCS 720-148961/8**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike Added	LCS			Unit	D	%Rec.	Limits
		Result	Qualifier	LCS				
Gasoline Range Organics (GRO) -C5-C12	500	486		ug/L		97	62 - 120	

**Surrogate**      **LCS**      **LCS**

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	90		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCSD 720-148961/7**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike Added	LCSD			Unit	D	%Rec.	Limits	RPD	Limit
		Result	Qualifier	LCS						
Methyl tert-butyl ether	25.0	26.3		ug/L		105	62 - 130		4	20
Acetone	125	127		ug/L		102	26 - 180		9	30
Benzene	25.0	26.7		ug/L		107	79 - 130		1	20
Dichlorobromomethane	25.0	25.8		ug/L		103	70 - 130		3	20
Bromobenzene	25.0	26.5		ug/L		106	70 - 130		2	20
Chlorobromomethane	25.0	27.4		ug/L		109	70 - 130		3	20
Bromoform	25.0	28.6		ug/L		114	68 - 136		2	20
Bromomethane	25.0	24.4		ug/L		98	43 - 151		2	20
2-Butanone (MEK)	125	142		ug/L		113	54 - 130		1	20
n-Butylbenzene	25.0	28.2		ug/L		113	70 - 142		3	20
sec-Butylbenzene	25.0	28.2		ug/L		113	70 - 134		3	20
tert-Butylbenzene	25.0	28.8		ug/L		115	70 - 135		1	20
Carbon disulfide	25.0	25.2		ug/L		101	58 - 130		3	20
Carbon tetrachloride	25.0	31.3		ug/L		125	70 - 146		0	20
Chlorobenzene	25.0	27.5		ug/L		110	70 - 130		1	20
Chloroethane	25.0	25.2		ug/L		101	62 - 138		1	20
Chloroform	25.0	25.1		ug/L		100	70 - 130		1	20
Chloromethane	25.0	22.4		ug/L		90	52 - 175		3	20
2-Chlorotoluene	25.0	27.1		ug/L		108	70 - 130		0	20
4-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130		0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-148961/7**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD
	Added	Result	Qualifier				Limits	Limit		
Chlorodibromomethane	25.0	29.1		ug/L		116	70 - 145		4	20
1,2-Dichlorobenzene	25.0	25.1		ug/L		101	70 - 130		0	20
1,3-Dichlorobenzene	25.0	26.8		ug/L		107	70 - 130		1	20
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	70 - 130		0	20
1,3-Dichloropropane	25.0	27.1		ug/L		108	70 - 130		2	20
1,1-Dichloropropene	25.0	29.9		ug/L		119	70 - 130		2	20
1,2-Dibromo-3-Chloropropane	25.0	28.2		ug/L		113	70 - 136		3	20
Ethylene Dibromide	25.0	28.7		ug/L		115	70 - 130		3	20
Dibromomethane	25.0	25.8		ug/L		103	70 - 130		1	20
Dichlorodifluoromethane	25.0	21.2		ug/L		85	34 - 132		4	20
1,1-Dichloroethane	25.0	25.6		ug/L		102	70 - 130		1	20
1,2-Dichloroethane	25.0	24.2		ug/L		97	61 - 132		2	20
1,1-Dichloroethene	25.0	25.6		ug/L		102	64 - 128		2	20
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	70 - 130		1	20
trans-1,2-Dichloroethene	25.0	26.8		ug/L		107	68 - 130		1	20
1,2-Dichloropropane	25.0	26.1		ug/L		104	70 - 130		3	20
cis-1,3-Dichloropropene	25.0	28.9		ug/L		116	70 - 130		3	20
trans-1,3-Dichloropropene	25.0	30.6		ug/L		122	70 - 140		3	20
Ethylbenzene	25.0	26.8		ug/L		107	80 - 120		1	20
Hexachlorobutadiene	25.0	23.8		ug/L		95	70 - 130		4	20
2-Hexanone	125	130		ug/L		104	60 - 164		2	20
Isopropylbenzene	25.0	28.9		ug/L		116	70 - 130		1	20
4-Isopropyltoluene	25.0	28.0		ug/L		112	70 - 130		3	20
Methylene Chloride	25.0	27.3		ug/L		109	70 - 147		1	20
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	58 - 130		1	20
Naphthalene	25.0	25.6		ug/L		102	70 - 130		2	20
N-Propylbenzene	25.0	27.7		ug/L		111	70 - 130		2	20
Styrene	25.0	28.9		ug/L		115	70 - 130		0	20
1,1,1,2-Tetrachloroethane	25.0	29.7		ug/L		119	70 - 130		2	20
1,1,2,2-Tetrachloroethane	25.0	27.0		ug/L		108	70 - 130		1	20
Tetrachloroethene	25.0	28.4		ug/L		114	70 - 130		0	20
Toluene	25.0	25.9		ug/L		104	78 - 120		1	20
1,2,3-Trichlorobenzene	25.0	23.4		ug/L		94	70 - 130		0	20
1,2,4-Trichlorobenzene	25.0	23.9		ug/L		96	70 - 130		1	20
1,1,1-Trichloroethane	25.0	28.5		ug/L		114	70 - 130		1	20
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	70 - 130		3	20
Trichloroethene	25.0	27.7		ug/L		111	70 - 130		1	20
Trichlorofluoromethane	25.0	26.1		ug/L		104	66 - 132		3	20
1,2,3-Trichloropropene	25.0	26.3		ug/L		105	70 - 130		3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.9		ug/L		116	42 - 162		4	20
1,2,4-Trimethylbenzene	25.0	28.5		ug/L		114	70 - 132		0	20
1,3,5-Trimethylbenzene	25.0	28.6		ug/L		114	70 - 130		1	20
Vinyl acetate	25.0	35.9		ug/L		144	43 - 163		1	20
Vinyl chloride	25.0	23.6		ug/L		95	54 - 135		4	20
m-Xylene & p-Xylene	50.0	54.7		ug/L		109	70 - 142		1	20
o-Xylene	25.0	27.3		ug/L		109	70 - 130		1	20
2,2-Dichloropropane	25.0	31.9		ug/L		128	70 - 140		0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-148961/7**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
TBA	500	458		ug/L		92	70 - 130	0	20
Ethyl tert-butyl ether	25.0	25.8		ug/L		103	70 - 130	5	20
DIPE	25.0	24.3		ug/L		97	69 - 134	4	20
Ethanol	500	473		ug/L		95	31 - 216	4	30
TAME	25.0	27.2		ug/L		109	79 - 130	4	20

**LCSD LCSD**

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	90		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCSD 720-148961/9**

**Matrix: Water**

**Analysis Batch: 148961**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO)	500	472		ug/L		94	62 - 120	3	20
-C5-C12									

**LCSD LCSD**

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	91		67 - 130
1,2-Dichloroethane-d4 (Surr)	88		72 - 130
Toluene-d8 (Surr)	96		70 - 130

**Lab Sample ID: MB 720-149056/4**

**Matrix: Water**

**Analysis Batch: 149056**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/13 15:47	1
Acetone	ND		50		ug/L			11/26/13 15:47	1
Benzene	ND		0.50		ug/L			11/26/13 15:47	1
Dichlorobromomethane	ND		0.50		ug/L			11/26/13 15:47	1
Bromobenzene	ND		1.0		ug/L			11/26/13 15:47	1
Chlorobromomethane	ND		1.0		ug/L			11/26/13 15:47	1
Bromoform	ND		1.0		ug/L			11/26/13 15:47	1
Bromomethane	ND		1.0		ug/L			11/26/13 15:47	1
2-Butanone (MEK)	ND		50		ug/L			11/26/13 15:47	1
n-Butylbenzene	ND		1.0		ug/L			11/26/13 15:47	1
sec-Butylbenzene	ND		1.0		ug/L			11/26/13 15:47	1
tert-Butylbenzene	ND		1.0		ug/L			11/26/13 15:47	1
Carbon disulfide	ND		5.0		ug/L			11/26/13 15:47	1
Carbon tetrachloride	ND		0.50		ug/L			11/26/13 15:47	1
Chlorobenzene	ND		0.50		ug/L			11/26/13 15:47	1
Chloroethane	ND		1.0		ug/L			11/26/13 15:47	1
Chloroform	ND		1.0		ug/L			11/26/13 15:47	1
Chloromethane	ND		1.0		ug/L			11/26/13 15:47	1
2-Chlorotoluene	ND		0.50		ug/L			11/26/13 15:47	1

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-149056/4**

**Matrix: Water**

**Analysis Batch: 149056**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
4-Chlorotoluene	ND	ND			0.50		ug/L			11/26/13 15:47	1
Chlorodibromomethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,2-Dichlorobenzene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,3-Dichlorobenzene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,4-Dichlorobenzene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,3-Dichloropropane	ND	ND			1.0		ug/L			11/26/13 15:47	1
1,1-Dichloropropene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,2-Dibromo-3-Chloropropane	ND	ND			1.0		ug/L			11/26/13 15:47	1
Ethylene Dibromide	ND	ND			0.50		ug/L			11/26/13 15:47	1
Dibromomethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
Dichlorodifluoromethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,1-Dichloroethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,2-Dichloroethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,1-Dichloroethene	ND	ND			0.50		ug/L			11/26/13 15:47	1
cis-1,2-Dichloroethene	ND	ND			0.50		ug/L			11/26/13 15:47	1
trans-1,2-Dichloroethene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,2-Dichloropropene	ND	ND			0.50		ug/L			11/26/13 15:47	1
cis-1,3-Dichloropropene	ND	ND			0.50		ug/L			11/26/13 15:47	1
trans-1,3-Dichloropropene	ND	ND			0.50		ug/L			11/26/13 15:47	1
Ethylbenzene	ND	ND			0.50		ug/L			11/26/13 15:47	1
Hexachlorobutadiene	ND	ND			1.0		ug/L			11/26/13 15:47	1
2-Hexanone	ND	ND			50		ug/L			11/26/13 15:47	1
Isopropylbenzene	ND	ND			0.50		ug/L			11/26/13 15:47	1
4-Isopropyltoluene	ND	ND			1.0		ug/L			11/26/13 15:47	1
Methylene Chloride	ND	ND			5.0		ug/L			11/26/13 15:47	1
4-Methyl-2-pentanone (MIBK)	ND	ND			50		ug/L			11/26/13 15:47	1
Naphthalene	ND	ND			1.0		ug/L			11/26/13 15:47	1
N-Propylbenzene	ND	ND			1.0		ug/L			11/26/13 15:47	1
Styrene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,1,1,2-Tetrachloroethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,1,2,2-Tetrachloroethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
Tetrachloroethene	ND	ND			0.50		ug/L			11/26/13 15:47	1
Toluene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,2,3-Trichlorobenzene	ND	ND			1.0		ug/L			11/26/13 15:47	1
1,2,4-Trichlorobenzene	ND	ND			1.0		ug/L			11/26/13 15:47	1
1,1,1-Trichloroethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,1,2-Trichloroethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
Trichloroethene	ND	ND			0.50		ug/L			11/26/13 15:47	1
Trichlorodifluoromethane	ND	ND			1.0		ug/L			11/26/13 15:47	1
1,2,3-Trichloropropene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,2,4-Trimethylbenzene	ND	ND			0.50		ug/L			11/26/13 15:47	1
1,3,5-Trimethylbenzene	ND	ND			0.50		ug/L			11/26/13 15:47	1
Vinyl acetate	ND	ND			10		ug/L			11/26/13 15:47	1
Vinyl chloride	ND	ND			0.50		ug/L			11/26/13 15:47	1
Xylenes, Total	ND	ND			1.0		ug/L			11/26/13 15:47	1
2,2-Dichloropropane	ND	ND			0.50		ug/L			11/26/13 15:47	1

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-149056/4**

**Matrix: Water**

**Analysis Batch: 149056**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	50									
Gasoline Range Organics (GRO) -C5-C12											
TBA	ND				10		ug/L			11/26/13 15:47	1
Ethyl tert-butyl ether	ND				0.50		ug/L			11/26/13 15:47	1
DIPE	ND				0.50		ug/L			11/26/13 15:47	1
Ethanol	ND				250		ug/L			11/26/13 15:47	1
TAME	ND				0.50		ug/L			11/26/13 15:47	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene	90		67 - 130				11/26/13 15:47	1
1,2-Dichloroethane-d4 (Surr)	91		72 - 130				11/26/13 15:47	1
Toluene-d8 (Surr)	96		70 - 130				11/26/13 15:47	1

**Lab Sample ID: LCS 720-149056/5**

**Matrix: Water**

**Analysis Batch: 149056**

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

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier							
Methyl tert-butyl ether	25.0	24.9				ug/L		100	62 - 130	
Acetone	125	113				ug/L		90	26 - 180	
Benzene	25.0	26.4				ug/L		106	79 - 130	
Dichlorobromomethane	25.0	25.9				ug/L		104	70 - 130	
Bromobenzene	25.0	25.5				ug/L		102	70 - 130	
Chlorobromomethane	25.0	26.9				ug/L		108	70 - 130	
Bromoform	25.0	27.0				ug/L		108	68 - 136	
Bromomethane	25.0	24.7				ug/L		99	43 - 151	
2-Butanone (MEK)	125	117				ug/L		94	54 - 130	
n-Butylbenzene	25.0	28.0				ug/L		112	70 - 142	
sec-Butylbenzene	25.0	27.4				ug/L		110	70 - 134	
tert-Butylbenzene	25.0	27.6				ug/L		111	70 - 135	
Carbon disulfide	25.0	24.0				ug/L		96	58 - 130	
Carbon tetrachloride	25.0	30.1				ug/L		121	70 - 146	
Chlorobenzene	25.0	27.3				ug/L		109	70 - 130	
Chloroethane	25.0	24.9				ug/L		100	62 - 138	
Chloroform	25.0	25.2				ug/L		101	70 - 130	
Chloromethane	25.0	22.1				ug/L		88	52 - 175	
2-Chlorotoluene	25.0	26.5				ug/L		106	70 - 130	
4-Chlorotoluene	25.0	26.0				ug/L		104	70 - 130	
Chlorodibromomethane	25.0	28.7				ug/L		115	70 - 145	
1,2-Dichlorobenzene	25.0	24.6				ug/L		99	70 - 130	
1,3-Dichlorobenzene	25.0	26.6				ug/L		107	70 - 130	
1,4-Dichlorobenzene	25.0	26.6				ug/L		106	70 - 130	
1,3-Dichloropropane	25.0	26.6				ug/L		107	70 - 130	
1,1-Dichloropropene	25.0	29.0				ug/L		116	70 - 130	
1,2-Dibromo-3-Chloropropane	25.0	24.4				ug/L		98	70 - 136	
Ethylene Dibromide	25.0	27.4				ug/L		109	70 - 130	
Dibromomethane	25.0	25.1				ug/L		101	70 - 130	
Dichlorodifluoromethane	25.0	20.1				ug/L		80	34 - 132	

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-149056/5**

**Matrix: Water**

**Analysis Batch: 149056**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
1,1-Dichloroethane	25.0	25.1		ug/L		100	70 - 130
1,2-Dichloroethane	25.0	23.9		ug/L		95	61 - 132
1,1-Dichloroethene	25.0	23.6		ug/L		95	64 - 128
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	70 - 130
trans-1,2-Dichloroethene	25.0	25.6		ug/L		102	68 - 130
1,2-Dichloropropane	25.0	26.4		ug/L		106	70 - 130
cis-1,3-Dichloropropene	25.0	29.2		ug/L		117	70 - 130
trans-1,3-Dichloropropene	25.0	30.4		ug/L		122	70 - 140
Ethylbenzene	25.0	26.6		ug/L		106	80 - 120
Hexachlorobutadiene	25.0	24.9		ug/L		100	70 - 130
2-Hexanone	125	113		ug/L		90	60 - 164
Isopropylbenzene	25.0	28.5		ug/L		114	70 - 130
4-Isopropyltoluene	25.0	27.6		ug/L		110	70 - 130
Methylene Chloride	25.0	25.6		ug/L		102	70 - 147
4-Methyl-2-pentanone (MIBK)	125	116		ug/L		93	58 - 130
Naphthalene	25.0	24.0		ug/L		96	70 - 130
N-Propylbenzene	25.0	27.1		ug/L		108	70 - 130
Styrene	25.0	29.3		ug/L		117	70 - 130
1,1,1,2-Tetrachloroethane	25.0	29.6		ug/L		119	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 130
Tetrachloroethene	25.0	27.7		ug/L		111	70 - 130
Toluene	25.0	25.6		ug/L		102	78 - 120
1,2,3-Trichlorobenzene	25.0	24.2		ug/L		97	70 - 130
1,2,4-Trichlorobenzene	25.0	25.4		ug/L		101	70 - 130
1,1,1-Trichloroethane	25.0	27.7		ug/L		111	70 - 130
1,1,2-Trichloroethane	25.0	25.9		ug/L		104	70 - 130
Trichloroethene	25.0	27.4		ug/L		110	70 - 130
Trichlorofluoromethane	25.0	25.0		ug/L		100	66 - 132
1,2,3-Trichloropropane	25.0	23.2		ug/L		93	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	26.9		ug/L		108	42 - 162
1,2,4-Trimethylbenzene	25.0	28.2		ug/L		113	70 - 132
1,3,5-Trimethylbenzene	25.0	27.9		ug/L		112	70 - 130
Vinyl acetate	25.0	32.7		ug/L		131	43 - 163
Vinyl chloride	25.0	23.2		ug/L		93	54 - 135
m-Xylene & p-Xylene	50.0	54.9		ug/L		110	70 - 142
o-Xylene	25.0	27.4		ug/L		109	70 - 130
2,2-Dichloropropane	25.0	30.6		ug/L		122	70 - 140
TBA	500	467		ug/L		93	70 - 130
Ethyl tert-butyl ether	25.0	25.5		ug/L		102	70 - 130
DPE	25.0	24.7		ug/L		99	69 - 134
Ethanol	500	538		ug/L		108	31 - 216
TAME	25.0	26.5		ug/L		106	79 - 130

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	88		72 - 130
Toluene-d8 (Surr)	97		70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-149056/7**

**Matrix: Water**

**Analysis Batch: 149056**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Gasoline Range Organics (GRO) -C5-C12	500	480		ug/L		96	62 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				Limits
4-Bromofluorobenzene	95		67 - 130				
1,2-Dichloroethane-d4 (Surr)	95		72 - 130				
Toluene-d8 (Surr)	99		70 - 130				

**Lab Sample ID: LCSD 720-149056/6**

**Matrix: Water**

**Analysis Batch: 149056**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Methyl tert-butyl ether	25.0	25.3		ug/L		101	62 - 130	2	20	
Acetone	125	119		ug/L		95	26 - 180	5	30	
Benzene	25.0	26.5		ug/L		106	79 - 130	1	20	
Dichlorobromomethane	25.0	26.0		ug/L		104	70 - 130	1	20	
Bromobenzene	25.0	25.6		ug/L		103	70 - 130	1	20	
Chlorobromomethane	25.0	27.0		ug/L		108	70 - 130	0	20	
Bromoform	25.0	27.6		ug/L		110	68 - 136	2	20	
Bromomethane	25.0	24.2		ug/L		97	43 - 151	2	20	
2-Butanone (MEK)	125	127		ug/L		101	54 - 130	8	20	
n-Butylbenzene	25.0	28.1		ug/L		112	70 - 142	0	20	
sec-Butylbenzene	25.0	27.4		ug/L		110	70 - 134	0	20	
tert-Butylbenzene	25.0	27.7		ug/L		111	70 - 135	0	20	
Carbon disulfide	25.0	24.6		ug/L		98	58 - 130	2	20	
Carbon tetrachloride	25.0	30.7		ug/L		123	70 - 146	2	20	
Chlorobenzene	25.0	27.5		ug/L		110	70 - 130	1	20	
Chloroethane	25.0	25.1		ug/L		100	62 - 138	1	20	
Chloroform	25.0	25.1		ug/L		100	70 - 130	0	20	
Chloromethane	25.0	22.3		ug/L		89	52 - 175	1	20	
2-Chlorotoluene	25.0	26.5		ug/L		106	70 - 130	0	20	
4-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	0	20	
Chlorodibromomethane	25.0	29.1		ug/L		116	70 - 145	1	20	
1,2-Dichlorobenzene	25.0	24.7		ug/L		99	70 - 130	0	20	
1,3-Dichlorobenzene	25.0	26.7		ug/L		107	70 - 130	0	20	
1,4-Dichlorobenzene	25.0	26.5		ug/L		106	70 - 130	0	20	
1,3-Dichloropropane	25.0	26.7		ug/L		107	70 - 130	0	20	
1,1-Dichloropropene	25.0	29.3		ug/L		117	70 - 130	1	20	
1,2-Dibromo-3-Chloropropane	25.0	25.1		ug/L		101	70 - 136	3	20	
Ethylene Dibromide	25.0	27.8		ug/L		111	70 - 130	2	20	
Dibromomethane	25.0	25.3		ug/L		101	70 - 130	1	20	
Dichlorodifluoromethane	25.0	20.2		ug/L		81	34 - 132	0	20	
1,1-Dichloroethane	25.0	25.4		ug/L		101	70 - 130	1	20	
1,2-Dichloroethane	25.0	24.1		ug/L		96	61 - 132	1	20	
1,1-Dichloroethene	25.0	24.2		ug/L		97	64 - 128	2	20	
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	70 - 130	0	20	
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	68 - 130	2	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-149056/6**

**Matrix: Water**

**Analysis Batch: 149056**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
1,2-Dichloropropane	25.0	26.5		ug/L		106	70 - 130	0	20	
cis-1,3-Dichloropropene	25.0	29.3		ug/L		117	70 - 130	1	20	
trans-1,3-Dichloropropene	25.0	30.6		ug/L		122	70 - 140	1	20	
Ethylbenzene	25.0	26.6		ug/L		107	80 - 120	0	20	
Hexachlorobutadiene	25.0	24.3		ug/L		97	70 - 130	2	20	
2-Hexanone	125	117		ug/L		94	60 - 164	4	20	
Isopropylbenzene	25.0	28.7		ug/L		115	70 - 130	1	20	
4-Isopropyltoluene	25.0	27.7		ug/L		111	70 - 130	0	20	
Methylene Chloride	25.0	25.8		ug/L		103	70 - 147	1	20	
4-Methyl-2-pentanone (MIBK)	125	120		ug/L		96	58 - 130	4	20	
Naphthalene	25.0	24.2		ug/L		97	70 - 130	1	20	
N-Propylbenzene	25.0	27.2		ug/L		109	70 - 130	1	20	
Styrene	25.0	29.2		ug/L		117	70 - 130	0	20	
1,1,1,2-Tetrachloroethane	25.0	30.0		ug/L		120	70 - 130	1	20	
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	70 - 130	0	20	
Tetrachloroethene	25.0	27.8		ug/L		111	70 - 130	0	20	
Toluene	25.0	25.7		ug/L		103	78 - 120	0	20	
1,2,3-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 130	2	20	
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		100	70 - 130	2	20	
1,1,1-Trichloroethane	25.0	28.1		ug/L		112	70 - 130	2	20	
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	70 - 130	1	20	
Trichloroethene	25.0	27.5		ug/L		110	70 - 130	0	20	
Trichlorofluoromethane	25.0	25.5		ug/L		102	66 - 132	2	20	
1,2,3-Trichloropropane	25.0	23.8		ug/L		95	70 - 130	3	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.4		ug/L		109	42 - 162	2	20	
1,2,4-Trimethylbenzene	25.0	28.2		ug/L		113	70 - 132	0	20	
1,3,5-Trimethylbenzene	25.0	28.1		ug/L		112	70 - 130	1	20	
Vinyl acetate	25.0	33.8		ug/L		135	43 - 163	3	20	
Vinyl chloride	25.0	23.1		ug/L		93	54 - 135	0	20	
m-Xylene & p-Xylene	50.0	54.7		ug/L		109	70 - 142	0	20	
o-Xylene	25.0	27.3		ug/L		109	70 - 130	0	20	
2,2-Dichloropropane	25.0	31.2		ug/L		125	70 - 140	2	20	
TBA	500	460		ug/L		92	70 - 130	2	20	
Ethyl tert-butyl ether	25.0	25.7		ug/L		103	70 - 130	1	20	
DIPE	25.0	24.6		ug/L		99	69 - 134	0	20	
Ethanol	500	487		ug/L		97	31 - 216	10	30	
TAME	25.0	26.7		ug/L		107	79 - 130	1	20	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	88		72 - 130
Toluene-d8 (Surr)	98		70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID:** LCSD 720-149056/8

**Matrix:** Water

**Analysis Batch:** 149056

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	500	494		ug/L		99	62 - 120	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	90		72 - 130
Toluene-d8 (Surr)	99		70 - 130

## Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

**Lab Sample ID:** MB 440-147102/7

**Client Sample ID:** Method Blank

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 147102

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methanol	ND		0.50		mg/L			11/26/13 19:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Pentanol	93		70 - 130		11/26/13 19:39	1

**Lab Sample ID:** LCS 440-147102/8

**Client Sample ID:** Lab Control Sample

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 147102

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methanol	10.0	10.1		mg/L		101	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Pentanol	91		70 - 130

TestAmerica Pleasanton

# QC Association Summary

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## GC/MS VOA

### Analysis Batch: 148913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54005-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	5
720-54005-3	MW-4	Total/NA	Water	8260B/CA_LUFT MS	6
LCS 720-148913/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	7
LCS 720-148913/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	8
LCSD 720-148913/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	9
LCSD 720-148913/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	10
MB 720-148913/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	11

### Analysis Batch: 148961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54005-4	MW-5	Total/NA	Water	8260B/CA_LUFT MS	12
720-54005-5	MW-6A	Total/NA	Water	8260B/CA_LUFT MS	13
720-54005-6	MW-6B	Total/NA	Water	8260B/CA_LUFT MS	14
720-54005-7	MW-7A	Total/NA	Water	8260B/CA_LUFT MS	15
720-54005-8	MW-7B	Total/NA	Water	8260B/CA_LUFT MS	16
LCS 720-148961/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-148961/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-148961/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-148961/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-148961/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### Analysis Batch: 149056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54005-2	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-149056/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-149056/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-149056/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-149056/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-149056/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

# QC Association Summary

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

## GC VOA

Analysis Batch: 147102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54005-1	MW-1	Total/NA	Water	8015B	5
720-54005-2	MW-2	Total/NA	Water	8015B	6
720-54005-3	MW-4	Total/NA	Water	8015B	7
720-54005-4	MW-5	Total/NA	Water	8015B	8
720-54005-5	MW-6A	Total/NA	Water	8015B	9
720-54005-6	MW-6B	Total/NA	Water	8015B	10
720-54005-7	MW-7A	Total/NA	Water	8015B	11
720-54005-8	MW-7B	Total/NA	Water	8015B	12
LCS 440-147102/8	Lab Control Sample	Total/NA	Water	8015B	13
MB 440-147102/7	Method Blank	Total/NA	Water	8015B	14

## Lab Chronicle

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

### Client Sample ID: MW-1

Date Collected: 11/22/13 11:40

Date Received: 11/22/13 17:27

Lab Sample ID: 720-54005-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	148913	11/25/13 16:48	ASC	TAL PLS
Total/NA	Analysis	8015B		1	147102	11/26/13 22:11	EI	TAL IRV

### Client Sample ID: MW-2

Date Collected: 11/22/13 13:35

Date Received: 11/22/13 17:27

Lab Sample ID: 720-54005-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	149056	11/26/13 21:05	ASC	TAL PLS
Total/NA	Analysis	8015B		1	147102	11/26/13 22:44	EI	TAL IRV

### Client Sample ID: MW-4

Date Collected: 11/22/13 14:25

Date Received: 11/22/13 17:27

Lab Sample ID: 720-54005-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	148913	11/25/13 17:46	ASC	TAL PLS
Total/NA	Analysis	8015B		1	147102	11/26/13 23:01	EI	TAL IRV

### Client Sample ID: MW-5

Date Collected: 11/22/13 12:45

Date Received: 11/22/13 17:27

Lab Sample ID: 720-54005-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		50	148961	11/25/13 23:23	ASC	TAL PLS
Total/NA	Analysis	8015B		1	147102	11/26/13 23:18	EI	TAL IRV

### Client Sample ID: MW-6A

Date Collected: 11/22/13 15:50

Date Received: 11/22/13 17:27

Lab Sample ID: 720-54005-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	148961	11/25/13 23:52	ASC	TAL PLS
Total/NA	Analysis	8015B		1	147102	11/26/13 23:34	EI	TAL IRV

### Client Sample ID: MW-6B

Date Collected: 11/22/13 15:15

Date Received: 11/22/13 17:27

Lab Sample ID: 720-54005-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	148961	11/26/13 00:21	ASC	TAL PLS

TestAmerica Pleasanton

## Lab Chronicle

Client: Engeo, Inc.  
Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

### Client Sample ID: MW-6B

Date Collected: 11/22/13 15:15  
Date Received: 11/22/13 17:27

### Lab Sample ID: 720-54005-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	147102	11/26/13 23:51	EI	TAL IRV

### Client Sample ID: MW-7A

Date Collected: 11/22/13 09:20  
Date Received: 11/22/13 17:27

### Lab Sample ID: 720-54005-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	148961	11/26/13 00:49	ASC	TAL PLS
Total/NA	Analysis	8015B		1	147102	11/27/13 00:08	EI	TAL IRV

### Client Sample ID: MW-7B

Date Collected: 11/22/13 10:00  
Date Received: 11/22/13 17:27

### Lab Sample ID: 720-54005-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	148961	11/26/13 01:18	ASC	TAL PLS
Total/NA	Analysis	8015B		1	147102	11/27/13 00:24	EI	TAL IRV

#### Laboratory References:

SC0068 = KIFF Analytical, 2795 Second Street, Suite 300, Davis, CA 95616

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

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TestAmerica Pleasanton

## Certification Summary

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

### Laboratory: TestAmerica Pleasanton

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	State Program	9	2496	01-31-14

### Laboratory: TestAmerica Irvine

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-14
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-14
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

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

## Method Summary

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8015B	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	TAL IRV
Carbon Chain (C4-C44)	General Sub Contract Method	NONE	SC0068
Local Method	General Sub Contract Method	NONE	SC0068

### Protocol References:

NONE = NONE

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

SC0068 = KIFF Analytical, 2795 Second Street, Suite 300, Davis, CA 95616

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

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: Engeo, Inc.

Project/Site: Jordan Ranch

TestAmerica Job ID: 720-54005-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-54005-1	MW-1	Water	11/22/13 11:40	11/22/13 17:27
720-54005-2	MW-2	Water	11/22/13 13:35	11/22/13 17:27
720-54005-3	MW-4	Water	11/22/13 14:25	11/22/13 17:27
720-54005-4	MW-5	Water	11/22/13 12:45	11/22/13 17:27
720-54005-5	MW-6A	Water	11/22/13 15:50	11/22/13 17:27
720-54005-6	MW-6B	Water	11/22/13 15:15	11/22/13 17:27
720-54005-7	MW-7A	Water	11/22/13 09:20	11/22/13 17:27
720-54005-8	MW-7B	Water	11/22/13 10:00	11/22/13 17:27

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TestAmerica Pleasanton



Report Number : 86733

Date : 12/06/2013

## Laboratory Results

Afsaneh Salimpour  
TestAmerica  
1220 Quarry Lane  
Pleasanton, CA 94566-4756

Subject : 8 Water Samples  
Project Name : Jordan Ranch  
Project Number : 72007929  
P.O. Number : 720-54005

Dear Ms. Salimpour,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Troy G. Turpen". The signature is fluid and cursive, with "Troy" and "G." being more stylized and "Turpen" being more legible.

Troy Turpen



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**

Project Number : **72007929**

Sample : **MW-1**

Matrix : Water

Lab Number : 86733-01

Sample Date :11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/03/13 20:40
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	12/03/13 20:40



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**

Project Number : **72007929**

Sample : **MW-2**

Matrix : Water

Lab Number : 86733-02

Sample Date : 11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/03/13 21:09
Octacosane (Silica Gel Surr)	90.6		% Recovery	M EPA 8015	12/03/13 21:09



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**

Project Number : **72007929**

Sample : **MW-4**

Matrix : Water

Lab Number : 86733-03

Sample Date : 11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/04/13 15:05
Octacosane (Silica Gel Surr)	98.3		% Recovery	M EPA 8015	12/04/13 15:05



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**Project Number : **72007929**Sample : **MW-5**

Matrix : Water

Lab Number : 86733-04

Sample Date : 11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
<b>C4-C12 GRO</b>	<b>19000</b>	500	ug/L	EPA 8260B	12/05/13 16:41
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	12/05/13 16:41
<b>TPH as Diesel (w/ Silica Gel)</b>	<b>96</b>	50	ug/L	M EPA 8015	12/04/13 21:24
TPH as Motor Oil (w/ Silica Gel)	< 100	100	ug/L	M EPA 8015	12/04/13 21:24
Octacosane (Silica Gel Surr)	93.1		% Recovery	M EPA 8015	12/04/13 21:24



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**

Project Number : **72007929**

Sample : **MW-6A**

Matrix : Water

Lab Number : 86733-05

Sample Date :11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/04/13 18:29
Octacosane (Silica Gel Surr)	106		% Recovery	M EPA 8015	12/04/13 18:29



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**

Project Number : **72007929**

Sample : **MW-6B**

Matrix : Water

Lab Number : 86733-06

Sample Date :11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/04/13 22:22
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	12/04/13 22:22



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**

Project Number : **72007929**

Sample : **MW-7A**

Matrix : Water

Lab Number : 86733-07

Sample Date : 11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/04/13 21:53
Octacosane (Silica Gel Surr)	96.3		% Recovery	M EPA 8015	12/04/13 21:53



Report Number : 86733

Date : 12/06/2013

Project Name : **Jordan Ranch**

Project Number : **72007929**

Sample : **MW-7B**

Matrix : Water

Lab Number : 86733-08

Sample Date : 11/22/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/04/13 22:51
Octacosane (Silica Gel Surr)	87.6		% Recovery	M EPA 8015	12/04/13 22:51

# Hydrocarbon Ranges Report\*

Project Name: Jordan Ranch

Lab Number: 86733-04  
Sample: MW-5 (720-54005-04)  
Sample Date: 11/22/2013  
Matrix: Water

## Hydrocarbon Range

C4 to C5 Fraction (ug/L)	120
C6 to C7 Fraction (ug/L)	2600
C8 to C9 Fraction (ug/L)	9600
C10 to C11 Fraction (ug/L)	66
C12 to C13 Fraction (ug/L)	nd
C14 to C15 Fraction (ug/L)	nd
C16 to C17 Fraction (ug/L)	nd
C18 to C19 Fraction (ug/L)	nd
C20 to C21 Fraction (ug/L)	nd
C22 to C23 Fraction (ug/L)	nd
C24 to C25 Fraction (ug/L)	nd
C26 to C27 Fraction (ug/L)	nd
C28 to C29 Fraction (ug/L)	nd
C30 to C31 Fraction (ug/L)	nd
C32 to C33 Fraction (ug/L)	nd
C34 to C35 Fraction (ug/L)	nd
C36 to C37 Fraction (ug/L)	nd
C38 to C39 Fraction (ug/L)	nd
C40 Fraction (ug/L)	nd

Reporting Limit (ug/L): 10

\*Hydrocarbon concentrations should be considered estimates

"nd" is non-detect at the specified Reporting Limit

Report Number : 86733

Date : 12/06/2013

**QC Report : Method Blank Data**

Project Name : **Jordan Ranch**

Project Number : **72007929**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/03/2013
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	12/03/2013
TPH as Motor Oil (w/ Silica Gel)	< 100	100	ug/L	M EPA 8015	12/03/2013
Octacosane (Silica Gel Surr)	110		%	M EPA 8015	12/03/2013
C4-C12 GRO	< 50	50	ug/L	EPA 8260B	12/05/2013
Toluene - d8 (Surr)	98.5		%	EPA 8260B	12/05/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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**QC Report : Matrix Spike/ Matrix Spike Duplicate**Project Name : **Jordan Ranch**Project Number : **72007929**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
<b>TPH-D (Si Gel)</b>														
	BLANK	<50	1000	1000	942	933	ug/L	M EPA 8015	12/3/13	94.2	93.3	0.990	70-130	25
<b>Toluene</b>														
	86769-17	0.029	40.0	40.0	39.6	37.1	ug/L	EPA 8260B	12/5/13	98.9	92.7	6.49	70.0-130	25

Report Number : 86733

Date : 12/06/2013

**QC Report : Laboratory Control Sample (LCS)**

Project Name : **Jordan Ranch**

Project Number : **72007929**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
C4-C12 GRO	503	ug/L	EPA 8260B	12/5/13	87.6	50.0-150

86733

## **Chain of Custody Record**

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Salimpour, Afsaneh		Carrier Tracking No(s):		COC No: 720-19650.1	
Client Contact: Shipping/Receiving Company: KIEF Analytical		Phone:		E-Mail: afsaneh.salimpour@testamericainc.com				Page: Page 1 of 1	
Address: 2795 Second Street, Suite 300, City: Davis		Due Date Requested: <i>11/29/2013 Standards TAT</i>		Analysis Requested				Job #: 720-54005-1	
State, Zip: CA, 95616		TAT Requested (days):							
Phone:		PO #:							
Email:		WO #:							
Project Name: Jordan Ranch		Project #: 72007929							
Site:		SSOW#:							
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air)	Preservation Code	Total Number of Contaminants	Special Instructions/Note:	
MW-1 (720-54005-1)	11/22/13	11:40 Pacific		Water	X		3		
MW-2 (720-54005-2)	11/22/13	13:35 Pacific		Water	X		3		
MW-4 (720-54005-3)	11/22/13	14:25 Pacific		Water	X		3		
MW-5 (720-54005-4)	11/22/13	12:45 Pacific		Water	X X		6		
MW-6A (720-54005-5)	11/22/13	15:50 Pacific		Water	X		3		
MW-6B (720-54005-6)	11/22/13	15:15 Pacific		Water	X		3		
MW-7A (720-54005-7)	11/22/13	09:20 Pacific		Water	X		3		
MW-7B (720-54005-8)	11/22/13	10:00 Pacific		Water	X		3		
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
Unconfirmed		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:							
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by:	<i>JG Bulk</i>	Date/Time:	<i>11/25/13 15:30</i>	Company	Received by:		Date/Time:	Company	
Relinquished by:		Date/Time:		Company	Received by:		Date/Time:	Company	
Relinquished by:		Date/Time:		Company	Received by:	<i>Tiff M. Brinkley</i>	Date/Time:	<i>11/26/13 17:17</i>	Company
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									



## **SAMPLE RECEIPT CHECKLIST**

**SRG #:** 86733

Sample Receipt	Initials/Date: <i>TJB 112613</i>	Storage Time: <i>1717</i>	Sample Login	Initials/Date: <i>guy 112713</i>
TAT:	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush <input type="checkbox"/> Split <input type="checkbox"/> None	Method of Receipt: <input type="checkbox"/> Courier <input type="checkbox"/> Over-the-counter <input checked="" type="checkbox"/> Shipped		
Temp °C <i>0-8</i>	<input type="checkbox"/> N/A	Therm ID/ <i>R3</i>	Time <i>0950</i>	Coolant present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Water <input type="checkbox"/> Temp Excursion
For Shipments Only:	Cooler Receipt Initials/Date/Time: <i>GUY 112613 0950</i>		Custody Seals	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Broken

<b>Chain-of-Custody:</b>	<b>Yes</b>	<b>No</b>
Is COC present?	X	
Is COC signed by relinquisher?	X	
Is COC dated by relinquisher?	X	
Is the sampler's name on the COC?		X
Are there analyses or hold for all samples?	X	

<b>Documented on</b>	<b>COC</b>	<b>Labels</b>	<b>Discrepancies:</b>
Sample ID	/	/	
Project ID	/		
Sample Date	/	/	
Sample Time	/	/	
Does COC match project history?	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No

<b>Samples:</b>	N/A	Yes	No
Are sample custody seals intact?	X		
Are sample containers intact?		X	
Is preservation documented?		X	
<b>In-house Analysis:</b>	N/A	Yes	No
Are preservatives acceptable?		X	
Are samples within holding time?		X	
Are sample container types correct?		X	
Is there adequate sample volume?		X	

## **Comments:**

Receipt Details:		
Matrix	Container Type	# of Containers
WA	JOA	26

**CS Required:**

Proceed With Analysis:  YES  NO      Init/Date:  
Client Communication:



## Login Sample Receipt Checklist

Client: Engeo, Inc.

Job Number: 720-54005-1

**Login Number: 54005**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Bullock, Tracy**

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

## Login Sample Receipt Checklist

Client: Engeo, Inc.

Job Number: 720-54005-1

**Login Number: 54005**

**List Source: TestAmerica Irvine**

**List Number: 1**

**List Creation: 11/26/13 12:02 PM**

**Creator: Kim, Guerry**

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time.	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
Sample collection date/times are provided.	True		16
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		