



**CONESTOGA-ROVERS  
& ASSOCIATES**

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## TRANSMITTAL

DATE: February 5, 2013 REFERENCE NO.: 240695  
 PROJECT NAME: 4895 Hacienda Drive, Dublin  
 TO: Jerry Wickham  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**RECEIVED**  
 By Alameda County Environmental Health at 10:49 am, Feb 08, 2013

Please find enclosed:  Draft  Final  
 Originals  Other  
 Prints  
 Sent via:  Mail  Same Day Courier  
 Overnight Courier  Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Groundwater Monitoring Report - Fourth Quarter 2012

As Requested  For Review and Comment  
 For Your Use

**COMMENTS:**

If you have any questions regarding the content of this document, please contact Peter Schaefer at (510) 420-3319.

Copy to: Denis Brown, Shell Oil Products US (electronic copy)  
 Carl Cox, CJC Hacienda LLC (property owner), 4431 Stoneridge Drive #100, Pleasanton, CA 94588-8417  
 Colleen Winey, Zone 7 Water Agency (electronic copy)

Completed by: Peter Schaefer Signed: 

Filing: Correspondence File



Jerry Wickham  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**Denis L. Brown**  
**Shell Oil Products US**  
HSE – Environmental Services  
20945 S. Wilmington Ave.  
Carson, CA 90810-1039  
Tel (707) 865 0251  
Fax (707) 865 2542  
Email [denis.l.brown@shell.com](mailto:denis.l.brown@shell.com)

Re: Shell-branded Service Station  
4895 Hacienda Drive  
Dublin, California  
SAP Code 165112  
Incident No. 97795893  
ACEH Case No. RO0002985

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

A handwritten signature in black ink, appearing to read "Denis L. Brown", is located below the "Sincerely," text.

Denis L. Brown  
Senior Program Manager



## **GROUNDWATER MONITORING REPORT - FOURTH QUARTER 2012**

**SHELL-BRANDED SERVICE STATION  
4895 HACIENDA DRIVE  
DUBLIN, CALIFORNIA**

**SAP CODE           165112  
INCIDENT NO.    97795893  
AGENCY NO.      RO0002985**

**FEBRUARY 5, 2013  
REF. NO. 240695 (10)**  
This report is printed on recycled paper.

**Prepared by:  
Conestoga-Rovers  
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## TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION .....	1
1.1 SITE INFORMATION .....	1
2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION .....	1
2.1 CURRENT QUARTER'S ACTIVITIES.....	1
2.2 CURRENT QUARTER'S FINDINGS .....	2
2.3 PROPOSED ACTIVITIES .....	2

LIST OF FIGURES  
(Following Text)

- FIGURE 1 VICINITY MAP  
FIGURE 2 GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP

LIST OF TABLES  
(Following Text)

- TABLE 1 GROUNDWATER DATA

LIST OF APPENDICES

- APPENDIX A BLAINE TECH SERVICES, INC. - FIELD NOTES  
APPENDIX B TESTAMERICA LABORATORIES, INC. - ANALYTICAL REPORT

## 1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell).

### 1.1 SITE INFORMATION

Site Address	4895 Hacienda Drive, Dublin
Site Use	Shell-branded Service Station
Shell Project Manager	Denis Brown
CRA Project Manager	Peter Schaefer
Lead Agency and Contact	ACEH, Jerry Wickham
Agency Case No.	RO0002985
Shell SAP Code	165112
Shell Incident No.	97795893

Date of most recent agency correspondence was October 31, 2012 (electronic).

## 2.0 SITE ACTIVITIES, FINDINGS, AND DISCUSSION

### 2.1 CURRENT QUARTER'S ACTIVITIES

Blaine Tech Services, Inc. (Blaine) gauged and sampled the wells according to the established monitoring program for this site.

CRA prepared a vicinity map (Figure 1), a groundwater contour and chemical concentration map (Figure 2), and a groundwater data table (Table 1). Blaine's field notes are presented in Appendix A, and the laboratory report is presented in Appendix B.

On January 7, 2013, CRA submitted a *Subsurface Investigation Report*, which presented results from cone penetrometer test borings and grab groundwater sampling down gradient from the site and recommended case closure.

**2.2**      **CURRENT QUARTER'S FINDINGS**

Groundwater Flow Direction	Variable
Hydraulic Gradient	Variable
Depth to Water	14.10 to 14.96 feet below top of well casing

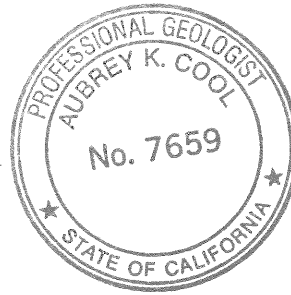
**2.3**      **PROPOSED ACTIVITIES**

As requested in CRA's January 7, 2013 *Subsurface Investigation Report*, we suspended the groundwater monitoring program during Alameda County Environmental Health's closure review. Unless directed otherwise, no further groundwater monitoring events are scheduled.

All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES

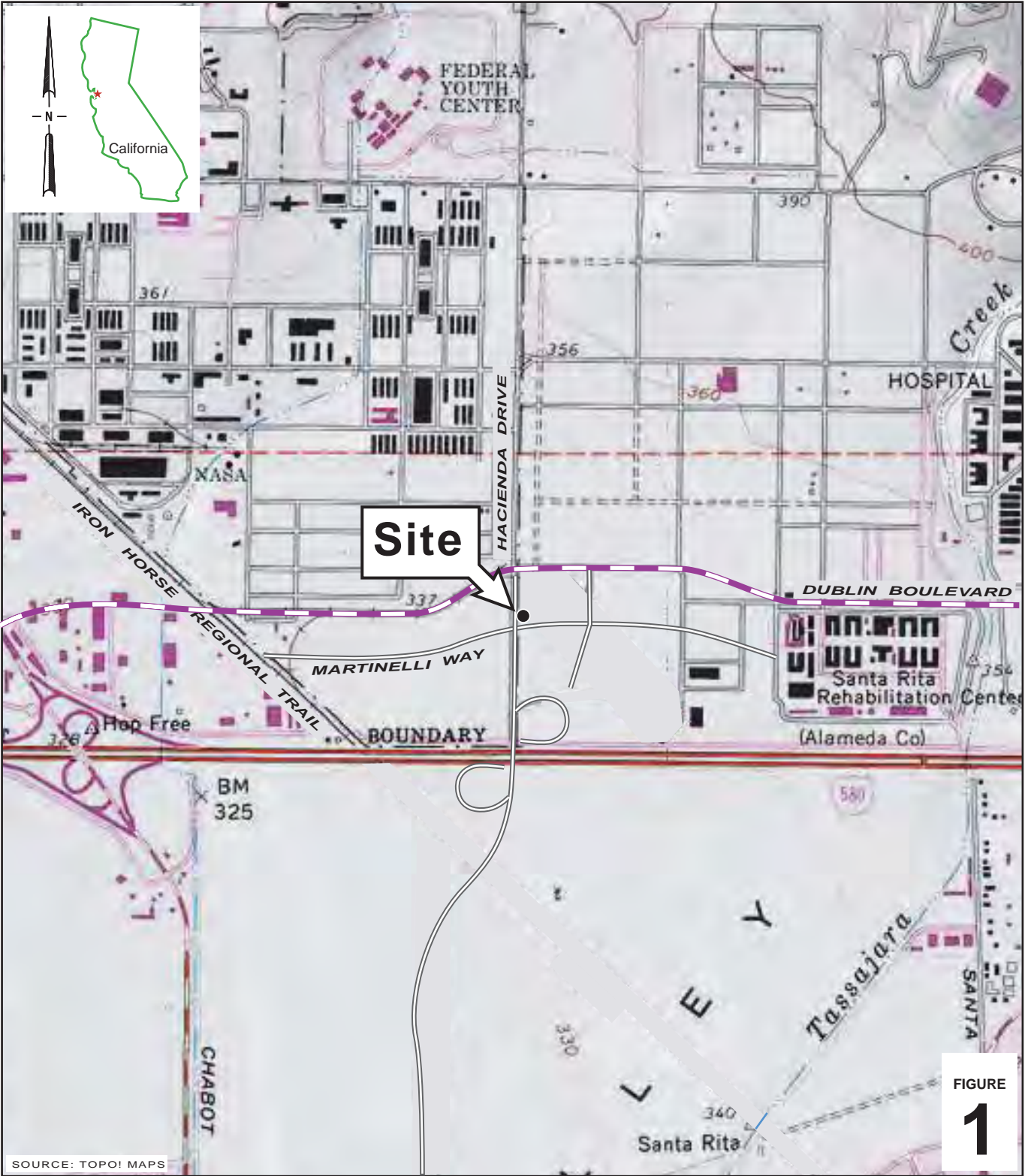
*Peter Schaefer*  
Peter Schaefer, CHG, CEG

*Aubrey K. Cool*  
Aubrey K. Cool, PG





## FIGURES



I:\Shell\6-charts\2406--1240695-Dublin\_4895\_Hacienda\240695-FIGURES\240695 VICINITY (F1).AI

FIGURE  
**1**

0 1/8 1/4 1/2 1  
SCALE : 1" = 1/4 MILE

### Shell-branded Service Station

4895 Hacienda Drive  
Dublin, California



**CONESTOGA-ROVERS  
& ASSOCIATES**

### Vicinity Map

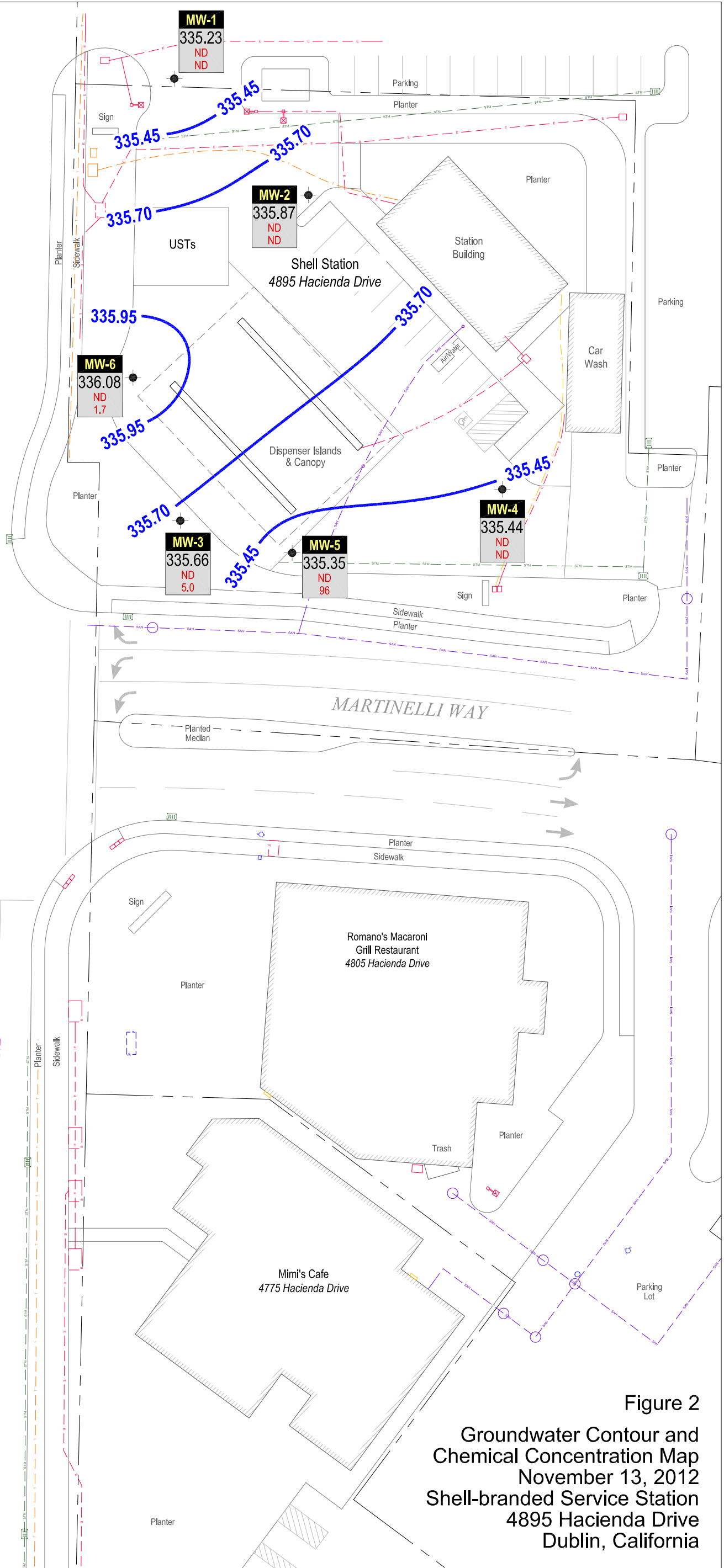
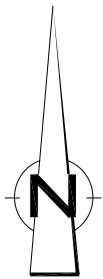
**EXPLANATION**

- MW-1 ● Monitoring well location
- Electrical line (E)
- Telecommunication line (T)
- Gas line (G)
- Storm drain line (STM)
- Sanitary sewer line (SAN)
- Water line (W)
- Unknown utility line (?)
- ☐ Catch basin
- Fire hydrant

**xx.xx** Groundwater elevation contour, in feet above mean sea level (ft MSL); dashed where inferred

**Well**  
**ELEV.** Groundwater elevation, in ft MSL  
**Benzene**  
**MTBE** Benzene and MTBE concentrations are in micrograms per liter

**Notes:**  
**ND = Not detected**



**Figure 2**  
**Groundwater Contour and**  
**Chemical Concentration Map**  
**November 13, 2012**  
**Shell-branded Service Station**  
**4895 Hacienda Drive**  
**Dublin, California**



TABLE

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
4895 HACIENDA DRIVE, DUBLIN, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd (µg/L)</i>	<i>TPHg (µg/L)</i>	<i>B (µg/L)</i>	<i>T (µg/L)</i>	<i>E (µg/L)</i>	<i>X (µg/L)</i>	<i>MTBE (µg/L)</i>	<i>TBA (µg/L)</i>	<i>DIPE (µg/L)</i>	<i>ETBE (µg/L)</i>	<i>TAME (µg/L)</i>	<i>TOC (ft MSL)</i>	<i>Depth to Water (ft TOC)</i>	<i>GW Elevation (ft MSL)</i>
MW-1	03/15/2010	---	---	---	---	---	---	---	---	---	---	---	349.33	11.65	337.68
MW-1	03/19/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	349.33	11.75	337.58
MW-1	05/06/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	349.33	11.99	337.34
MW-1	08/05/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	349.33	12.98	336.35
MW-1	11/08/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	349.33	13.50	335.83
MW-1	02/03/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	349.33	13.04	336.29
MW-1	05/16/2011	<50	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	<1.0	<1.0	<1.0	349.33	12.05	337.28
MW-1	10/31/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<10	---	---	---	349.33	13.10	336.23
MW-1	05/22/2012	75	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	---	---	---	349.33	12.83	336.50
<b>MW-1</b>	<b>11/13/2012</b>	<b>97 a</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>&lt;10</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>349.33</b>	<b>14.10</b>	<b>335.23</b>
MW-2	03/15/2010	---	---	---	---	---	---	---	---	---	---	---	350.66	12.95	337.71
MW-2	03/19/2010	<50	230	<0.50	<1.0	<1.0	<1.0	180	<10	<2.0	<2.0	<2.0	350.66	13.16	337.50
MW-2	05/06/2010	<50	100	<0.50	<1.0	<1.0	<1.0	130	<10	<2.0	<2.0	<2.0	350.66	13.32	337.34
MW-2	08/05/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	11	<10	<2.0	<2.0	<2.0	350.66	14.34	336.32
MW-2	11/08/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	7.9	<10	<2.0	<2.0	<2.0	350.66	14.28	336.38
MW-2	02/03/2011	<47	50	<0.50	<0.50	<0.50	<1.0	42	24	<1.0	<1.0	<1.0	350.66	14.45	336.21
MW-2	05/16/2011	<50	<50	<0.50	<0.50	<0.50	<1.0	22	<10	<1.0	<1.0	<1.0	350.66	13.50	337.16
MW-2	10/31/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	1.0	<10	---	---	---	350.66	14.49	336.17
MW-2	05/22/2012	60	<50	<0.50	<0.50	<0.50	<1.0	0.90	<10	---	---	---	350.66	14.30	336.36
<b>MW-2</b>	<b>11/13/2012</b>	<b>&lt;48</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>&lt;10</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>350.66</b>	<b>14.79</b>	<b>335.87</b>
MW-3	03/15/2010	---	---	---	---	---	---	---	---	---	---	---	350.18	12.62	337.56
MW-3	03/19/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	11	<10	<2.0	<2.0	<2.0	350.18	12.84	337.34
MW-3	05/06/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	6.9	<10	<2.0	<2.0	<2.0	350.18	13.51	336.67
MW-3	08/05/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	9.6	<10	<2.0	<2.0	<2.0	350.18	14.28	335.90
MW-3	11/08/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	20	<10	<2.0	<2.0	<2.0	350.18	14.41	335.77
MW-3	02/03/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	16	<10	<1.0	<1.0	<1.0	350.18	14.08	336.10
MW-3	05/16/2011	<50	<50	<0.50	<0.50	<0.50	<1.0	10	<10	<1.0	<1.0	<1.0	350.18	13.05	337.13
MW-3	10/31/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	32	<10	---	---	---	350.18	14.01	336.17

TABLE 1

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
4895 HACIENDA DRIVE, DUBLIN, CALIFORNIA**

<i>Well ID</i>	<i>Date</i>	<i>TPHd</i> ( $\mu\text{g/L}$ )	<i>TPHg</i> ( $\mu\text{g/L}$ )	<i>B</i> ( $\mu\text{g/L}$ )	<i>T</i> ( $\mu\text{g/L}$ )	<i>E</i> ( $\mu\text{g/L}$ )	<i>X</i> ( $\mu\text{g/L}$ )	<i>MTBE</i> ( $\mu\text{g/L}$ )	<i>TBA</i> ( $\mu\text{g/L}$ )	<i>DIPE</i> ( $\mu\text{g/L}$ )	<i>ETBE</i> ( $\mu\text{g/L}$ )	<i>TAME</i> ( $\mu\text{g/L}$ )	<i>TOC</i> (ft MSL)	<i>Depth to</i> <i>Water</i> (ft TOC)	<i>GW</i> <i>Elevation</i> (ft MSL)
MW-3	05/22/2012	<48	<50	<0.50	<0.50	<0.50	<1.0	7.3	<10	---	---	---	350.18	13.70	336.48
<b>MW-3</b>	<b>11/13/2012</b>	<b>58 a</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>5.0</b>	<b>&lt;10</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>350.18</b>	<b>14.52</b>	<b>335.66</b>
MW-4	03/15/2010	---	---	---	---	---	---	---	---	---	---	---	350.32	12.85	337.47
MW-4	03/19/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	3.3	<10	<2.0	<2.0	<2.0	350.32	12.98	337.34
MW-4	05/06/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	350.32	13.35	336.97
MW-4	08/05/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	350.32	14.23	336.09
MW-4	11/08/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0	350.32	14.24	336.08
MW-4	02/03/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	1.7	<10	<1.0	<1.0	<1.0	350.32	14.24	336.08
MW-4	05/16/2011	<51	<50	<0.50	<0.50	<0.50	<1.0	29	<10	<1.0	<1.0	<1.0	350.32	13.64	336.68
MW-4	10/31/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	2.8	<10	---	---	---	350.32	14.34	335.98
MW-4	05/22/2012	<47	<50	<0.50	<0.50	<0.50	<1.0	1.2	<10	---	---	---	350.32	14.05	336.27
<b>MW-4</b>	<b>11/13/2012</b>	<b>&lt;48</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>&lt;10</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>350.32</b>	<b>14.88</b>	<b>335.44</b>
MW-5	03/15/2010	---	---	---	---	---	---	---	---	---	---	---	350.31	12.80	337.51
MW-5	03/19/2010	<50	410	<0.50	<1.0	<1.0	<1.0	310	<10	<2.0	<2.0	<2.0	350.31	12.99	337.32
MW-5	05/06/2010	<50	160	<1.0	<2.0	<2.0	<2.0	210	<20	<4.0	<4.0	<4.0	350.31	13.21	337.10
MW-5	08/05/2010	<50	310	<1.0	<2.0	<2.0	<2.0	250	39	<4.0	<4.0	<4.0	350.31	14.25	336.06
MW-5	11/08/2010	<50	210	<1.0	<2.0	<2.0	<2.0	210	<20	<4.0	<4.0	<4.0	350.31	14.20	336.11
MW-5	02/03/2011	<47	79 a	<0.50	<0.50	<0.50	<1.0	140	<10	<1.0	<1.0	<1.0	350.31	14.28	336.03
MW-5	05/16/2011	<50	150	<0.50	<0.50	<0.50	<1.0	200	21 b	<1.0	<1.0	<1.0	350.31	13.65	336.66
MW-5	10/31/2011	<47	100	<1.0	<1.0	<1.0	<2.0	130	<20	---	---	---	350.31	14.40	335.91
MW-5	05/22/2012	63	110	<0.50	<0.50	<0.50	<1.0	110	<10	---	---	---	350.31	14.13	336.18
<b>MW-5</b>	<b>11/13/2012</b>	<b>&lt;48</b>	<b>100 c</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>96</b>	<b>&lt;10</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>350.31</b>	<b>14.96</b>	<b>335.35</b>
MW-6	03/15/2010	---	---	---	---	---	---	---	---	---	---	---	350.29	12.79	337.50
MW-6	03/19/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	18	<10	<2.0	<2.0	<2.0	350.29	12.84	337.45
MW-6	05/06/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	7.4	<10	<2.0	<2.0	<2.0	350.29	13.14	337.15
MW-6	08/05/2010	<50	53	<0.50	<1.0	<1.0	<1.0	4.0	<10	<2.0	<2.0	<2.0	350.29	14.12	336.17
MW-6	11/08/2010	<50	<50	<0.50	<1.0	<1.0	<1.0	7.8	<10	<2.0	<2.0	<2.0	350.29	14.12	336.17

**GROUNDWATER DATA  
SHELL-BRANDED SERVICE STATION  
4895 HACIENDA DRIVE, DUBLIN, CALIFORNIA**

Well ID	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water
														(ft TOC)
MW-6	02/03/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	18	<10	<1.0	<1.0	<1.0	350.29	14.05
MW-6	05/16/2011	<51	<50	<0.50	<0.50	<0.50	<1.0	9.8	<10	<1.0	<1.0	<1.0	350.29	13.19
MW-6	10/31/2011	<47	<50	<0.50	<0.50	<0.50	<1.0	17	<10	---	---	---	350.29	14.06
MW-6	05/22/2012	<48	<50	<0.50	<0.50	<0.50	<1.0	5.0	<10	---	---	---	350.29	13.82
MW-6	11/13/2012	<50	<50	<0.50	<0.50	<0.50	<1.0	1.7	<10	---	---	---	350.29	14.21

Notes:

TPHd = Total petroleum hydrocarbons as diesel analyzed by modified EPA Method 8015 with silica gel cleanup

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B

BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B

MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B

TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B

DIPE = Di-isopropyl ether analyzed by EPA Method 8260B

ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B

TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B

TOC = Top of casing elevation, in feet relative to mean sea level

GW = Groundwater

µg/L = Micrograms per liter

ft = Feet

MSL = Mean sea level

<x = Not detected at reporting limit x

--- = Not analyzed or not available

a = Hydrocarbon result partly due to individual peaks in quantitation range

b = Due to the low levels of analyte found in the sample, the analyte was qualitatively identified based on the compound's retention time and the presence of a single mass ion.

c = Concentration reported due to the presence of discrete peak of MTBE

Site wells surveyed March 19, 2010 by Mid Coast Engineers.

APPENDIX A

BLAINE TECH SERVICES, INC. -  
FIELD NOTES







## SHELL WELL MONITORING DATA SHEET

BTS #: <u>12113-MMZ</u>	Site: <u>4895 Hacienda Dr. Dublin, CA</u>
Sampler: <u>JO</u>	Date: <u>11-13-12</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>(4)</u> 6 8 <u>   </u>
Total Well Depth (TD): <u>30.00</u>	Depth to Water (DTW): <u>14.79</u>
Depth to Free Product: <u>   </u>	Thickness of Free Product (feet): <u>   </u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>17.83</u>	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

$\frac{9.8 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{29.4 \text{ Gals.}}{\text{Calculated Volume}}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1341	67.9	7.21	2177	28	9.8	
1343	68.0	7.20	2179	27	19.6	
1345	68.0	7.21	2190	27	29.4	

Did well dewater?    Yes    No      Gallons actually evacuated: 29.4

Sampling Date: 11-13-12      Sampling Time: 1350      Depth to Water: 15.37

Sample I.D.: MW-2      Laboratory: Test America      Other \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: see coc

SB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
D.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



## SHELL WELL MONITORING DATA SHEET

BTS #: <u>12113-MMZ</u>	Site: <u>4895 Hacienda Dr. Dublin, CA</u>
Sampler: <u>JO</u>	Date: <u>11-13-12</u>
Well I.D.: <u>MW-4</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>27.42</u>	Depth to Water (DTW): <u>14.88</u>
Depth to Free Product: <u>—</u>	Thickness of Free Product (feet): <u>—</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>17.38</u>	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

9.1 (Gals.) X 3 = 24.3 Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
<u>1322</u>	<u>67.9</u>	<u>7.14</u>	<u>2291</u>	<u>31</u>	<u>9.1</u>	
<u>1324</u>	<u>67.8</u>	<u>7.12</u>	<u>2299</u>	<u>30</u>	<u>16.2</u>	
<u>1326</u>	<u>67.9</u>	<u>7.11</u>	<u>2297</u>	<u>29</u>	<u>24.3</u>	

Did well dewater?    Yes    No      Gallons actually evacuated: 24.3

Sampling Date: 11-13-12      Sampling Time: 1330      Depth to Water: 16.60

Sample I.D.: MW-4      Laboratory: Test America      Other: \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: see COC

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
D.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## SHELL WELL MONITORING DATA SHEET

BTS #: <u>12113-MMZ</u>	Site: <u>4895 Hacienda Dr. Dublin, CA</u>
Sampler: <u>Jo</u>	Date: <u>11-13-12</u>
Well I.D.: <u>MW-5</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): <u>29.66</u>	Depth to Water (DTW): <u>14.96</u>
Depth to Free Product: <u>                    </u>	Thickness of Free Product (feet): <u>                    </u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>17.90</u>	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

$\frac{9.5 \text{ (Gals.)} \times 3 \text{ Specified Volumes}}{1 \text{ Case Volume}} = 28.5 \text{ Gals. Calculated Volume}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1445	68.1	7.31	1693	42	9.5	
1447	68.1	7.27	1704	44	19.0	
1449	68.2	7.24	1702	49	28.5	

Did well dewater? Yes  No  Gallons actually evacuated: 28.5

Sampling Date: 11-13-12 Sampling Time: 1455 Depth to Water: 15.83

Sample I.D.: MW-5 Laboratory: Test America Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see coc

SB I.D. (if applicable): @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
D.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## SHELL WELL MONITORING DATA SHEET

BTS #: <u>12113-MMZ</u>	Site: <u>4895 Hacienda Dr. Dublin, CA</u>
Sampler: <u>JB</u>	Date: <u>11-13-12</u>
Well I.D.: <u>MW-6</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD): <u>25.30</u>	Depth to Water (DTW): <u>14.21</u>
Depth to Free Product: <u>25.30</u>	Thickness of Free Product (feet): <u>—</u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>16.42</u>	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

$\frac{7.2 \text{ (Gals.)} \times 3 \text{ Specified Volumes}}{1 \text{ Case Volume}} = 21.6 \text{ Gals. Calculated Volume}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1403	68.0	7.22	2278	34	7.2	
1405	68.1	7.21	2246	37	14.4	
1407	68.1	7.22	2231	34	21.6	

Did well dewater? Yes  No  Gallons actually evacuated: 21.6

Sampling Date: 11-13-12 Sampling Time: 1410 Depth to Water: 15.12

Sample I.D.: MW-6 Laboratory: Test America Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: \_\_\_\_\_

D.O. (if req'd): Pre-purge: \_\_\_\_\_ mg/L Post-purge: \_\_\_\_\_ mg/L

D.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

INCIDENT # 41175893

ADDRESS 4895 Hacienda Dr.

DATE: 11-13-12

CITY & STATE Dublin, CA

Well ID	Observations Upon Arrival														Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials				
	Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition									
MW-1	Standpipe	Flush	G	P	12	Y	N	G	R	G	R	NL	G	P	1/2 tabs stripped	Y	N					
MW-2	Standpipe	Flush	G	P	12	Y	N	G	R	G	R	NL	G	P	2 1/2 tabs stripped	Y	N					
MW-3	Standpipe	Flush	G	P	12	Y	N	G	R	G	R	NL	G	P		Y	N					
MW-4	Standpipe	Flush	G	P	12	Y	N	G	R	G	R	NL	G	P		Y	N					
MW-5	Standpipe	Flush	G	P	12	Y	N	G	R	G	R	NL	G	P		Y	N					
MW-6	Standpipe	Flush	G	P	12	Y	N	G	R	G	R	NL	G	P		Y	N					
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N					
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N					
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N					
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N					
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N					
TOTAL # CAPS REPLACED =										= TOTAL # OF LOCKS REPLACED												
Condition of Soil Boring Patches or Abandoned Monitoring Wells			G	P	N/A	If POOR, Borings/Well IDs or Location Description										Y	N					
Remediation Compound Type (Check boxes that apply)		Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted			Photos of Drum Condition		Repair Date and PM Initials			
NA																						
Building																						
Building w/ Fence Comp.		G			P			N/A			G			P			N/A			Y		N
Fenced Compound																						
Trailer																						
Number of Drums On-site		Does the Label Reveal the Source of the Contents			Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved			Photos of Drum Condition		Date Drums Removed from Site and PM Initials	
0		Y			N			N/A			G			P		N/A			Y		N	

G = Good (Acceptable) R = Replaced  
P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

\* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.

Version 2.4, March 2008

All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

Jose Ortiz / Blaine Tech  
Print or type Name of Field Personnel & Consultant Company



# SHELL WELLHEAD REPAIR FORM

## (FOR REPAIR TECHNICIAN)

Site Address 4895 Hacienda Dr. Dublin Date 12/11/12  
 Job Number 121211-BW1 Technician BW Page 1 of 1

Inspection Point (Well ID or description of location)	Well Inspected, Cleaned, Labeled - No Further Corrective Action Required	Replaced Cap	Replaced Lock	Replaced Lid Seal	Check Indicates deficiency										All Repairs Completed	Remaining Deficiencies Logged onto BLAINE Repair Order	Remaining Deficiencies Logged onto Notice of Deficient Condition - BLAINE Unable to Repair	
					Casing	Annular Seal	Tabs / Bolts	Box Structure	Apron	Trip Hazard	Below Grade	Not Securable by Design (12" diameter or less)	Lid not marked with words "MONITORING WELL"	Other Deficiency				Not Securable by Design (greater than 12" diameter)
MW-1							X									X		
	Notes: Heli-Coil 3/2 Tabs																	
	Well box type / size: 12" Morrison									Materials used: 2 bolts								
MW-2							X									X		
	Notes: Retap 3/2 Tabs																	
	Well box type / size: 12" Morrison									Materials used: 2 bolts								
MW-3							X									X		
	Notes: Heli-Coil 3/2 Tabs																	
	Well box type / size: 12" Morrison									Materials used: 2 bolts								
	Notes:																	
	Well box type / size:									Materials used:								
	Notes:																	
	Notes:																	
	Well box type / size:									Materials used:								
	Notes:																	
	Notes:																	
	Well box type / size:									Materials used:								
	Notes:																	

APPENDIX B

TESTAMERICA LABORATORIES, INC. -  
ANALYTICAL REPORT

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

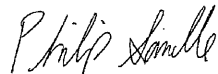
## ANALYTICAL REPORT

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

TestAmerica Job ID: 440-29980-1  
Client Project/Site: 4895 Hacienda Dr., Dublin

For:  
Conestoga-Rovers & Associates, Inc.  
5900 Hollis Street  
Suite A  
Emeryville, California 94608

Attn: Peter Schaefer



Authorized for release by:  
11/30/2012 10:37:51 AM

Philip Sanelle  
Project Manager I  
philip.sanelle@testamericainc.com

### LINKS

Review your project  
results through  
**Total Access**

Have a Question?

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The  
Expert

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

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

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

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

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Sample Summary . . . . .	3
Case Narrative . . . . .	4
Client Sample Results . . . . .	5
Chronicle . . . . .	9
QC Sample Results . . . . .	11
QC Association . . . . .	15
Definitions . . . . .	17
Certification Summary . . . . .	18
Chain of Custody . . . . .	19
Receipt Checklists . . . . .	20

# Sample Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-29980-1	MW-1	Water	11/13/12 13:10	11/15/12 10:45
440-29980-2	MW-2	Water	11/13/12 13:50	11/15/12 10:45
440-29980-3	MW-3	Water	11/13/12 14:30	11/15/12 10:45
440-29980-4	MW-4	Water	11/13/12 13:30	11/15/12 10:45
440-29980-5	MW-5	Water	11/13/12 14:55	11/15/12 10:45
440-29980-6	MW-6	Water	11/13/12 14:10	11/15/12 10:45

## Case Narrative

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

---

**Job ID: 440-29980-1**

---

**Laboratory: TestAmerica Irvine**

**Narrative**

---

**Job Narrative  
440-29980-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 11/15/2012 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.9° C, 3.8° C and 4.2° C.

**GC/MS VOA**

Method(s) 8260B/CA\_LUFTMS: The Gasoline Range Organics (GRO) concentration reported for the following sample(s) is due to the presence of discrete peaks: MW-5 (440-29980-5). Methyl tert-butyl ether

No other analytical or quality issues were noted.

**GC Semi VOA**

Method(s) 8015B: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 68244. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 8015B: Hydrocarbon result partly due to individual peak(s) in quantitation range. MW-1 (440-29980-1), MW-3 (440-29980-3).

No other analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

**VOA Prep**

No analytical or quality issues were noted.

## Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

**Client Sample ID: MW-1**

**Lab Sample ID: 440-29980-1**

Date Collected: 11/13/12 13:10

Matrix: Water

Date Received: 11/15/12 10:45

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			11/26/12 21:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	96		80 - 120					11/26/12 21:22	1
4-Bromofluorobenzene (Surr)	97		80 - 120					11/26/12 21:22	1
Toluene-d8 (Surr)	105		80 - 120					11/26/12 21:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			11/26/12 21:22	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 21:22	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			11/26/12 21:22	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			11/26/12 21:22	1
Toluene	ND		0.50		ug/L			11/26/12 21:22	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 21:22	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 (Surr)	97		80 - 120					11/26/12 21:22	1
Dibromofluoromethane (Surr)	96		80 - 120					11/26/12 21:22	1
Toluene-d8 (Surr)	105		80 - 120					11/26/12 21:22	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	97		47		ug/L		11/20/12 13:12	11/21/12 00:29	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane	88		45 - 120				11/20/12 13:12	11/21/12 00:29	1

**Client Sample ID: MW-2**

**Lab Sample ID: 440-29980-2**

Date Collected: 11/13/12 13:50

Matrix: Water

Date Received: 11/15/12 10:45

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			11/26/12 22:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	98		80 - 120					11/26/12 22:53	1
4-Bromofluorobenzene (Surr)	95		80 - 120					11/26/12 22:53	1
Toluene-d8 (Surr)	104		80 - 120					11/26/12 22:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			11/26/12 22:53	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 22:53	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			11/26/12 22:53	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			11/26/12 22:53	1
Toluene	ND		0.50		ug/L			11/26/12 22:53	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 22:53	1

TestAmerica Irvine

## Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

**Client Sample ID: MW-2**

**Lab Sample ID: 440-29980-2**

Date Collected: 11/13/12 13:50

Matrix: Water

Date Received: 11/15/12 10:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		80 - 120		11/26/12 22:53	1
Dibromofluoromethane (Surr)	98		80 - 120		11/26/12 22:53	1
Toluene-d8 (Surr)	104		80 - 120		11/26/12 22:53	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		48		ug/L		11/20/12 13:12	11/21/12 00:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	89		45 - 120	11/20/12 13:12	11/21/12 00:49	1

**Client Sample ID: MW-3**

**Lab Sample ID: 440-29980-3**

Date Collected: 11/13/12 14:30

Matrix: Water

Date Received: 11/15/12 10:45

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			11/26/12 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		80 - 120		11/26/12 23:24	1
4-Bromofluorobenzene (Surr)	97		80 - 120		11/26/12 23:24	1
Toluene-d8 (Surr)	102		80 - 120		11/26/12 23:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			11/26/12 23:24	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 23:24	1
Methyl-t-Butyl Ether (MTBE)	5.0		0.50		ug/L			11/26/12 23:24	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			11/26/12 23:24	1
Toluene	ND		0.50		ug/L			11/26/12 23:24	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		11/26/12 23:24	1
Dibromofluoromethane (Surr)	102		80 - 120		11/26/12 23:24	1
Toluene-d8 (Surr)	102		80 - 120		11/26/12 23:24	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	58		52		ug/L		11/20/12 13:12	11/21/12 01:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	90		45 - 120	11/20/12 13:12	11/21/12 01:09	1

**Client Sample ID: MW-4**

**Lab Sample ID: 440-29980-4**

Date Collected: 11/13/12 13:30

Matrix: Water

Date Received: 11/15/12 10:45

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			11/26/12 23:54	1

TestAmerica Irvine



## Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

**Client Sample ID: MW-4**  
**Date Collected: 11/13/12 13:30**  
**Date Received: 11/15/12 10:45**

**Lab Sample ID: 440-29980-4**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		80 - 120		11/26/12 23:54	1
4-Bromofluorobenzene (Surr)	95		80 - 120		11/26/12 23:54	1
Toluene-d8 (Surr)	103		80 - 120		11/26/12 23:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			11/26/12 23:54	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 23:54	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			11/26/12 23:54	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			11/26/12 23:54	1
Toluene	ND		0.50		ug/L			11/26/12 23:54	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 23:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		80 - 120		11/26/12 23:54	1
Dibromofluoromethane (Surr)	102		80 - 120		11/26/12 23:54	1
Toluene-d8 (Surr)	103		80 - 120		11/26/12 23:54	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		48		ug/L		11/20/12 13:12	11/21/12 01:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	87		45 - 120		11/20/12 13:12	11/21/12 01:29

**Client Sample ID: MW-5**  
**Date Collected: 11/13/12 14:55**  
**Date Received: 11/15/12 10:45**

**Lab Sample ID: 440-29980-5**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	100		50		ug/L			11/27/12 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		80 - 120		11/27/12 00:25	1
4-Bromofluorobenzene (Surr)	96		80 - 120		11/27/12 00:25	1
Toluene-d8 (Surr)	106		80 - 120		11/27/12 00:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			11/27/12 00:25	1
Ethylbenzene	ND		0.50		ug/L			11/27/12 00:25	1
Methyl-t-Butyl Ether (MTBE)	96		0.50		ug/L			11/27/12 00:25	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			11/27/12 00:25	1
Toluene	ND		0.50		ug/L			11/27/12 00:25	1
Xylenes, Total	ND		1.0		ug/L			11/27/12 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		80 - 120		11/27/12 00:25	1
Dibromofluoromethane (Surr)	102		80 - 120		11/27/12 00:25	1
Toluene-d8 (Surr)	106		80 - 120		11/27/12 00:25	1

TestAmerica Irvine

## Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

**Client Sample ID: MW-5**

**Lab Sample ID: 440-29980-5**

Date Collected: 11/13/12 14:55

Matrix: Water

Date Received: 11/15/12 10:45

**Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		48		ug/L		11/20/12 13:12	11/21/12 01:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n-Octacosane</i>	64		45 - 120				11/20/12 13:12	11/21/12 01:50	1

**Client Sample ID: MW-6**

**Lab Sample ID: 440-29980-6**

Date Collected: 11/13/12 14:10

Matrix: Water

Date Received: 11/15/12 10:45

**Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			11/27/12 00:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Dibromofluoromethane (Surr)</i>	103		80 - 120					11/27/12 00:55	1
<i>4-Bromofluorobenzene (Surr)</i>	93		80 - 120					11/27/12 00:55	1
<i>Toluene-d8 (Surr)</i>	105		80 - 120					11/27/12 00:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			11/27/12 00:55	1
Ethylbenzene	ND		0.50		ug/L			11/27/12 00:55	1
<b>Methyl-t-Butyl Ether (MTBE)</b>	<b>1.7</b>		<b>0.50</b>		<b>ug/L</b>			<b>11/27/12 00:55</b>	<b>1</b>
tert-Butyl alcohol (TBA)	ND		10		ug/L			11/27/12 00:55	1
Toluene	ND		0.50		ug/L			11/27/12 00:55	1
Xylenes, Total	ND		1.0		ug/L			11/27/12 00:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>4-Bromofluorobenzene (Surr)</i>	93		80 - 120					11/27/12 00:55	1
<i>Dibromofluoromethane (Surr)</i>	103		80 - 120					11/27/12 00:55	1
<i>Toluene-d8 (Surr)</i>	105		80 - 120					11/27/12 00:55	1

**Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level - Silica Gel Cleanup**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/20/12 13:12	11/21/12 02:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n-Octacosane</i>	81		45 - 120				11/20/12 13:12	11/21/12 02:10	1

## Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

**Client Sample ID: MW-1**

**Lab Sample ID: 440-29980-1**

Date Collected: 11/13/12 13:10

Matrix: Water

Date Received: 11/15/12 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	69292	11/26/12 21:22	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	69293	11/26/12 21:22	RM	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1055 mL	1 mL	68244	11/20/12 13:12	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			68393	11/21/12 00:29	NK	TAL IRV

**Client Sample ID: MW-2**

**Lab Sample ID: 440-29980-2**

Date Collected: 11/13/12 13:50

Matrix: Water

Date Received: 11/15/12 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	69292	11/26/12 22:53	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	69293	11/26/12 22:53	RM	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1045 mL	1 mL	68244	11/20/12 13:12	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			68393	11/21/12 00:49	NK	TAL IRV

**Client Sample ID: MW-3**

**Lab Sample ID: 440-29980-3**

Date Collected: 11/13/12 14:30

Matrix: Water

Date Received: 11/15/12 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	69292	11/26/12 23:24	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	69293	11/26/12 23:24	RM	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			970 mL	1 mL	68244	11/20/12 13:12	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			68393	11/21/12 01:09	NK	TAL IRV

**Client Sample ID: MW-4**

**Lab Sample ID: 440-29980-4**

Date Collected: 11/13/12 13:30

Matrix: Water

Date Received: 11/15/12 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	69292	11/26/12 23:54	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	69293	11/26/12 23:54	RM	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1035 mL	1 mL	68244	11/20/12 13:12	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			68393	11/21/12 01:29	NK	TAL IRV

**Client Sample ID: MW-5**

**Lab Sample ID: 440-29980-5**

Date Collected: 11/13/12 14:55

Matrix: Water

Date Received: 11/15/12 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	69292	11/27/12 00:25	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	69293	11/27/12 00:25	RM	TAL IRV

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## Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

**Client Sample ID: MW-5**

**Lab Sample ID: 440-29980-5**

Date Collected: 11/13/12 14:55

Matrix: Water

Date Received: 11/15/12 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			1050 mL	1 mL	68244	11/20/12 13:12	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			68393	11/21/12 01:50	NK	TAL IRV

**Client Sample ID: MW-6**

**Lab Sample ID: 440-29980-6**

Date Collected: 11/13/12 14:10

Matrix: Water

Date Received: 11/15/12 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	69292	11/27/12 00:55	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	10 mL	10 mL	69293	11/27/12 00:55	RM	TAL IRV
Silica Gel Cleanup	Prep	3510C SGC			1010 mL	1 mL	68244	11/20/12 13:12	KW	TAL IRV
Silica Gel Cleanup	Analysis	8015B		1			68393	11/21/12 02:10	NK	TAL IRV

**Laboratory References:**

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

## QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

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

Lab Sample ID: MB 440-69292/4

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 69292

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50		ug/L			11/26/12 19:50	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 19:50	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			11/26/12 19:50	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			11/26/12 19:50	1
Toluene	ND		0.50		ug/L			11/26/12 19:50	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 19:50	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	98		80 - 120		11/26/12 19:50	1
Dibromofluoromethane (Surr)	98		80 - 120		11/26/12 19:50	1
Toluene-d8 (Surr)	104		80 - 120		11/26/12 19:50	1

Lab Sample ID: LCS 440-69292/5

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 69292

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	25.0	24.9		ug/L		100	70 - 120
Ethylbenzene	25.0	26.3		ug/L		105	75 - 125
m,p-Xylene	50.0	52.6		ug/L		105	75 - 125
Methyl-t-Butyl Ether (MTBE)	25.0	26.1		ug/L		104	60 - 135
o-Xylene	25.0	26.4		ug/L		106	75 - 125
tert-Butyl alcohol (TBA)	125	128		ug/L		102	70 - 135
Toluene	25.0	26.9		ug/L		108	70 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	107		80 - 120

Lab Sample ID: 440-29980-1 MS

Client Sample ID: MW-1

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 69292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Benzene	ND		25.0	24.7		ug/L		99	65 - 125
Ethylbenzene	ND		25.0	27.0		ug/L		108	65 - 130
m,p-Xylene	ND		50.0	52.9		ug/L		106	65 - 130
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.6		ug/L		98	55 - 145
o-Xylene	ND		25.0	26.9		ug/L		107	65 - 125
tert-Butyl alcohol (TBA)	ND		125	128		ug/L		103	65 - 140
Toluene	ND		25.0	26.4		ug/L		105	70 - 125

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	103		80 - 120

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## QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

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

Lab Sample ID: 440-29980-1 MSD

Client Sample ID: MW-1

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 69292

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Benzene	ND		25.0	24.6		ug/L		98	65 - 125	0	20
Ethylbenzene	ND		25.0	25.8		ug/L		103	65 - 130	5	20
m,p-Xylene	ND		50.0	51.2		ug/L		102	65 - 130	3	25
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.7		ug/L		95	55 - 145	4	25
o-Xylene	ND		25.0	25.8		ug/L		103	65 - 125	4	20
tert-Butyl alcohol (TBA)	ND		125	133		ug/L		106	65 - 140	3	25
Toluene	ND		25.0	26.5		ug/L		106	70 - 125	0	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	104		80 - 120

### Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-69293/4

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 69293

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Volatile Fuel Hydrocarbons (C4-C12)	ND		50		ug/L			11/26/12 19:50	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	98		80 - 120		11/26/12 19:50	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/26/12 19:50	1
Toluene-d8 (Surr)	104		80 - 120		11/26/12 19:50	1

Lab Sample ID: LCS 440-69293/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 69293

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result				Qualifier
Volatile Fuel Hydrocarbons (C4-C12)	500	509		ug/L		102	55 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: 440-29980-1 MS

Client Sample ID: MW-1

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 69293

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		1730	1450		ug/L		84	50 - 145

TestAmerica Irvine

## QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

### Method: 8260B/CA\_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 440-29980-1 MS  
 Matrix: Water  
 Analysis Batch: 69293

Client Sample ID: MW-1  
 Prep Type: Total/NA

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: 440-29980-1 MSD  
 Matrix: Water  
 Analysis Batch: 69293

Client Sample ID: MW-1  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Toluene-d8 (Surr)	104		80 - 120

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

Lab Sample ID: MB 440-68244/1-A  
 Matrix: Water  
 Analysis Batch: 68393

Client Sample ID: Method Blank  
 Prep Type: Silica Gel Cleanup  
 Prep Batch: 68244

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
n-Octacosane	89		45 - 120	11/20/12 13:12	11/20/12 23:28	1

Lab Sample ID: LCS 440-68244/2-A  
 Matrix: Water  
 Analysis Batch: 68393

Client Sample ID: Lab Control Sample  
 Prep Type: Silica Gel Cleanup  
 Prep Batch: 68244

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

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

Lab Sample ID: LCSD 440-68244/3-A  
 Matrix: Water  
 Analysis Batch: 68393

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Silica Gel Cleanup  
 Prep Batch: 68244

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit

TestAmerica Irvine

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

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

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Lab Sample ID: LCSD 440-68244/3-A

Matrix: Water

Analysis Batch: 68393

Client Sample ID: Lab Control Sample Dup

Prep Type: Silica Gel Cleanup

Prep Batch: 68244

<i>Surrogate</i>	<i>LCS</i>	<i>D</i>	<i>LCS</i>	<i>D</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>			
<i>n-Octacosane</i>	86				45 - 120



## QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

### GC/MS VOA

#### Analysis Batch: 69292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-29980-1	MW-1	Total/NA	Water	8260B	
440-29980-1 MS	MW-1	Total/NA	Water	8260B	
440-29980-1 MSD	MW-1	Total/NA	Water	8260B	
440-29980-2	MW-2	Total/NA	Water	8260B	
440-29980-3	MW-3	Total/NA	Water	8260B	
440-29980-4	MW-4	Total/NA	Water	8260B	
440-29980-5	MW-5	Total/NA	Water	8260B	
440-29980-6	MW-6	Total/NA	Water	8260B	
LCS 440-69292/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-69292/4	Method Blank	Total/NA	Water	8260B	

#### Analysis Batch: 69293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-29980-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-29980-1 MS	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-29980-1 MSD	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
440-29980-2	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
440-29980-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
440-29980-4	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
440-29980-5	MW-5	Total/NA	Water	8260B/CA_LUFT MS	
440-29980-6	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
LCS 440-69293/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
MB 440-69293/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### GC Semi VOA

#### Prep Batch: 68244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-29980-1	MW-1	Silica Gel Cleanup	Water	3510C SGC	
440-29980-2	MW-2	Silica Gel Cleanup	Water	3510C SGC	
440-29980-3	MW-3	Silica Gel Cleanup	Water	3510C SGC	
440-29980-4	MW-4	Silica Gel Cleanup	Water	3510C SGC	
440-29980-5	MW-5	Silica Gel Cleanup	Water	3510C SGC	
440-29980-6	MW-6	Silica Gel Cleanup	Water	3510C SGC	
LCS 440-68244/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 440-68244/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 440-68244/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

#### Analysis Batch: 68393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-29980-1	MW-1	Silica Gel Cleanup	Water	8015B	68244
440-29980-2	MW-2	Silica Gel Cleanup	Water	8015B	68244
440-29980-3	MW-3	Silica Gel Cleanup	Water	8015B	68244

# QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

## GC Semi VOA (Continued)

### Analysis Batch: 68393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-29980-4	MW-4	Silica Gel Cleanup	Water	8015B	68244
440-29980-5	MW-5	Silica Gel Cleanup	Water	8015B	68244
440-29980-6	MW-6	Silica Gel Cleanup	Water	8015B	68244
LCS 440-68244/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	68244
LCSD 440-68244/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	68244
MB 440-68244/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	68244

## Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

### 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)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Certification Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 4895 Hacienda Dr., Dublin

TestAmerica Job ID: 440-29980-1

### Laboratory: TestAmerica Irvine

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

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

440-29980

LAB (LOCATION)

- CALSCIENCE ( )
- SPL Houston ( )
- XENCO ( )
- TEST AMERICA (IRVINE)
- OTHER ( )



Shell Oil Products Chain Of Custody Record

Please Check Appropriate Box:

<input type="checkbox"/> ENV. SERVICES	<input type="checkbox"/> MOTIVA RETAIL	<input type="checkbox"/> SHELL RETAIL
<input type="checkbox"/> MOTIVA SD&CM	<input checked="" type="checkbox"/> CONSULTANT	<input type="checkbox"/> LUBES
<input type="checkbox"/> SHELL PIPELINE	<input type="checkbox"/> OTHER	

Print Bill To Contact Name:

240695 Peter Schaefer

PO #

INCIDENT # (ENV SERVICES)

9	7	7	9	5	8	9	3
---	---	---	---	---	---	---	---

SAP #

				1	6	5	1	1	2
--	--	--	--	---	---	---	---	---	---

CHECK IF NO INCIDENT # APPLIES

DATE: 11-13-12

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services

LOG CODE: BTSS

SITE ADDRESS: Street and City: 4895 Hacienda Dr., Dublin

State: CA

GLOBAL ID NO.: T10000000423

ADDRESS: 1680 Rogers Avenue, San Jose, CA

EDP DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville, CA

PHONE NO.: 510-420-3343

EMAIL: ShellEDF@CRAWorld.com, Shell-US-LabDataManagement@CRAworld.com

CONSULTANT PROJECT NO.: 240695-65-12.03

PROJECT CONTACT (Hardcopy or PDF Report to): Lorin King

SAMPLER NAME(S) (Print): J. Ortiz

LAB USE ONLY

TELEPHONE: (310) 885-4455 x 108

FAX: (310) 637-5802

E-MAIL: lking@blainetech.com

TURNAROUND TIME (CALENDAR DAYS):

STANDARD (14 DAY)  5 DAYS  3 DAYS  2 DAYS  24 HOURS  RESULTS NEEDED ON WEEKEND

REQUESTED ANALYSIS

LA - RWQCB REPORT FORMAT  UST AGENCY:

**SPECIAL INSTRUCTIONS OR NOTES:**

1) Please upload the "CRA EQUS 4-file EDD" to the CRA Website (<http://cralabeddupload.craworld.com/equs/default.aspx>) and/or send it to the Shell-US-LabDataManagement@CRAworld.com email folder. 2) Please indicate that you have uploaded the EDD by including "EDD Uploaded to CRA website" in the body of the email used to deliver the final PDF report to the Shell-US-LabDataManagement@CRAworld.com email folder.

SHELL CONTRACT RATE APPLIES  
 STATE REIMBURSEMENT RATE APPLIES  
 EDD NOT NEEDED  
 RECEIPT VERIFICATION REQUESTED

MATRIX	TPH-GRO, Purgeable (8260B)	TPH-DRO, Extractable (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 5 OX's (MTBE, TBA, DIPE, TAME, ETBE) (8260B)	VOCs Full list (8260B)	Single Compound: (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015B)
WVG	X	X	X	X	X							
	X											
	X											
	X											
	X											
	X											

TEMPERATURE ON RECEIPT, °C

(CS) 4.2  
3.8  
2.9

Container PID Readings or Laboratory Notes

Copy final report to Shell.Lab.Billing@craworld.com, ShellEDF@craworld.com, Shell-US-LabDataManagement@CRAworld.com, and pschaefer@CRAWorld.com

Email invoice to Shell.Lab.Billing@craworld.com

Run TPH-D with Silica Gel Clean Up

LAB USE ONLY	SAMPLE ID					MATRIX	PRESERVATIVE					NO. OF CONT.
	PROJECT NUMBER	DATE (MMDDYY)	SAMPLER INITIALS	WELL ID	TIME		HCL	HNO3	H2SO4	NONE	OTHER	
	12113	111312	JD	MW-1	1310	WVG	X			X		5
				MW-2	1350		X			X		
				MW-3	1430		X			X		
				MW-4	1330		X			X		
				MW-5	1455		X			X		
				MW-6	1410		X			X		

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i> (Sample Custodian)	11-13-12	17:00
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i> (S.C.)	<i>[Signature]</i>	11-14-12	11:20
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i>	11/15/12	10:45

11/30/2012

## Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-29980-1

Login Number: 29980

List Source: TestAmerica Irvine

List Number: 1

Creator: Morales, Sergio

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