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2:45 pm, Dec 13, 2007

**Alameda County  
Environmental Health**

**Denis L. Brown**

**Shell Oil Products US**

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

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  
3600 Park Boulevard  
Oakland, California  
SAP Code 135689  
Incident No. 97610341  
ACHCSA Case No. RO0002855

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 written over a horizontal line.

Denis L. Brown  
Project Manager



**CONESTOGA-ROVERS  
& ASSOCIATES**

19449 Riverside Drive, Suite 230, Sonoma, California 95476  
Telephone: 707-935-4850 Facsimile: 707-935-6649  
www.CRAworld.com

December 13, 2007

Mr. Jerry Wickham  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577


Re: **Groundwater Monitoring Report – Fourth Quarter 2007**  
Shell-branded Service Station  
3600 Park Boulevard  
Oakland, California  
SAP Code 135689  
Incident No. 97610341  
Agency Case No. RO0002855

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) in accordance with the quarterly reporting requirements of 23 CCR 2652d.

If you have any questions regarding the contents of this document, please call Dennis Baertschi at (707) 268-3813.

Sincerely,  
**Conestoga-Rovers & Associates**

*for*   
Dennis Baertschi  
Project Manager

  
Joe Neely, PG



cc: Mr. Denis Brown, Shell

Equal  
Employment  
Opportunity Employer



**CONESTOGA-ROVERS  
& ASSOCIATES**

Mr. Jerry Wickham  
December 13, 2007

## **GROUNDWATER MONITORING REPORT – FOURTH QUARTER 2007**

<b>Site Address</b>	<u>3600 Park Boulevard, Oakland</u>
<b>Site Use</b>	<u>Shell-branded Service Station</u>
<b>Shell Project Manager</b>	<u>Denis Brown</u>
<b>Consultant and Contact Person</b>	<u>CRA, Dennis Baertschi</u>
<b>Lead Agency and Contact</b>	<u>ACHCSA, Jerry Wickham</u>
<b>Agency Case No.</b>	<u>RO0002855</u>
<b>Shell SAP Code</b>	<u>135689</u>
<b>Shell Incident No.</b>	<u>97610341</u>
<b>Date of Most Recent Agency Correspondence</b>	<u>April 18, 2006</u>

### **Current Quarter's Activities**

1. Blaine Tech Services, Inc. (Blaine) gauged and sampled wells according to the established monitoring program for this site.
2. CRA prepared a vicinity map (Figure 1) and a groundwater contour and chemical concentration map (Figure 2). The Blaine report, presenting the analytical data, is included in Attachment A.

### **Current Quarter's Findings**

<b>Groundwater Flow Direction</b>	<u>Westerly</u>
<b>Hydraulic Gradient</b>	<u>0.09</u>
<b>Depth to Water</b>	<u>5.31 to 15.45 feet below top of well casing</u>

### **Proposed Activities for Next Quarter**

1. Blaine will gauge and sample wells during the first month of the quarter and will tabulate the data, and CRA will prepare a groundwater monitoring report.



**CONESTOGA-ROVERS  
& ASSOCIATES**

Mr. Jerry Wickham  
December 13, 2007

Figures:        1 - Vicinity Map  
                  2 - Groundwater Contour and Chemical Concentration Map

Attachment:    A - Blaine Tech Services, Inc. - Groundwater Monitoring Report

Conestoga-Rovers & Associates (CRA) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to CRA from outside sources and/or in the public domain, and partially on information supplied by CRA and its subcontractors. CRA makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by CRA. This document represents the best professional judgment of CRA. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

I:\Sonoma.Shell\Oakland 3600 Park\QMR\2007\4Q07\4Q07 text.doc

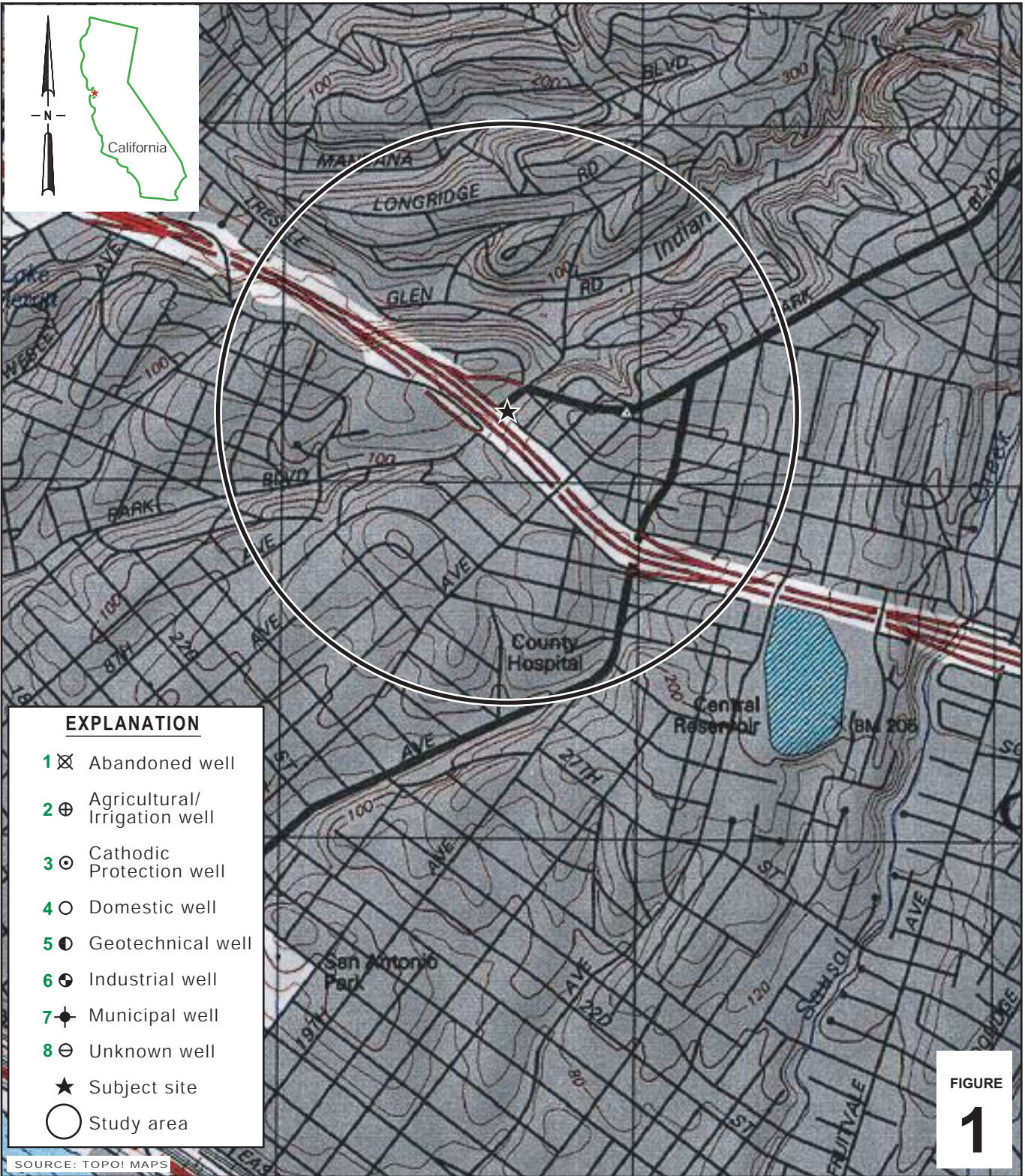


FIGURE 1

I:\SONOMA\_SHELL\OAKLAND\_3600\_PARK\FIGURES\VICINITY.A1

### Shell-branded Service Station

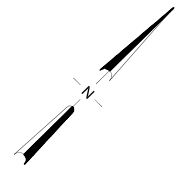
3600 Park Boulevard  
Oakland, California



**CONESTOGA-ROVERS & ASSOCIATES**

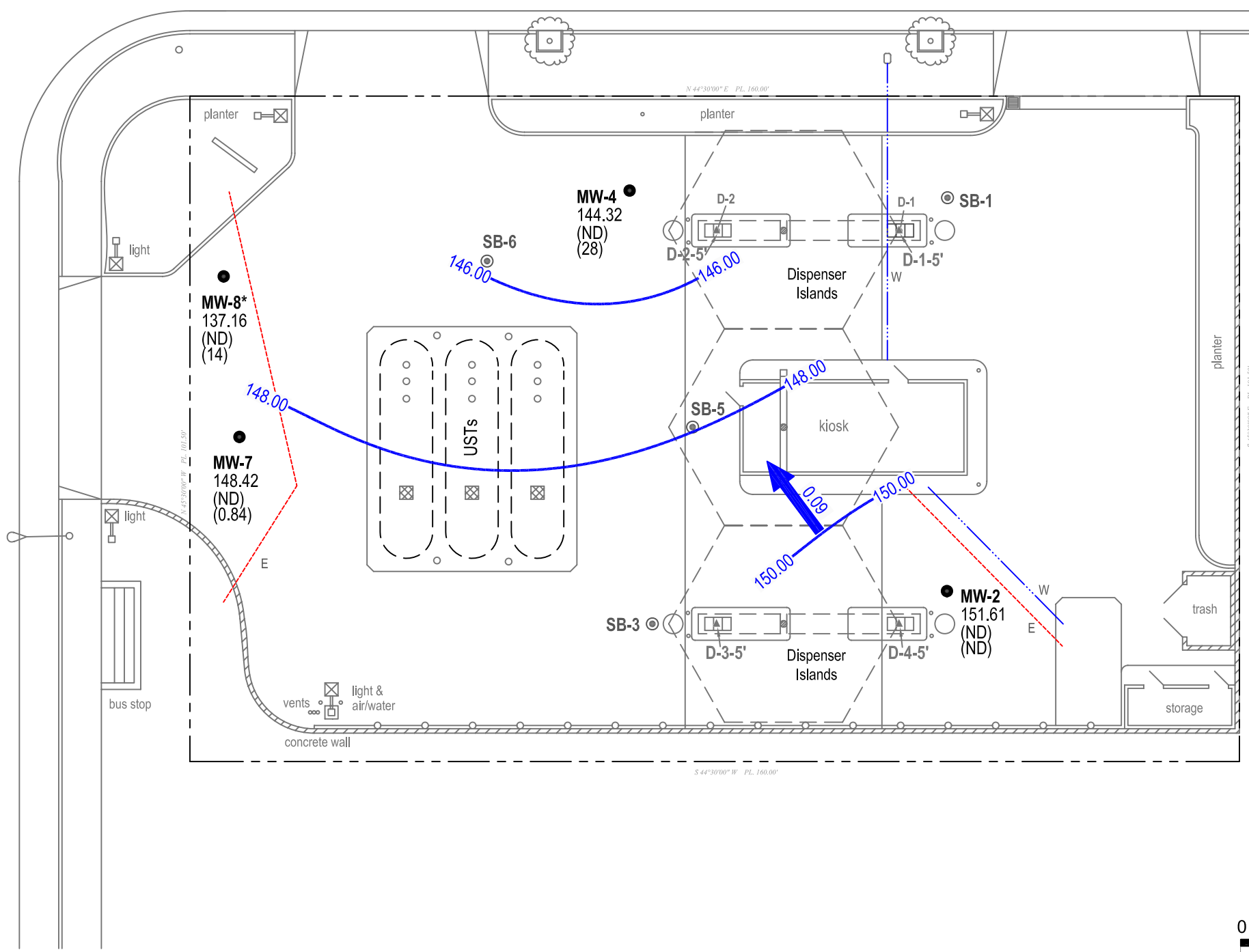
### Vicinity Map





# PARK BOULEVARD

# CHATHAM ROAD



### EXPLANATION

- MW-2** ● Monitoring well location
- 151.61 Groundwater elevation, in feet above msl
- (ND) Benzene concentrations in  $\mu\text{g/L}$
- (ND) MTBE concentrations in  $\mu\text{g/L}$
- SB-1** ◎ Soil boring location (1/3-6/06)
- D-1-5'** ▲ Dispenser soil sample location (8/20/04)
- D-1** ● Dispenser soil sample location (02/20/98)
- Electrical line (E)
- Water line (W)
- 0.02 → Groundwater flow direction and gradient
- ~xx.xx~ Groundwater elevation contour, in feet above mean sea level (msl)

**Notes:**  
 ND = Not detected  
 MW-8\* Monitoring well with different screen interval; not used for contouring

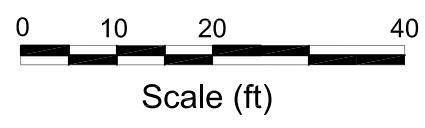


FIGURE **2**

I:\SONOMA-SHELL\OAKLAND 3600 PARK QMR\2007\40074QM07.DWG

Groundwater Contour and  
Chemical Concentration Map

October 30, 2007



CONESTOGA-ROVERS  
& ASSOCIATES

Shell-branded Service Station

3600 Park Boulevard  
Oakland, California

**Attachment A**

**Blaine Tech Services, Inc.  
Groundwater Monitoring Report**

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**BLAINE**  
TECH SERVICES INC.

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GROUNDWATER SAMPLING SPECIALISTS  
SINCE 1985

November 19, 2007

Denis Brown  
Shell Oil Products US  
20945 South Wilmington Avenue  
Carson, CA 90810

Fourth Quarter 2007 Groundwater Monitoring at  
Shell-branded Service Station  
3600 Park Boulevard  
Oakland, CA

Monitoring performed on October 30, 2007

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Groundwater Monitoring Report **071030-SL-1**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.



Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Mike Ninokata  
Project Manager

MN/ks

attachments: Cumulative Table of WELL CONCENTRATIONS  
Certified Analytical Report  
Field Data Sheets

cc: Denis Baertschi  
Conestoga-Rovers & Associates  
19449 Riverside Dr., Suite 230  
Sonoma, CA 95476

**WELL CONCENTRATIONS**  
**Shell Service Station**  
**3600 Park Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2- DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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MW-2	01/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156.92	11.62	145.30
MW-2	01/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156.92	8.72	148.20
MW-2	01/24/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	156.92	11.23	145.69
MW-2	04/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	2.53	<0.500	156.92	4.43	152.49
MW-2	07/11/2006	<50.0	<0.500	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	156.92	4.48	152.44
MW-2	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	156.92	4.64	152.28
MW-2	01/19/2007	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<0.50	<0.50	156.92	4.73	152.19
MW-2	04/02/2007	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	156.92	4.70	152.22
MW-2	07/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	156.92	4.77	152.15
<b>MW-2</b>	<b>10/30/2007</b>	<b>&lt;50 a</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>156.92</b>	<b>5.31</b>	<b>151.61</b>

MW-4	01/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	155.00	9.43	145.57
MW-4	01/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	155.00	9.45	145.55
MW-4	01/24/2006	1,330	<0.500	<0.500	<0.500	<0.500	762	<0.500	<0.500	1.72	<10.0	1.35	<0.500	155.00	9.92	145.08
MW-4	04/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	72.7	<0.500	<0.500	<0.500	<10.0	1.00	<0.500	155.00	9.33	145.67
MW-4	07/11/2006	<50.0	<0.500	<0.500	<0.500	<0.500	38.8	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	155.00	9.68	145.32
MW-4	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	39.8	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	155.00	10.28	144.72
MW-4	01/19/2007	<50	<0.50	<0.50	<0.50	<1.0	28	<1.0	<1.0	<1.0	<10	0.68	<0.50	155.00	10.26	144.74
MW-4	04/02/2007	<50 a	<0.50	<1.0	<1.0	<1.0	20	<2.0	<2.0	<2.0	<10	0.39 b	<1.0	155.00	9.93	145.07
MW-4	07/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	59	<2.0	<2.0	<2.0	<10	0.35 b	<1.0	155.00	10.34	144.66
<b>MW-4</b>	<b>10/30/2007</b>	<b>&lt;50 a</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>28</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;10</b>	<b>0.41 b</b>	<b>&lt;1.0</b>	<b>155.00</b>	<b>10.68</b>	<b>144.32</b>

MW-7	01/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	154.00	5.97	148.03
MW-7	01/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	154.00	6.40	147.60
MW-7	01/24/2006	<50.0	<0.500	<0.500	<0.500	<0.500	3.08	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	154.00	9.64	144.36
MW-7	04/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	0.690	<0.500	<0.500	<0.500	<10.0	2.32	<0.500	154.00	3.49	150.51
MW-7	07/11/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	154.00	3.96	150.04
MW-7	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	154.00	5.11	148.89

**WELL CONCENTRATIONS**  
**Shell Service Station**  
**3600 Park Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2- DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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MW-7	01/19/2007	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<0.50	<0.50	154.00	4.62	149.38
MW-7	04/02/2007	<50 a	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0	154.00	4.23	149.77
MW-7	07/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	0.31 b	<2.0	<2.0	<2.0	<10	<0.50	<1.0	154.00	5.08	148.92
<b>MW-7</b>	<b>10/30/2007</b>	<b>&lt;50 a</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>0.84 b</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>154.00</b>	<b>5.58</b>	<b>148.42</b>

MW-8	01/12/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	152.61	16.84	135.77
MW-8	01/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	152.61	16.00	136.61
MW-8	01/24/2006	1,120	<0.500	<0.500	<0.500	<0.500	592	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	152.61	17.08	135.53
MW-8	04/27/2006	<50.0	<0.500	<0.500	<0.500	<0.500	26.4	<0.500	<0.500	<0.500	<10.0	2.32	<0.500	152.61	12.97	139.64
MW-8	07/11/2006	<50.0	<0.500	<0.500	<0.500	<0.500	16.8	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	152.61	12.91	139.70
MW-8	10/26/2006	<50.0	<0.500	<0.500	<0.500	<0.500	6.09	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	152.61	14.28	138.33
MW-8	01/19/2007	<50	<0.50	<0.50	<0.50	<1.0	8.3	<1.0	<1.0	<1.0	<10	<0.50	<0.50	152.61	14.45	138.16
MW-8	04/02/2007	<50 a	<0.50	<1.0	<1.0	<1.0	23	<2.0	<2.0	<2.0	<10	<0.50	<1.0	152.61	14.54	138.07
MW-8	07/18/2007	<50 a	<0.50	<1.0	<1.0	<1.0	24	<2.0	<2.0	<2.0	<10	<0.50	<1.0	152.61	14.71	137.90
<b>MW-8</b>	<b>10/30/2007</b>	<b>&lt;50 a</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>14</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;2.0</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>152.61</b>	<b>15.45</b>	<b>137.16</b>

**WELL CONCENTRATIONS**  
**Shell Service Station**  
**3600 Park Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2- DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8260B.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.

MTBE = Methyl tertiary butyl ether

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

TBA = Tertiary butyl alcohol or tertiary butanol, analyzed by EPA Method 8260B

1,2-DCA = 1,2-Dichloroethane, analyzed by EPA Method 8260B

EDB = Ethylene Dibromide, analyzed by EPA Method 8260B

TOC = Top of Casing Elevation

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

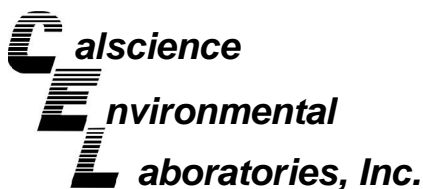
NA = Not applicable

Notes:

a = Analyzed by EPA Method 8015B (M).

b = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

Site surveyed on February 2, 2006 by Virgil Chavez Land Surveying of Vallejo, CA.



November 06, 2007

Michael Ninokata  
Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject: **Calscience Work Order No.: 07-10-2149**  
**Client Reference: 3600 Park Blvd., Oakland, CA**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/31/2007 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read 'Danielle Gonsman', with a horizontal line extending to the right.

Calscience Environmental  
Laboratories, Inc.  
Danielle Gonsman  
Project Manager

## Analytical Report



Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Date Received: 10/31/07  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project: 3600 Park Blvd., Oakland, CA

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
<b>MW-2</b>	<b>07-10-2149-1</b>	<b>10/30/07</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>10/31/07</b>	<b>10/31/07</b>	<b>071031B01</b>

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	89	38-134			

<b>MW-4</b>	<b>07-10-2149-2</b>	<b>10/30/07</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>10/31/07</b>	<b>10/31/07</b>	<b>071031B01</b>
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	78	38-134			

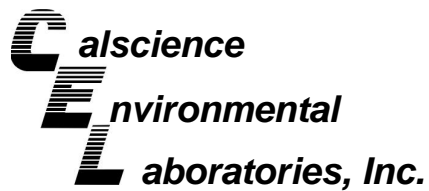
<b>MW-7</b>	<b>07-10-2149-3</b>	<b>10/30/07</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>10/31/07</b>	<b>10/31/07</b>	<b>071031B01</b>
-------------	---------------------	-----------------	----------------	--------------	-----------------	-----------------	------------------

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	94	38-134			

<b>MW-8</b>	<b>07-10-2149-4</b>	<b>10/30/07</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>10/31/07</b>	<b>10/31/07</b>	<b>071031B01</b>
-------------	---------------------	-----------------	----------------	--------------	-----------------	-----------------	------------------

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	85	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report



Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Date Received: 10/31/07  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project: 3600 Park Blvd., Oakland, CA

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-12-436-1,075	N/A	Aqueous	GC 22	10/31/07	10/31/07	071031B01

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	88	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report

Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Date Received: 10/31/07  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8260B  
Units: ug/L

Project: 3600 Park Blvd., Oakland, CA

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
MW-2	07-10-2149-1	10/30/07	Aqueous	GC/MS R	11/05/07	11/05/07	071105L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.50	0.14	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dibromoethane	ND	1.0	0.49	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.26	1	
1,2-Dichloroethane	ND	0.50	0.26	1		Tert-Butyl Alcohol (TBA)	ND	10	5.4	1	
Ethylbenzene	ND	1.0	0.23	1		Diisopropyl Ether (DIPE)	ND	2.0	0.33	1	
Toluene	ND	1.0	0.27	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.18	1	
p/m-Xylene	ND	1.0	0.54	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.1	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>
Dibromofluoromethane	106	74-140				1,2-Dichloroethane-d4	108	74-146			
Toluene-d8	94	88-112				1,4-Bromofluorobenzene	92	74-110			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
MW-4	07-10-2149-2	10/30/07	Aqueous	GC/MS R	11/05/07	11/05/07	071105L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

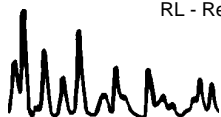
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.50	0.14	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dibromoethane	ND	1.0	0.49	1		Methyl-t-Butyl Ether (MTBE)	28	1.0	0.26	1	
1,2-Dichloroethane	0.41	0.50	0.26	1	J	Tert-Butyl Alcohol (TBA)	ND	10	5.4	1	
Ethylbenzene	ND	1.0	0.23	1		Diisopropyl Ether (DIPE)	ND	2.0	0.33	1	
Toluene	ND	1.0	0.27	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.18	1	
p/m-Xylene	ND	1.0	0.54	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.1	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>
Dibromofluoromethane	106	74-140				1,2-Dichloroethane-d4	103	74-146			
Toluene-d8	100	88-112				1,4-Bromofluorobenzene	90	74-110			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
MW-7	07-10-2149-3	10/30/07	Aqueous	GC/MS R	11/05/07	11/05/07	071105L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.50	0.14	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dibromoethane	ND	1.0	0.49	1		Methyl-t-Butyl Ether (MTBE)	0.84	1.0	0.26	1	J
1,2-Dichloroethane	ND	0.50	0.26	1		Tert-Butyl Alcohol (TBA)	ND	10	5.4	1	
Ethylbenzene	ND	1.0	0.23	1		Diisopropyl Ether (DIPE)	ND	2.0	0.33	1	
Toluene	ND	1.0	0.27	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.18	1	
p/m-Xylene	ND	1.0	0.54	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.1	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>
Dibromofluoromethane	105	74-140				1,2-Dichloroethane-d4	106	74-146			
Toluene-d8	88	88-112				1,4-Bromofluorobenzene	90	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



## Analytical Report

Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Date Received: 10/31/07  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8260B  
Units: ug/L

Project: 3600 Park Blvd., Oakland, CA

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
MW-8	07-10-2149-4	10/30/07	Aqueous	GC/MS R	11/05/07	11/05/07	071105L01

Comment(s): -Results were evaluated to the MDL, concentrations  $\geq$  to the MDL but  $<$  RL, if found, are qualified with a "J" flag.

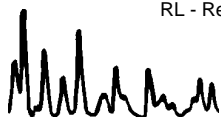
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.50	0.14	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dibromoethane	ND	1.0	0.49	1		Methyl-t-Butyl Ether (MTBE)	14	1.0	0.26	1	
1,2-Dichloroethane	ND	0.50	0.26	1		Tert-Butyl Alcohol (TBA)	ND	10	5.4	1	
Ethylbenzene	ND	1.0	0.23	1		Diisopropyl Ether (DIPE)	ND	2.0	0.33	1	
Toluene	ND	1.0	0.27	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.18	1	
p/m-Xylene	ND	1.0	0.54	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.1	1	
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
Dibromofluoromethane	109	74-140				1,2-Dichloroethane-d4	109	74-146			
Toluene-d8	101	88-112				1,4-Bromofluorobenzene	90	74-110			

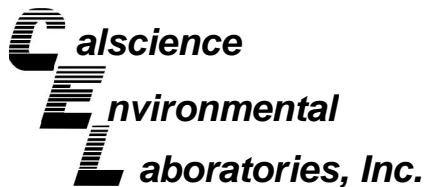
Method Blank	099-10-006-23,328	N/A	Aqueous	GC/MS R	11/05/07	11/05/07	071105L01
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Comment(s): -Results were evaluated to the MDL, concentrations  $\geq$  to the MDL but  $<$  RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.50	0.14	1		o-Xylene	ND	1.0	0.17	1	
1,2-Dibromoethane	ND	1.0	0.49	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.26	1	
1,2-Dichloroethane	ND	0.50	0.26	1		Tert-Butyl Alcohol (TBA)	ND	10	5.4	1	
Ethylbenzene	ND	1.0	0.23	1		Diisopropyl Ether (DIPE)	ND	2.0	0.33	1	
Toluene	ND	1.0	0.27	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.18	1	
p/m-Xylene	ND	1.0	0.54	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.1	1	
Surrogates:	REC (%)	Control Limits			Qual	Surrogates:	REC (%)	Control Limits			Qual
Dibromofluoromethane	105	74-140				1,2-Dichloroethane-d4	103	74-146			
Toluene-d8	99	88-112				1,4-Bromofluorobenzene	91	74-110			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





## Quality Control - Spike/Spike Duplicate



Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

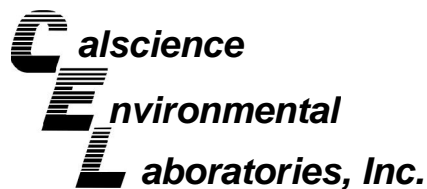
Date Received: 10/31/07  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project 3600 Park Blvd., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-2	Aqueous	GC 22	10/31/07	10/31/07	071031S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	119	121	68-122	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Spike/Spike Duplicate



Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

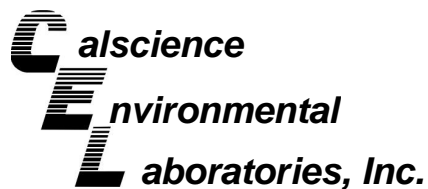
Date Received: 10/31/07  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8260B

Project 3600 Park Blvd., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-2	Aqueous	GC/MS R	11/05/07	11/05/07	071105S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	93	88-118	8	0-7	4
Carbon Tetrachloride	102	94	67-145	8	0-11	
Chlorobenzene	106	101	88-118	5	0-7	
1,2-Dibromoethane	109	106	70-130	3	0-30	
1,2-Dichlorobenzene	108	103	86-116	5	0-8	
1,1-Dichloroethene	90	90	70-130	0	0-25	
Ethylbenzene	113	107	70-130	5	0-30	
Toluene	100	92	87-123	8	0-8	
Trichloroethene	95	91	79-127	4	0-10	
Vinyl Chloride	87	87	69-129	0	0-13	
Methyl-t-Butyl Ether (MTBE)	100	93	71-131	7	0-13	
Tert-Butyl Alcohol (TBA)	102	84	36-168	20	0-45	
Diisopropyl Ether (DIPE)	102	96	81-123	6	0-9	
Ethyl-t-Butyl Ether (ETBE)	103	99	72-126	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	104	100	72-126	5	0-12	
Ethanol	103	96	53-149	7	0-31	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - LCS/LCS Duplicate



Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

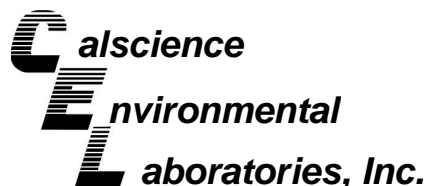
Date Received: N/A  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project: 3600 Park Blvd., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-436-1,075	Aqueous	GC 22	10/31/07	11/01/07	071031B01

<u>Parameter</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Gasoline	101	101	78-120	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - LCS/LCS Duplicate



Blaine Tech Services, Inc.  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Date Received: N/A  
Work Order No: 07-10-2149  
Preparation: EPA 5030B  
Method: EPA 8260B

Project: 3600 Park Blvd., Oakland, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-23,328	Aqueous	GC/MS R	11/05/07	11/05/07	071105L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	98	84-120	0	0-8	
Carbon Tetrachloride	108	112	63-147	4	0-10	
Chlorobenzene	104	104	89-119	0	0-7	
1,2-Dibromoethane	106	106	80-120	0	0-20	
1,2-Dichlorobenzene	105	108	89-119	3	0-9	
1,1-Dichloroethene	95	104	77-125	8	0-16	
Ethylbenzene	110	113	80-120	2	0-20	
Toluene	103	100	83-125	2	0-9	
Trichloroethene	97	98	89-119	0	0-8	
Vinyl Chloride	90	91	63-135	2	0-13	
Methyl-t-Butyl Ether (MTBE)	99	99	82-118	0	0-13	
Tert-Butyl Alcohol (TBA)	92	102	46-154	10	0-32	
Diisopropyl Ether (DIPE)	102	103	81-123	2	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	101	74-122	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	100	98	76-124	2	0-10	
Ethanol	92	93	60-138	0	0-32	

RPD - Relative Percent Difference , CL - Control Limit

Work Order Number: 07-10-2149

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.





# SHELL Chain Of Custody Record

- TA - Irvine, California
- TA - Morgan Hill, California
- TA - Sacramento, California
- TA - Nashville, Tennessee
- Calscience
- Other \_\_\_\_\_

**NAME OF PERSON TO BILL: Denis Brown**

ENVIRONMENTAL SERVICES

NETWORK DEV / FE

COMPLIANCE

BILL CONSULTANT

RMT/CRMT

CHECK BOX TO VERIFY IF NO INCIDENT # APPLIES

INCIDENT # (ES ONLY)

9 7 6 1 0 3 4 1

DATE: 10/30/07

PAGE: 1 of 1

SAMPLING COMPANY: **Blaine Tech Services** LOG CODE: **BTSS**

ADDRESS: **1680 Rogers Avenue, San Jose, CA 95112**

PROJECT CONTACT (Hardcopy or PDF Report to): **Michael Ninokata**

TELEPHONE: **408-573-0555** FAX: **408-573-7771** E-MAIL: **mninokata@blainetech.com**

SITE ADDRESS: Street and City  
**3600 Park Blvd., Oakland**

State: **CA** GLOBAL ID NO.: **T0600115417**

EDF DELIVERABLE TO (Name, Company, Office Location): **Dennis Baertschi, CRA, Sonoma Office** PHONE NO.: **(707) 268-3813** E-MAIL: **sonomaedf@croworld.com** CONSULTANT PROJECT NO.: **07030-51**

SAMPLER NAME(S) (Print): **S. Lane** LAB USE ONLY: **10-2149**

TAT (STD IS 10 BUSINESS DAYS / RUSH IS CALENDAR DAYS):  RESULTS NEEDED

STD  5 DAY  3 DAY  2 DAY  24 HOURS ON WEEKEND

LA - RWQCB REPORT FORMAT  UST AGENCY: \_\_\_\_\_

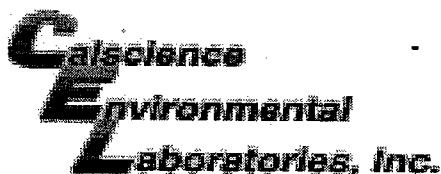
SPECIAL INSTRUCTIONS OR NOTES:

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

### REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable (8260B)	TPH - Diesel, Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B) (MTBE, TBA, DIPE, TAME, ETBE)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH-motor oil (8015M)	TDS (160.1)	Total Iron (6010B)	Total Lead (6010B)	TEMPERATURE ON RECEIPT C°	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
		DATE	TIME																					
1	MW-2	10/30/07	1020	W	5	X	X	X							X	X								
2	MW-4	↓	1100	W	5	X	X	X							X	X								
3	MW-7	↓	1075	W	5	X	X	X							X	X								
4	MW-8	↓	1050	W	5	X	X	X							X	X								

Relinquished by: (Signature) <i>S. Lane</i>	Received by: (Signature) <i>S. Lane (Griplock)</i>	Date: <u>10/30/07</u>	Time: <u>1530</u>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>10/30/07</u>	Time: <u>1620</u>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>10/31/07</u>	Time: <u>1000</u>



WORK ORDER #: 07 - 10 - 2149

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Blaine Tech

DATE: 10/31/07

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
Chilled, cooler without temperature blank.
Chilled and placed in cooler with wet ice.
Ambient and placed in cooler with wet ice.
Ambient temperature.
C Temperature blank.

LABORATORY (Other than Calscience Courier):

- 4.1 C Temperature blank.
C IR thermometer.
Ambient temperature.

Initial: [Signature]

CUSTODY SEAL INTACT:

Sample(s): Cooler: No (Not Intact): Not Present: [checked]

Initial: [Signature]

SAMPLE CONDITION:

Table with 4 columns: Item, Yes, No, N/A. Rows include Chain-Of-Custody document(s), Sampler's name, Sample container label(s), Sample container(s) intact, Correct containers and volume, Proper preservation, VOA vial(s) free of headspace, Tedlar bag(s) free of condensation.

Initial: [Signature]

COMMENTS:

Blank lines for handwritten comments.

# SHELL WELLHEAD INSPECTION FORM

(FOR SAMPLE TECHNICIAN)

Site Address 3600 Park Oakland Date 10/30/07  
 Job Number 071030-SL1 Technician SL Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Well Box Meets Compliance Requirements *See Below	Water Bailed From Wellbox	Cap Replaced	Lock Replaced	Well Not Inspected (explain in notes)	New Deficiency Identified	Previously Identified Deficiency Persists	Notes
MW-2	X	X							
MW-4	X	X							
MW-7	X	X							
MW-8	X	X							

\*Well box must meet all three criteria to be compliant: 1) WELL IS SECURABLE BY DESIGN (12" or less) 2) WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12" or less) 3) WELL TAG IS PRESENT, SECURE, AND CORRECT

Notes: \_\_\_\_\_

# WELL GAUGING DATA

Project # 071030.SU1 Date 10/30/07 Client Shell

Site 3600 Park Blvd Oakland

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or <del>TOC</del>	Notes
MW-2	0745	4					5.31	29.50	↓	
MW-4	0750	4				10.68	29.45			
MW-7	0749	4				5.58	37.73			
MW-8	0752	4				15.45	49.20			

## SHELL WELL MONITORING DATA SHEET

BTS #: 071030-GL	Site: 97610341
Sampler: GL	Date: 10/30/07
Well I.D.: MW-2	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 29.50	Depth to Water (DTW): 5.31
Depth to Free Product:	Thickness of Free Product (feet):
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]: 10.15	

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

15.7 (Gals.) X <u>3</u> = 47.1 Gals.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <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> </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															
1 Case Volume	Specified Volumes	Calculated Volume																

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
0819	66.9	6.05	1524	24	15.7	
<del>0822</del>						well dewatered @ 16 gal
<del>0824</del>						
1020	65.4	6.24	1492	85		

Did well dewater?  Yes    No    Gallons actually evacuated: 16

Sampling Date: 10/30/07    Sampling Time: ~~08~~ 1020    Depth to Water: 26.00 (26)

Sample I.D.: MW-2    Laboratory: STL    Other: Cal Science

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Other: See Col

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

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Other:

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



## SHELL WELL MONITORING DATA SHEET

BTS #: <u>071034051</u>	Site: <u>97610341</u>
Sampler: <u>GL</u>	Date: <u>10/30/07</u>
Well I.D.: <u>MW-7</u>	Well Diameter: 2 3 <u>4</u> 6 8 <u>    </u>
Total Well Depth (TD): <u>37.73</u>	Depth to Water (DTW): <u>5.58</u>
Depth to Free Product:	Thickness of Free Product (feet):
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>12.01</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: \_\_\_\_\_

$\underline{20.9} \text{ (Gals.)} \times \underline{3} = \underline{62.7} \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <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> </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
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1"	0.04	4"	0.65														
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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>0830</u>	<u>67.5</u>	<u>6.66</u>	<u>1101</u>	<u>20</u>	<u>20.9</u>	
<u>0834</u>	<u>67.3</u>	<u>6.74</u>	<u>1098</u>	<u>47</u>	<u>41.8</u>	
<u>0847</u>			<u>well dewatered @ 42 gal</u>			
<u>1035</u>	<u>65.1</u>	<u>6.94</u>	<u>1117</u>	<u>39</u>		

Did well dewater?  Yes     No      Gallons actually evacuated: 42

Sampling Date: 10/30/07    Sampling Time: 1035    Depth to Water: 33.21 (2h)

Sample I.D.: MW-7      Laboratory: STL    Other: CH Science

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Other: See COC

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

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Other:

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



