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*By dehloptoxic at 12:58 pm, Feb 23, 2007*



**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  
9750 Golf Links Road  
Oakland, California  
SAP Code 135683  
Incident No. 98995744  
ACHCSA Case No. RO0002441

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 that reads "Denis L. Brown". The signature is fluid and cursive, with a long horizontal stroke at the end.

Denis L. Brown  
Project Manager

February 22, 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 2006**  
Shell-branded Service Station  
9750 Golf Links Road  
Oakland, California  
SAP Code 135683  
Incident No. 98995744  
ACHCSA Case No. RO0002441



Dear Mr. Wickham:

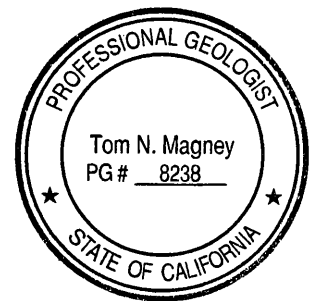
Cambria Environmental Technology, Inc. (Cambria) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) in accordance with the quarterly reporting requirements of 23 CCR 2652d.

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

Sincerely,  
**Cambria Environmental Technology, Inc.**

*for* *M. Magney*  
Dennis Baertschi  
Project Geologist

*Tom N. Magney*  
Ana Friel, PG  
Associate Geologist



Enclosure: Groundwater Monitoring Report – Fourth Quarter 2006

cc: Mr. Denis Brown, Shell

**Cambria  
Environmental  
Technology, Inc.**

19449 Riverside Drive  
Suite 230  
Sonoma, CA 95476  
Tel (707) 935-4850  
Fax (707) 935-6649

# C A M B R I A

## GROUNDWATER MONITORING REPORT – FOURTH QUARTER 2006

Site Address	<u>9750 Golf Links Road, Oakland</u>
Site Use	<u>Shell-branded Service Station</u>
Shell Project Manager	<u>Denis Brown</u>
Consultant and Contact Person	<u>Cambria, Dennis Baertschi</u>
Lead Agency and Contact	<u>ACHCSA, Jerry Wickham</u>
Agency Case No.	<u>RO0002441</u>
Shell SAP Code	<u>135683</u>
Shell Incident No.	<u>98995744</u>
Date of Most Recent Agency Correspondence	<u>July 13, 2005</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. Cambria 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

Groundwater Flow Direction	<u>Westerly to northwesterly</u>
Hydraulic Gradient	<u>0.08</u>
Depth to Water	<u>5.50 to 10.42 feet below top of well casing</u>

### Proposed Activities for Next Quarter

1. Blaine will gauge and sample wells during the third month of the quarter, according to the established monitoring program for this site.

# C A M B R I A

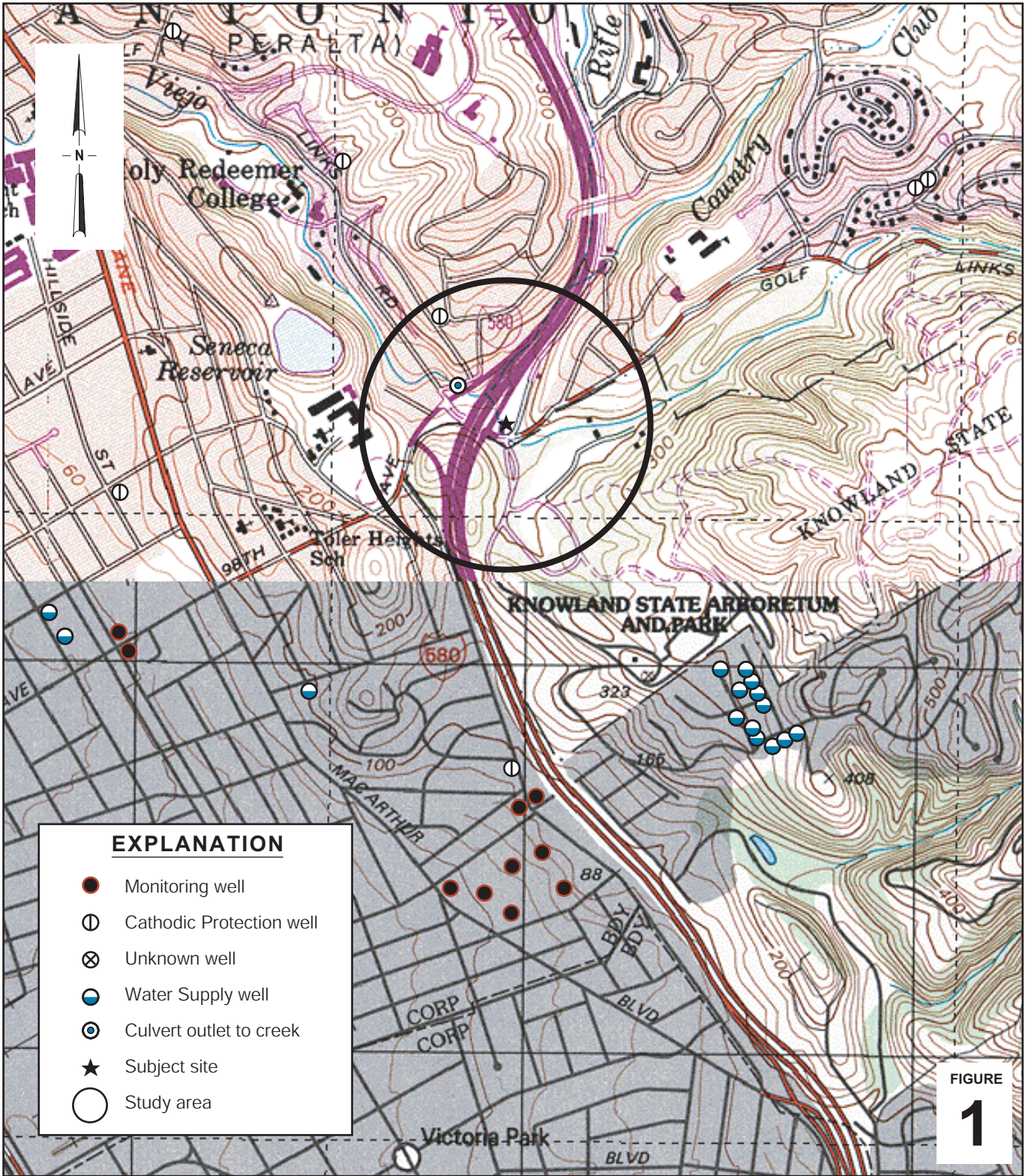
Figures: 1 - Vicinity Map  
2 - Groundwater Contour and Chemical Concentration Map

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



Cambria Environmental Technology, Inc. (Cambria) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to Cambria from outside sources and/or in the public domain, and partially on information supplied by Cambria and its subcontractors. Cambria 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 Cambria. This document represents the best professional judgment of Cambria. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

K:\Oakland 9750 Golf Links\QMRs\2006\4Q06\Text 9750 Golf Links Oakland 4Q06.doc



FIGURE

1

### Shell-branded Service Station

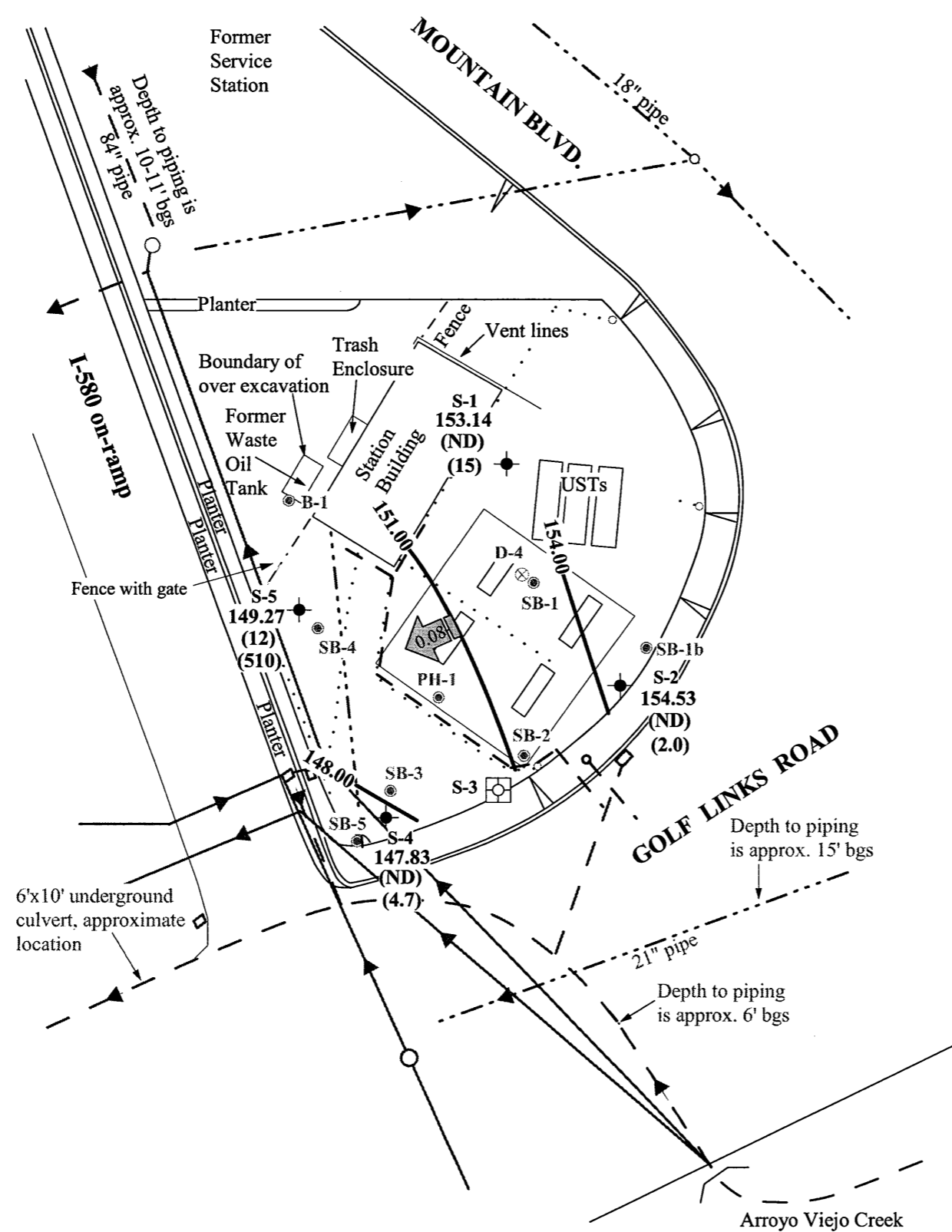
9750 Golf Links Road  
Oakland, California















C A M B R I A

### Vicinity Map

(1/4-Mile Radius)



**EXPLANATION**

-  Monitoring well
-  Attempted monitoring well
-  Soil boring
-  Soil sample
-  Storm drain line
-  Former storm drain line
-  Sanitary sewer line
-  Water line
-  Electrical line
-  Flow direction where applicable
-  Groundwater elevation contour in feet referenced to mean sea level (ft msl).
-  Groundwater flow direction and gradient

**153.29** Groundwater elevation in ft msl  
**(1.3)** Benzene concentration in micrograms per liter (µg/L)  
**(61)** MTBE concentration in µg/L  
**ND** Below laboratory detection limits.

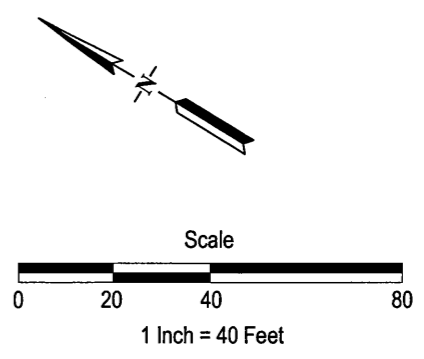


FIGURE  
**2**

0735

**Shell-branded Service Station**  
 9750 Golf Links Road  
 Oakland, California



**CAMBRIA**

**Groundwater Contour and  
 Chemical Concentration Map**

December 27, 2006

**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

January 12, 2007

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

Fourth Quarter 2006 Groundwater Monitoring at  
Shell-branded Service Station  
9750 Golf Links Road  
Oakland, CA

Monitoring performed on December 27, 2006

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Groundwater Monitoring Report **061227-DW-2**

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: Dennis Baertschi  
Cambria Environmental Technology, Inc.  
19449 Riverside Dr. Suite 230  
Sonoma, CA 95476

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**9750 Golf Links Road**  
**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)	Ethanol (ug/L)	Methanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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S-1	03/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	160.54	7.65	152.89
S-1	03/23/2005	13,000	<13	<13	89	70	1,400	<50	<50	<50	460	<13	<13	<1,300	<500	160.54	7.62	152.92
S-1	06/16/2005	9,500	<5.0	<5.0	130	66	860	<20	<20	<20	780	<5.0	<5.0	<500	2,800	160.54	7.91	152.63
S-1	08/02/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<500	160.54	8.44	152.10
S-1	08/29/2005	1,300 a	<5.0	<5.0	<5.0	<10	1,300	<20	<20	<20	1,600	<5.0	<5.0	<500	<500	160.54	8.88	151.66
S-1	12/15/2005	3,710	<0.500	<0.500	8.28	<0.500	65.4	<0.500	<0.500	<0.500	847	<0.500	<0.500	<50.0	<10,000	160.54	8.55	151.99
S-1	03/08/2006	2,400 h	1.3	<0.50	6.9	3.8	61 f	<0.50	<0.50 i	<0.50 i	250	<0.50 i	<0.50	<100	<250 d	160.54	7.25	153.29
S-1	06/14/2006	1,300	1.5	<1.0	2.3	<1.0	77	NA	NA	<1.0	400	NA	NA	NA	NA	160.54	8.29	152.25
S-1	09/06/2006	700 k	<1.0 k	<1.0 k	1.7 k	<1.0 k	42 k	<1.0 k	<1.0 k	<1.0 k	630 k	NA	NA	NA	<400 j	160.54	8.92	151.62
<b>S-1</b>	<b>12/27/2006</b>	<b>1,500</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>2.2</b>	<b>0.60</b>	<b>15</b>	<b>NA</b>	<b>NA</b>	<b>&lt;0.50</b>	<b>130</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>160.54</b>	<b>7.40</b>	<b>153.14</b>

S-2	03/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	160.23	5.64	154.59
S-2	03/23/2005	<50	<0.50	<0.50	<0.50	<1.0	5.3	<2.0	<2.0	<2.0	<5.0	<0.50	<0.50	<50	<500	160.23	5.20	155.03
S-2	06/16/2005	<50	<0.50	<0.50	<0.50	<1.0	2.2	<2.0	<2.0	<2.0	<5.0	<0.50	<0.50	<50	<500	160.23	5.94	154.29
S-2	08/29/2005	<50	<0.50	<0.50	<0.50	<1.0	2.7	<2.0	<2.0	<2.0	<5.0	<0.50	<0.50	<50	<500	160.23	6.56	153.67
S-2	12/15/2005	<50.0	<0.500	<0.500 c	<0.500	<0.500	17.9	<0.500	<0.500	<0.500	58.4	<0.500	<0.500	<50.0	<10,000	160.03 b	5.77	154.26
S-2	03/08/2006	<50 f	<0.50	<0.50	<0.50	<0.50	2.5 f	<0.50	<0.50 i	<0.50 i	20	<0.50 i	<0.50	<100	<100	160.03 b	5.10	154.93
S-2	06/14/2006	<50	<0.50	<0.50	<0.50	<0.50	2.8	NA	NA	<0.50	<20	NA	NA	NA	NA	160.03 b	6.00	154.03
S-2	09/06/2006	<50 k	<0.50 k	<0.50 k	<0.50 k	<0.50 k	4.9 k	<0.50 k	<0.50 k	<0.50 k	<20 k	NA	NA	NA	<100	160.03 b	6.49	153.54
<b>S-2</b>	<b>12/27/2006</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>2.0</b>	<b>NA</b>	<b>NA</b>	<b>&lt;0.50</b>	<b>&lt;20</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>160.03 b</b>	<b>5.50</b>	<b>154.53</b>

S-4	03/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	158.23	9.83	148.40
S-4	03/23/2005	<100	<1.0	<1.0	<1.0	<2.0	260	<4.0	<4.0	<4.0	<10	<1.0	<1.0	<100	<500	158.23	9.55	148.68
S-4	06/16/2005	<50	<0.50	<0.50	<0.50	<1.0	8.0	<2.0	<2.0	<2.0	<5.0	<0.50	<0.50	<50	<500	158.23	10.25	147.98
S-4	08/29/2005	<50	<0.50	<0.50	<0.50	<1.0	71	<2.0	<2.0	<2.0	5.6	<0.50	<0.50	<50	<500	158.23	10.60	147.63
S-4	12/15/2005	345	<0.500	<0.500 c	<0.500	<0.500	296	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	<50.0	<10,000	158.23	10.38	147.85
S-4	03/08/2006	73 g	<0.50	<0.50	<0.50	<0.50	0.72 f	<0.50	<0.50 i	<0.50 i	<20	<0.50 i	<0.50	<100	<100	158.23	9.60	148.63
S-4	06/14/2006	<50	<0.50	<0.50	<0.50	0.51	0.50	NA	NA	<0.50	<20	NA	NA	NA	NA	158.23	10.30	147.93

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**9750 Golf Links Road**  
**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)	Ethanol (ug/L)	Methanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
S-4	09/06/2006	<50 k	<0.50 k	<0.50 k	<0.50 k	<0.50 k	3.6 k	<0.50 k	<0.50 k	<0.50 k	<20 k	NA	NA	NA	<100	158.23	10.57	147.66
<b>S-4</b>	<b>12/27/2006</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>4.7</b>	<b>NA</b>	<b>NA</b>	<b>&lt;0.50</b>	<b>&lt;20</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>158.23</b>	<b>10.40</b>	<b>147.83</b>
S-5	03/09/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.69	10.62	149.07
S-5	03/23/2005	<1,300	13	<13	26	60	2,800	<50	<50	<50	<130	<13	<13	<1,300	<500	159.69	11.49	148.20
S-5	06/16/2005	<1,300	45	<13	53	<25	2,300	<50	<50	<50	380	<13	<13	<1,300	<500	159.69	10.30	149.39
S-5	08/29/2005	<1,300	31	<13	60	<25	1,700	<50	<50	<50	320	<13	<13	<1,300	<500	159.69	10.70	148.99
S-5	12/15/2005	2,700	11.1	2.31 c	80.2	6.62	823	<0.500	<0.500	<0.500	233	<0.500	<0.500	<50.0	<10,000	159.69	11.20	148.49
S-5	03/08/2006	360 g	<0.50	<0.50	<0.50	<0.50	340 e	<0.50	<0.50 i	1.2 i	49	<0.50 i	<0.50	<100	<250 d	159.69	10.05	149.64
S-5	06/14/2006	510	<5.0	<5.0	<5.0	<5.0	720	NA	NA	<5.0	<200	NA	NA	NA	NA	159.69	10.20	149.49
S-5	09/06/2006	1,100 k	8.6 k	<5.0 k	35 k	<5.0 k	830 k	<5.0 k	<5.0 k	<5.0 k	240 k	NA	NA	NA	<200 j	159.69	10.65	149.04
<b>S-5</b>	<b>12/27/2006</b>	<b>1,000</b>	<b>12</b>	<b>&lt;5.0</b>	<b>38</b>	<b>6.2</b>	<b>510.0</b>	<b>NA</b>	<b>NA</b>	<b>&lt;5.0</b>	<b>&lt;200</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>159.69</b>	<b>10.42</b>	<b>149.27</b>

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**9750 Golf Links Road**  
**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)	Ethanol (ug/L)	Methanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by 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 8260

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260

TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260

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

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**9750 Golf Links Road**  
**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)	Ethanol (ug/L)	Methanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	----------------	----------------	----------------	---------------	-----------------------	---------------	-------------------	--------------------	--------------	----------------------------	--------------------------

Notes:

a = Quantity of unknown hydrocarbon(s) in sample based on gasoline.

b = Top of casing altered -0.20 ft. due to wellhead maintenance on September 27, 2005.

c = Analyte was detected in the associated Method Blank.

d = The reporting limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.

e = Sample was originally analyzed within the EPA recommended hold time. Re-analysis for dilution was performed past the recommended hold time.

f = Sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation was performed past the recommended hold time.

g = Result for this hydrocarbon is elevated due to the presence of single analyte peak(s) in the quantitation range.

h = Concentration indicated for this analyte is an estimated value above the calibration range of the instrument.

i = Result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.

j = The reporting limit for this analyte has been raised to account for matrix interference.

k = There was insufficient preservative to reduce the sample pH to less than 2. The sample was analyzed within 14 days of sampling but beyond the 7 days recommended for Benzene, Toluene, and Ethylbenzene.

Ethanol and Methanol analyzed by EPA Method 8260B.

Site surveyed March 23, 2005 by Virgil Chavez Land Surveying of Vallejo, CA.

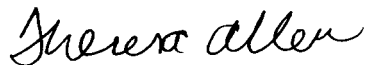
10 January, 2007

Michael Ninokata  
Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose, CA 95112

RE: 9750 Golf Links Rd., Oakland  
Work Order: MQA0012

Enclosed are the results of analyses for samples received by the laboratory on 12/28/06 17:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Theresa Allen For Leticia Reyes  
Project Manager

CA ELAP Certificate # 1210

Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
**Reported:**  
01/10/07 19:28

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1	MQA0012-01	Water	12/27/06 12:27	12/28/06 17:40
S-2	MQA0012-02	Water	12/27/06 12:10	12/28/06 17:40
S-4	MQA0012-03	Water	12/27/06 13:00	12/28/06 17:40
S-5	MQA0012-04	Water	12/27/06 12:45	12/28/06 17:40

Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
**Reported:**  
01/10/07 19:28

**Total Purgeable Hydrocarbons by GC/MS (CA LUFT)**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>S-1 (MQA0012-01) Water Sampled: 12/27/06 12:27 Received: 12/28/06 17:40</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>1500</b>	50	ug/l	1	7A09006	01/09/07	01/09/07	LUFT GCMS	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %	60-145		"	"	"	"	
<b>S-2 (MQA0012-02) Water Sampled: 12/27/06 12:10 Received: 12/28/06 17:40</b>									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7A09006	01/09/07	01/09/07	LUFT GCMS	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %	60-145		"	"	"	"	
<b>S-4 (MQA0012-03) Water Sampled: 12/27/06 13:00 Received: 12/28/06 17:40</b>									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	7A09006	01/09/07	01/09/07	LUFT GCMS	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	60-145		"	"	"	"	
<b>S-5 (MQA0012-04) Water Sampled: 12/27/06 12:45 Received: 12/28/06 17:40</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>1000</b>	500	ug/l	10	7A09006	01/09/07	01/09/07	LUFT GCMS	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	60-145		"	"	"	"	



Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
**Reported:**  
01/10/07 19:28

**Volatile Organic Compounds by EPA Method 8260B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**S-1 (MQA0012-01) Water    Sampled: 12/27/06 12:27    Received: 12/28/06 17:40**

Benzene	ND	0.50	ug/l	1	7A09006	01/09/07	01/09/07	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>2.2</b>	0.50	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>0.60</b>	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>15</b>	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
<b>tert-Butyl alcohol</b>	<b>130</b>	20	"	"	"	"	"	"	

<i>Surrogate: Dibromofluoromethane</i>		103 %		75-130	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %		60-145	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %		70-130	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		113 %		60-120	"	"	"	"	

**S-2 (MQA0012-02) Water    Sampled: 12/27/06 12:10    Received: 12/28/06 17:40**

Benzene	ND	0.50	ug/l	1	7A09006	01/09/07	01/09/07	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>2.0</b>	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	

<i>Surrogate: Dibromofluoromethane</i>		102 %		75-130	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		60-145	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98 %		70-130	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %		60-120	"	"	"	"	

Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
**Reported:**  
01/10/07 19:28

**Volatile Organic Compounds by EPA Method 8260B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**S-4 (MQA0012-03) Water Sampled: 12/27/06 13:00 Received: 12/28/06 17:40**

Benzene	ND	0.50	ug/l	1	7A09006	01/09/07	01/09/07	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>4.7</b>	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		102 %	75-130		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	60-145		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96 %	70-130		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	60-120		"	"	"	"	

**S-5 (MQA0012-04) Water Sampled: 12/27/06 12:45 Received: 12/28/06 17:40**

<b>Benzene</b>	<b>12</b>	5.0	ug/l	10	7A09006	01/09/07	01/09/07	EPA 8260B	
Toluene	ND	5.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>38</b>	5.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>6.2</b>	5.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>510</b>	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		100 %	75-130		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	60-145		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96 %	70-130		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	60-120		"	"	"	"	

Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
**Reported:**  
01/10/07 19:28

**Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control  
TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7A09006 - EPA 5030B P/T / LUFT GCMS**

**Blank (7A09006-BLK1)**

Prepared & Analyzed: 01/09/07

Gasoline Range Organics (C4-C12)	ND	50	ug/l							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.65		"	2.50		106	60-145			

**Laboratory Control Sample (7A09006-BS2)**

Prepared & Analyzed: 01/09/07

Gasoline Range Organics (C4-C12)	469	50	ug/l	500		94	75-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.62		"	2.50		105	60-145			

**Laboratory Control Sample Dup (7A09006-BSD2)**

Prepared & Analyzed: 01/09/07

Gasoline Range Organics (C4-C12)	470	50	ug/l	500		94	75-140	0.2	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.49		"	2.50		100	60-145			

Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
Reported:  
01/10/07 19:28

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7A09006 - EPA 5030B P/T / EPA 8260B**

**Blank (7A09006-BLK1)**

Prepared & Analyzed: 01/09/07

Benzene	ND	0.50	ug/l							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Ethanol	ND	100	"							
<i>Surrogate: Dibromofluoromethane</i>	2.61		"	2.50		104	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.65		"	2.50		106	60-145			
<i>Surrogate: Toluene-d8</i>	2.33		"	2.50		93	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.56		"	2.50		102	60-120			

**Laboratory Control Sample (7A09006-BS1)**

Prepared & Analyzed: 01/09/07

Benzene	10.5	0.50	ug/l	10.0		105	70-125			
Toluene	10.6	0.50	"	10.0		106	70-120			
Ethylbenzene	10.9	0.50	"	10.0		109	70-130			
Xylenes (total)	31.9	0.50	"	30.0		106	80-125			
Methyl tert-butyl ether	10.2	0.50	"	10.0		102	50-140			
Di-isopropyl ether	11.2	0.50	"	10.0		112	70-130			
Ethyl tert-butyl ether	10.2	0.50	"	10.0		102	65-130			
tert-Amyl methyl ether	10.2	0.50	"	10.0		102	65-135			
tert-Butyl alcohol	195	20	"	200		98	60-135			
1,2-Dichloroethane	11.0	0.50	"	10.0		110	75-125			
1,2-Dibromoethane (EDB)	10.8	0.50	"	10.0		108	80-125			
Ethanol	200	100	"	200		100	15-150			
<i>Surrogate: Dibromofluoromethane</i>	2.59		"	2.50		104	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.59		"	2.50		104	60-145			
<i>Surrogate: Toluene-d8</i>	2.50		"	2.50		100	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.63		"	2.50		105	60-120			

Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
Reported:  
01/10/07 19:28

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 7A09006 - EPA 5030B P/T / EPA 8260B**

**Matrix Spike (7A09006-MS1)**

**Source: MQA0012-04**

Prepared & Analyzed: 01/09/07

Benzene	114	5.0	ug/l	100	12	102	70-125			
Toluene	104	5.0	"	100	ND	104	70-120			
Ethylbenzene	146	5.0	"	100	38	108	70-130			
Xylenes (total)	322	5.0	"	300	6.2	105	80-125			
Methyl tert-butyl ether	645	5.0	"	100	510	135	50-140			
Di-isopropyl ether	104	5.0	"	100	ND	104	70-130			
Ethyl tert-butyl ether	104	5.0	"	100	ND	104	65-130			
tert-Amyl methyl ether	105	5.0	"	100	ND	105	65-135			
tert-Butyl alcohol	2030	200	"	2000	ND	102	60-135			
1,2-Dichloroethane	108	5.0	"	100	ND	108	75-125			
1,2-Dibromoethane (EDB)	110	5.0	"	100	ND	110	80-125			
Ethanol	1550	1000	"	2000	ND	78	15-150			
<i>Surrogate: Dibromofluoromethane</i>	2.62		"	2.50		105	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.66		"	2.50		106	60-145			
<i>Surrogate: Toluene-d8</i>	2.53		"	2.50		101	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.62		"	2.50		105	60-120			

**Matrix Spike Dup (7A09006-MSD1)**

**Source: MQA0012-04**

Prepared & Analyzed: 01/09/07

Benzene	114	5.0	ug/l	100	12	102	70-125	0	15	
Toluene	101	5.0	"	100	ND	101	70-120	3	15	
Ethylbenzene	146	5.0	"	100	38	108	70-130	0	15	
Xylenes (total)	318	5.0	"	300	6.2	104	80-125	1	15	
Methyl tert-butyl ether	634	5.0	"	100	510	124	50-140	2	25	
Di-isopropyl ether	102	5.0	"	100	ND	102	70-130	2	35	
Ethyl tert-butyl ether	103	5.0	"	100	ND	103	65-130	1	35	
tert-Amyl methyl ether	104	5.0	"	100	ND	104	65-135	1	25	
tert-Butyl alcohol	2040	200	"	2000	ND	102	60-135	0.5	35	
1,2-Dichloroethane	108	5.0	"	100	ND	108	75-125	0	10	
1,2-Dibromoethane (EDB)	110	5.0	"	100	ND	110	80-125	0	15	
Ethanol	1910	1000	"	2000	ND	96	15-150	21	35	
<i>Surrogate: Dibromofluoromethane</i>	2.58		"	2.50		103	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.63		"	2.50		105	60-145			
<i>Surrogate: Toluene-d8</i>	2.51		"	2.50		100	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.62		"	2.50		105	60-120			

Blaine Tech Services - San Jose [Shell]  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 9750 Golf Links Rd., Oakland  
Project Number: 061227-DW-2  
Project Manager: Michael Ninokata

MQA0012  
**Reported:**  
01/10/07 19:28

**Notes and Definitions**

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

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



# SHELL Chain Of Custody Record

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 8 9 9 5 7 4 4

DATE: **12-27-06**

PAGE: **1** of **1**

PO #

SAP or CRMT #

SITE ADDRESS: Street and City

**9750 Golf Links Rd. Oakland**

State

**CA**

GLOBAL ID NO.:

**T0600101931**

EDF DELIVERABLE TO (Name, Company, Office Location):

**Dennis Baertschi, Cambria, Eureka Office**

PHONE NO.:

**707-268-3813**

E-MAIL:

**sonomaedf@cambria-env.com**

CONSULTANT PROJECT NO.:

**061227-0W-2**

SAMPLER NAME(S) (Print):

**Dave Walter**

LAB USE ONLY

**MSA0012**

SAMPLING COMPANY:

**Blaine Tech Services**

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**

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

STD  5 DAY  3 DAY  2 DAY  24 HOURS

RESULTS NEEDED 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

Analyze in Morgan Hill Laboratory only due to reprotng limits

R/L for METHANOL = 500 PPB

## REQUESTED ANALYSIS

## FIELD NOTES:

Container/Preservative or PID Readings or Laboratory Notes

TEMPERATURE ON RECEIPT C°

**5.25**

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)
	DATE	TIME																	
01	S-1		12-27	1227	W	3	X	X	X	X	X	X	X	X	X	X	X	X	X
02	S-2		↓	1210	↓	↓	X	X	X	X	X	X	X	X	X	X	X	X	X
03	S-4		↓	1300	↓	↓	X	X	X	X	X	X	X	X	X	X	X	X	X
04	S-5		↓	1245	↓	↓	X	X	X	X	X	X	X	X	X	X	X	X	X

Relinquished by: (Signature)  
**David C. Slatt**  
 Relinquished by: (Signature)  
**Sample Curator**  
 Relinquished by: (Signature)  
**[Signature]**

Received by: (Signature)  
**[Signature]**  
 Received by: (Signature)  
**[Signature]**  
 Received by: (Signature)  
**[Signature]**

Date: **12/27/06** Time: **1730**  
 Date: **12/28/06** Time: **1645**  
 Date: **12/28/06** Time: **1740**

## TEST AMERICA SAMPLE RECEIPT LOG

**CLIENT NAME:** BLAINE  
**REC. BY (PRINT)** EH/PH  
**WORKORDER:** MQA0012

**DATE REC'D AT LAB:** 12/20/06  
**TIME REC'D AT LAB:** 1740  
**DATE LOGGED IN:** 1/2/07

**For Regulatory Purposes?**  
**DRINKING WATER** YES  NO   
**WASTE WATER** YES  NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present <input checked="" type="radio"/> Absent <input type="radio"/> Intact / Broken*								<div style="transform: rotate(-45deg); font-size: 2em; font-weight: bold;">                     All good 1/2/07                 </div>
2. Chain-of-Custody <input checked="" type="radio"/> Present / Absent* <input type="radio"/>								
3. Traffic Reports or Packing List: Present <input checked="" type="radio"/> Absent <input type="radio"/>								
4. Airbill: Airbill / Sticker Present <input checked="" type="radio"/> Absent <input type="radio"/>								
5. Airbill #: _____								
6. Sample Labels: <input checked="" type="radio"/> Present / Absent <input type="radio"/>								
7. Sample IDs: <input checked="" type="radio"/> Listed / Not Listed <input type="radio"/> on Chain-of-Custody								
8. Sample Condition: <input checked="" type="radio"/> Intact / Broken* / Leaking* <input type="radio"/>								
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / No* <input type="radio"/>								
10. Sample received within hold time? <input checked="" type="radio"/> Yes / No* <input type="radio"/>								
11. Adequate sample volume received? <input checked="" type="radio"/> Yes / No* <input type="radio"/>								
12. Proper preservatives used? <input checked="" type="radio"/> Yes / No* <input type="radio"/>								
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / No* <input checked="" type="radio"/>								
14. Read Temp: <u>5.2 °C</u> Corrected Temp: <u>5.2 °C</u> Is corrected temp 4 +/-2°C? <input checked="" type="radio"/> Yes / No** <input type="radio"/>								

(Acceptance range for samples requiring thermal pres.)  
 \*\*Exception (if any): METALS / DFF ON ICE or Problem COC

**\*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.**



# SHELL WELLHEAD INSPECTION FORM

## (FOR SAMPLE TECHNICIAN)

Site Address 9750 Golf Links Rd Oakland Date 12/27/06  
 Job Number 061227-0W-2 Technician DW 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
S-1	X	X							
S-2	X	X							
S-4	X	X							
S-5	X	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 # 06/227-0w-2 Date 12-27-06 Client Shell

Site 9750 Golf Links Rd 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 TOC	Notes
S-1	1146	4					7.40	17.50		
S-2	1139	4				5.50	11.75			
S-4	1135	4				10.40	13.40			
S-5	1149	4				10.42	14.04			

## SHELL WELL MONITORING DATA SHEET

BTS #: 061227-DW-2	Site: 9750 Golf Links Rd
Sampler: DW	Date: 12-27-06
Well I.D.: S-1	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 17.50	Depth to Water (DTW): 7.40
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]: 9.42	

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

<u>6.6</u> (Gals.) X <u>3</u> = <u>19.8</u> Gals.																	
1 Case Volume                      Specified Volumes                      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <td>Well Diameter</td><td>Multiplier</td><td>Well Diameter</td><td>Multiplier</td></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														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1216	65.1	6.8	1124	0.6	6.6	
1217	66.9	6.7	940	0.6	13.2	
1219	67.7	6.7	980	0.6	19.8	

Did well dewater? Yes  No                       Gallons actually evacuated: 19.8

Sampling Date: 12-27-06      Sampling Time: 1227      Depth to Water: 9.40

Sample I.D.: S-1                      Laboratory: STL      Other: TA

Analyzed for: TPH-G BTEX MTBE TPH-D      Other: TBA, TAME (8260 A11)

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
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O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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## SHELL WELL MONITORING DATA SHEET

BTS #: <b>061227-DW-2</b>	Site: <b>9750 Golf Links Rd</b>
Sampler: <b>DW</b>	Date: <b>12-27-06</b>
Well I.D.: <b>5-2</b>	Well Diameter: 2 3 <b>④</b> 6 8
Total Well Depth (TD): <b>11.75</b>	Depth to Water (DTW): <b>5.50</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVC</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <b>6.75</b>	

Purge Method: <input type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input checked="" type="checkbox"/> Electric Submersible	Waterwa <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump <input type="checkbox"/> Other	Sampling Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing	Other:
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**4.1** (Gals.) X **3** = **12.3** 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 $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1203	61.2	6.9	1333	37	4.1	
1204	63.8	6.9	1131	0.5	8.2	
1205	65.4	6.9	1013	0.5	12.3	

Did well dewater?    Yes    **No**                      Gallons actually evacuated: **12.3**

Sampling Date: **12-27-06**    Sampling Time: **1210**                      Depth to Water: **6.65**

Sample I.D.: **S-2**                      Laboratory:    STL    Other **TA**

Analyzed for: **TPH-G** **BTEX** **MTBE** **TPH-D**    Other: **TBA, TAME (8260 A11)**

EB I.D. (if applicable):                      @                      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>061227-DW-2</u>	Site: <u>9750 Golf Links Rd</u>
Sampler: <u>DW</u>	Date: <u>12-27-06</u>
Well I.D.: <u>5-4</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth (TD): <u>13.40</u>	Depth to Water (DTW): <u>10.40</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>11.00</u>	

Purge Method: <input type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input checked="" type="checkbox"/> Electric Submersible	Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump Other: _____	Sampling Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
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$\underline{2} \text{ (Gals.)} \times \underline{3} = \underline{6} \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <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
<u>1156</u>	<u>57.6</u>	<u>6.7</u>	<u>2282</u>	<u>58</u>	<u>2</u>	
						<u>well dewatered @ 2 g/s.</u>
<u>1300</u>	<u>60.4</u>	<u>6.9</u>	<u>978</u>	<u>0.5</u>	<u>-</u>	

Did well dewater? <input checked="" type="checkbox"/> Yes    No	Gallons actually evacuated: <u>2</u>
Sampling Date: <u>12-27-06</u> Sampling Time: <u>1300</u>	Depth to Water:
Sample I.D.: <u>S-4</u>	Laboratory: STL    Other: <u>TA</u>
Analyzed for: <input checked="" type="checkbox"/> TPH-G <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE    TPH-D	Other: <u>TBA, TAME (8260 A11)</u>
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>061227-DW-2</u>	Site: <u>9750 Golf Links Rd</u>
Sampler: <u>DW</u>	Date: <u>12-27-06</u>
Well I.D.: <u>S-5</u>	Well Diameter: 2 3 <u>(4)</u> 6 8 _____
Total Well Depth (TD): <u>14.04</u>	Depth to Water (DTW): <u>10.42</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>11.14</u>	

Purge Method:  Bailer  Disposable Bailer  Positive Air Displacement  Electric Submersible

Water:  Peristaltic  Extraction Pump  Other \_\_\_\_\_

Sampling Method:  Bailer  Disposable Bailer  Extraction Port  Dedicated Tubing

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

<u>2.4</u> (Gals.) X	<u>3</u>	<u>=</u>	<u>7.2</u> 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 $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1235</u>	<u>61.6</u>	<u>6.7</u>	<u>1157</u>	<u>35</u>	<u>2.4</u>	<u>*</u>
	<u>well dewatered @ 3 gal.</u>					
<u>1245</u>	<u>59.8</u>	<u>6.8</u>	<u>1100</u>	<u>0.5</u>	<u>-</u>	

Did well dewater?  Yes  No      Gallons actually evacuated: 3

Sampling Date: 12-27-06      Sampling Time: 1245      Depth to Water: 1114

Sample I.D.: S-5      Laboratory: STL      Other: TA

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D      Other: TBA, TAME (8260 A11)

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