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*By dehloptoxic at 1:11 pm, Feb 06, 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: Former Shell Service Station  
510 East 14<sup>th</sup> Street (506-510 International Boulevard)  
Oakland, California  
SAP Code 135695  
Incident No. 97601734  
ACHCSA Case No. RO0002853

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 6, 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  
510 East 14th Street (506-510 International Boulevard)  
Oakland, California  
SAP Code 135695  
Incident No. 97601734  
Agency Case No. RO0002853

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.**



Dennis Baertschi  
Project Geologist

Ana Friel, PG  
Associate Geologist

Enclosure: Groundwater Monitoring Report – Fourth Quarter 2006

cc: Mr. Denis Brown, Shell

# C A M B R I A

## GROUNDWATER MONITORING REPORT – FOURTH QUARTER 2006

<b>Site Address</b>	<u>510 East 14<sup>th</sup> Street (506-510 International Boulevard)</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>Cambria, Dennis Baertschi</u>
<b>Lead Agency and Contact</b>	<u>ACHCSA, Jerry Wickham</u>
<b>Agency Case No.</b>	<u>RO0002853</u>
<b>Shell SAP Code</b>	<u>135695</u>
<b>Shell Incident No.</b>	<u>97601734</u>
<b>Date of Most Recent Agency Correspondence</b>	<u>November 1, 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. 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

<b>Groundwater Flow Direction</b>	<u>Westerly</u>
<b>Hydraulic Gradient</b>	<u>0.02</u>
<b>Depth to Water</b>	<u>9.82 to 11.05 feet below top of well casing</u>

### Proposed Activities for Next Quarter

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

# C A M B R I A

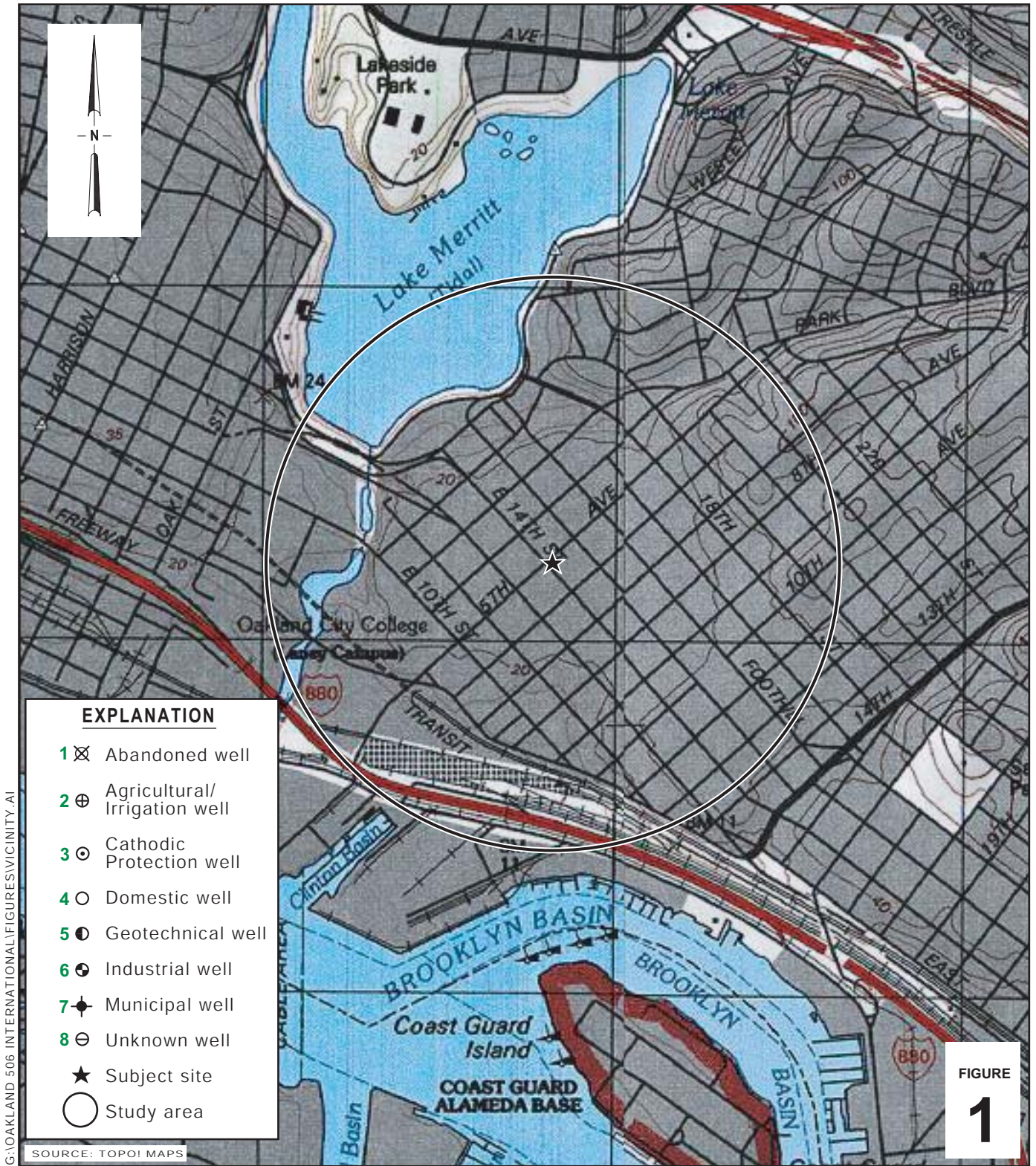
Figures: 1 - Vicinity Map  
2 - Groundwater Contour and Chemical Concentration Map

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 510 E. 14th (506-510 International Blvd)\QMR\2006\4Q06\510 14th St Oakland 4Q06.doc



G:\OAKLAND\_506 INTERNATIONAL\FIGURES\VICINITY.A1

FIGURE 1

### Shell-branded Service Station

506 International Boulevard (506 E. 14th St.)  
Oakland, California  
Incident No.97601734

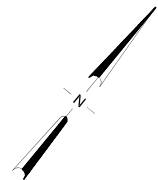


C A M B R I A

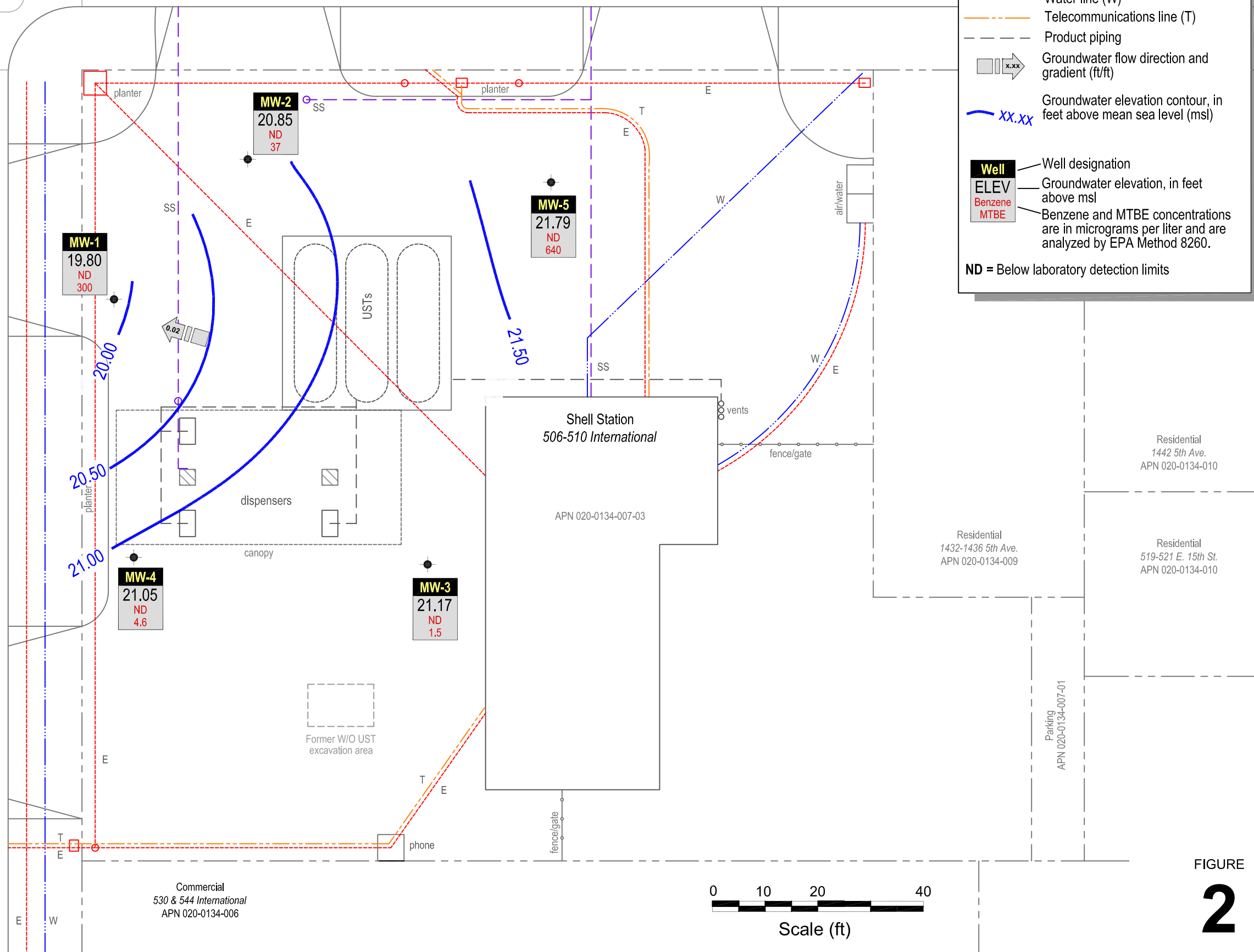
### Vicinity Map



5th AVENUE



INTERNATIONAL BOULEVARD (EAST 14th STREET)



Groundwater Contour and Chemical Concentration Map

November 13, 2006



Shell-branded Service Station  
506-510 International Boulevard (506 E. 14th St.)  
Oakland, California

FIGURE 2

**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 3, 2007

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

Fourth Quarter 2006 Groundwater Monitoring at  
Shell-branded Service Station  
510 E. 14th Street  
Oakland, CA

Monitoring performed on November 13, 2006

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Groundwater Monitoring Report **061113-JD-1**

This report covers the routine monitoring of groundwater wells at this former Shell 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 Coordinator

MN/np

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

cc: Dennis Baertschi  
Cambria Environmental Technology, Inc.  
P.O. Box 259  
Sonoma, CA 95476-0259

**WELL CONCENTRATIONS**  
**Shell Service Station**  
**510 E. 14th Street**  
**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)
MW-1	08/24/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.85	10.98	19.87
MW-1	08/29/2006	242	<0.500	<0.500	<0.500	<0.500	255	<0.500	<0.500	<0.500	54.1	<0.500	<0.500	30.85	10.98	19.87
<b>MW-1</b>	<b>11/13/2006</b>	<b>140 a</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>300</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;100</b>	<b>NA</b>	<b>NA</b>	<b>30.85</b>	<b>11.05</b>	<b>19.80</b>
MW-2	08/24/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.96	9.91	21.05
MW-2	08/29/2006	2,130	1.18	0.660	1.67	0.960	206	<0.500	<0.500	<0.500	55.5	<0.500	<0.500	30.96	9.91	21.05
<b>MW-2</b>	<b>11/13/2006</b>	<b>890</b>	<b>&lt;0.50</b>	<b>1.4</b>	<b>4.1</b>	<b>4.5</b>	<b>37</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>41</b>	<b>NA</b>	<b>NA</b>	<b>30.96</b>	<b>10.11</b>	<b>20.85</b>
MW-3	08/24/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32.02	10.00	22.02
MW-3	08/29/2006	<50.0	<0.500	<0.500	<0.500	<0.500	28.8	<0.500	<0.500	<0.500	11.9	<0.500	<0.500	32.02	10.00	22.02
<b>MW-3</b>	<b>11/13/2006</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>1.5</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;20</b>	<b>NA</b>	<b>NA</b>	<b>32.02</b>	<b>10.85</b>	<b>21.17</b>
MW-4	08/24/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.10	9.91	21.19
MW-4	08/29/2006	375	<0.500	<0.500	3.10	0.660	6.53	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	31.10	9.91	21.19
<b>MW-4</b>	<b>11/13/2006</b>	<b>120</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.87</b>	<b>&lt;0.50</b>	<b>4.6</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;20</b>	<b>NA</b>	<b>NA</b>	<b>31.10</b>	<b>10.05</b>	<b>21.05</b>
MW-5	08/24/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.61	9.98	21.63
MW-5	08/29/2006	1,260	<0.500	<0.500	<0.500	<0.500	829	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	31.61	9.98	21.63
<b>MW-5</b>	<b>11/13/2006</b>	<b>290 a</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>640</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;200</b>	<b>NA</b>	<b>NA</b>	<b>31.61</b>	<b>9.82</b>	<b>21.79</b>

**WELL CONCENTRATIONS**  
**Shell Service Station**  
**510 E. 14th Street**  
**Oakland, CA**

<b>Well ID</b>	<b>Date</b>	<b>TPPH</b> (ug/L)	<b>B</b> (ug/L)	<b>T</b> (ug/L)	<b>E</b> (ug/L)	<b>X</b> (ug/L)	<b>MTBE</b> <b>8260</b> (ug/L)	<b>DIPE</b> (ug/L)	<b>ETBE</b> (ug/L)	<b>TAME</b> (ug/L)	<b>TBA</b> (ug/L)	<b>1,2-DCA</b> (ug/L)	<b>EDB</b> (ug/L)	<b>TOC</b> (MSL)	<b>Depth to</b> <b>Water</b> (ft.)	<b>GW</b> <b>Elevation</b> (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 = the result for this hydrocarbon is elevated due to the presence of single analyte peak(s) in the quantitation range.

Site surveyed September 7, 2006 by Virgil Chavez of Vallejo, CA.

1 December, 2006

Michael Ninokata  
Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose, CA 95112

RE: 510 E. 14th Street, Oakland  
Work Order: S611393

Enclosed are the results of analyses for samples received by the laboratory on 11/15/06 09:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Sylvia Krenn  
Project Manager

CA ELAP Certificate # 2630

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	S611393-01	Water	11/13/06 11:25	11/15/06 09:00
MW-2	S611393-02	Water	11/13/06 10:10	11/15/06 09:00
MW-3	S611393-03	Water	11/13/06 08:30	11/15/06 09:00
MW-4	S611393-04	Water	11/13/06 11:05	11/15/06 09:00
MW-5	S611393-05	Water	11/13/06 11:40	11/15/06 09:00

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (S611393-01) Water Sampled: 11/13/06 11:25 Received: 11/15/06 09:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>140</b>	50	ug/l	1	6K21037	11/21/06	11/22/06	LUFT GCMS	HC-11
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %	60-145		"	"	"	"	
<b>MW-2 (S611393-02) Water Sampled: 11/13/06 10:10 Received: 11/15/06 09:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>890</b>	50	ug/l	1	6K21037	11/21/06	11/22/06	LUFT GCMS	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	60-145		"	"	"	"	
<b>MW-3 (S611393-03) Water Sampled: 11/13/06 08:30 Received: 11/15/06 09:00</b>									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6K21037	11/21/06	11/22/06	LUFT GCMS	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	60-145		"	"	"	"	
<b>MW-4 (S611393-04) Water Sampled: 11/13/06 11:05 Received: 11/15/06 09:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>120</b>	50	ug/l	1	6K21037	11/21/06	11/22/06	LUFT GCMS	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97 %	60-145		"	"	"	"	
<b>MW-5 (S611393-05) Water Sampled: 11/13/06 11:40 Received: 11/15/06 09:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>290</b>	50	ug/l	1	6K21037	11/21/06	11/22/06	LUFT GCMS	HC-11
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	60-145		"	"	"	"	



Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (S611393-01) Water Sampled: 11/13/06 11:25 Received: 11/15/06 09:00</b>									
Benzene	ND	2.5	ug/l	5	6K22031	11/22/06	11/23/06	EPA 8260B	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>300</b>	2.5	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.5	"	"	"	"	"	"	
tert-Butyl alcohol	ND	100	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		101 %		75-130	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %		60-145	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98 %		70-130	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90 %		60-120	"	"	"	"	
<b>MW-2 (S611393-02) Water Sampled: 11/13/06 10:10 Received: 11/15/06 09:00</b>									
Benzene	ND	0.50	ug/l	1	6K21037	11/21/06	11/22/06	EPA 8260B	
<b>Toluene</b>	<b>1.4</b>	0.50	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>4.1</b>	0.50	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>4.5</b>	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>37</b>	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
<b>tert-Butyl alcohol</b>	<b>41</b>	20	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		100 %		75-130	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %		60-145	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %		70-130	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		105 %		60-120	"	"	"	"	

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

**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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**MW-3 (S611393-03) Water Sampled: 11/13/06 08:30 Received: 11/15/06 09:00**

Benzene	ND	0.50	ug/l	1	6K21037	11/21/06	11/22/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>1.5</b>	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	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		102 %	75-130		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %	60-145		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		100 %	70-130		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	60-120		"	"	"	"	

**MW-4 (S611393-04) Water Sampled: 11/13/06 11:05 Received: 11/15/06 09:00**

Benzene	ND	0.50	ug/l	1	6K21037	11/21/06	11/22/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.87</b>	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>4.6</b>	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	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		102 %	75-130		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97 %	60-145		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	70-130		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	60-120		"	"	"	"	

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-5 (S611393-05) Water    Sampled: 11/13/06 11:40    Received: 11/15/06 09:00</b>									
Benzene	ND	5.0	ug/l	10	6K22031	11/22/06	11/23/06	EPA 8260B	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>640</b>	5.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		102 %		75-130	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		60-145	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96 %		70-130	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90 %		60-120	"	"	"	"	

Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose CA, 95112	Project: 510 E. 14th Street, Oakland Project Number: 97601734 Project Manager: Michael Ninokata	S611393 <b>Reported:</b> 12/01/06 16:46
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**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 6K21037 - EPA 5030B P/T / LUFT GCMS**

<b>Blank (6K21037-BLK1)</b>				Prepared & Analyzed: 11/21/06						
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.63		"	2.50		105	60-145			
<b>Laboratory Control Sample (6K21037-BS2)</b>				Prepared & Analyzed: 11/21/06						
Gasoline Range Organics (C4-C12)	389	50	ug/l	440		88	75-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.00		"	2.50		80	60-145			
<b>Laboratory Control Sample Dup (6K21037-BSD2)</b>				Prepared & Analyzed: 11/21/06						
Gasoline Range Organics (C4-C12)	405	50	ug/l	440		92	75-140	4	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.00		"	2.50		80	60-145			

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

**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 6K21037 - EPA 5030B P/T / EPA 8260B**

**Blank (6K21037-BLK1)**

Prepared & Analyzed: 11/21/06

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	"							
<i>Surrogate: Dibromofluoromethane</i>	2.48		"	2.50		99	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.63		"	2.50		105	60-145			
<i>Surrogate: Toluene-d8</i>	2.47		"	2.50		99	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.42		"	2.50		97	60-120			

**Laboratory Control Sample (6K21037-BS1)**

Prepared & Analyzed: 11/21/06

Benzene	9.15	0.50	ug/l	10.0		92	70-125			
Toluene	9.40	0.50	"	10.0		94	70-120			
Ethylbenzene	9.61	0.50	"	10.0		96	70-130			
Xylenes (total)	29.6	0.50	"	30.0		99	80-125			
Methyl tert-butyl ether	9.38	0.50	"	10.0		94	50-140			
Di-isopropyl ether	9.53	0.50	"	10.0		95	70-130			
Ethyl tert-butyl ether	9.57	0.50	"	10.0		96	65-130			
tert-Amyl methyl ether	9.70	0.50	"	10.0		97	65-135			
tert-Butyl alcohol	186	20	"	200		93	60-135			
<i>Surrogate: Dibromofluoromethane</i>	2.58		"	2.50		103	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.52		"	2.50		101	60-145			
<i>Surrogate: Toluene-d8</i>	2.58		"	2.50		103	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.62		"	2.50		105	60-120			

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

**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 6K21037 - EPA 5030B P/T / EPA 8260B**

<b>Matrix Spike (6K21037-MS1)</b>	<b>Source: MPK0746-01</b>			<b>Prepared: 11/21/06</b>		<b>Analyzed: 11/22/06</b>				
Benzene	10.2	0.50	ug/l	10.0	ND	102	70-125			
Toluene	10.1	0.50	"	10.0	ND	101	70-120			
Ethylbenzene	10.4	0.50	"	10.0	ND	104	70-130			
Xylenes (total)	32.0	0.50	"	30.0	0.38	105	80-125			
Methyl tert-butyl ether	519	0.50	"	10.0	520	0	50-140			QM05, E
Di-isopropyl ether	11.3	0.50	"	10.0	ND	113	70-130			
Ethyl tert-butyl ether	11.5	0.50	"	10.0	ND	115	65-130			
tert-Amyl methyl ether	27.9	0.50	"	10.0	16	119	65-135			
tert-Butyl alcohol	252	20	"	200	38	107	60-135			
<i>Surrogate: Dibromofluoromethane</i>	2.65		"	2.50		106	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.62		"	2.50		105	60-145			
<i>Surrogate: Toluene-d8</i>	2.54		"	2.50		102	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.55		"	2.50		102	60-120			

<b>Matrix Spike Dup (6K21037-MSD1)</b>	<b>Source: MPK0746-01</b>			<b>Prepared: 11/21/06</b>		<b>Analyzed: 11/22/06</b>				
Benzene	9.84	0.50	ug/l	10.0	ND	98	70-125	4	15	
Toluene	9.73	0.50	"	10.0	ND	97	70-120	4	15	
Ethylbenzene	10.1	0.50	"	10.0	ND	101	70-130	3	15	
Xylenes (total)	31.3	0.50	"	30.0	0.38	103	80-125	2	15	
Methyl tert-butyl ether	508	0.50	"	10.0	520	0	50-140	2	25	QM05, E
Di-isopropyl ether	10.6	0.50	"	10.0	ND	106	70-130	6	35	
Ethyl tert-butyl ether	10.6	0.50	"	10.0	ND	106	65-130	8	35	
tert-Amyl methyl ether	25.8	0.50	"	10.0	16	98	65-135	8	25	
tert-Butyl alcohol	248	20	"	200	38	105	60-135	2	35	
<i>Surrogate: Dibromofluoromethane</i>	2.65		"	2.50		106	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.53		"	2.50		101	60-145			
<i>Surrogate: Toluene-d8</i>	2.53		"	2.50		101	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.50		"	2.50		100	60-120			



Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose CA, 95112	Project: 510 E. 14th Street, Oakland Project Number: 97601734 Project Manager: Michael Ninokata	S611393 <b>Reported:</b> 12/01/06 16:46
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**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 6K22031 - EPA 5030B P/T / EPA 8260B**

**Blank (6K22031-BLK1)**

Prepared: 11/22/06 Analyzed: 11/23/06

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	"							
<i>Surrogate: Dibromofluoromethane</i>	2.47		"	2.50		99	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.59		"	2.50		104	60-145			
<i>Surrogate: Toluene-d8</i>	2.46		"	2.50		98	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.30		"	2.50		92	60-120			

**Laboratory Control Sample (6K22031-BS1)**

Prepared: 11/22/06 Analyzed: 11/23/06

Benzene	9.84	0.50	ug/l	10.0		98	70-125			
Toluene	9.83	0.50	"	10.0		98	70-120			
Ethylbenzene	10.3	0.50	"	10.0		103	70-130			
Xylenes (total)	31.4	0.50	"	30.0		105	80-125			
Methyl tert-butyl ether	10.3	0.50	"	10.0		103	50-140			
Di-isopropyl ether	10.4	0.50	"	10.0		104	70-130			
Ethyl tert-butyl ether	10.5	0.50	"	10.0		105	65-130			
tert-Amyl methyl ether	10.7	0.50	"	10.0		107	65-135			
tert-Butyl alcohol	203	20	"	200		102	60-135			
<i>Surrogate: Dibromofluoromethane</i>	2.57		"	2.50		103	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.55		"	2.50		102	60-145			
<i>Surrogate: Toluene-d8</i>	2.57		"	2.50		103	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.62		"	2.50		105	60-120			

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

**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 6K22031 - EPA 5030B P/T / EPA 8260B**

<b>Matrix Spike (6K22031-MS1)</b>	<b>Source: MPK0753-01</b>			<b>Prepared: 11/22/06</b>		<b>Analyzed: 11/23/06</b>				
Benzene	9.85	0.50	ug/l	10.0	ND	98	70-125			
Toluene	10.1	0.50	"	10.0	ND	101	70-120			
Ethylbenzene	10.1	0.50	"	10.0	ND	101	70-130			
Xylenes (total)	30.7	0.50	"	30.0	ND	102	80-125			
Methyl tert-butyl ether	119	0.50	"	10.0	100	190	50-140			QM04
Di-isopropyl ether	10.8	0.50	"	10.0	ND	108	70-130			
Ethyl tert-butyl ether	11.0	0.50	"	10.0	ND	110	65-130			
tert-Amyl methyl ether	11.1	0.50	"	10.0	ND	111	65-135			
tert-Butyl alcohol	789	20	"	200	540	124	60-135			
<i>Surrogate: Dibromofluoromethane</i>	2.66		"	2.50		106	75-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.65		"	2.50		106	60-145			
<i>Surrogate: Toluene-d8</i>	2.53		"	2.50		101	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.57		"	2.50		103	60-120			

<b>Matrix Spike Dup (6K22031-MSD1)</b>	<b>Source: MPK0753-01</b>			<b>Prepared: 11/22/06</b>		<b>Analyzed: 11/23/06</b>				
Benzene	9.47	0.50	ug/l	10.0	ND	95	70-125	4	15	
Toluene	9.64	0.50	"	10.0	ND	96	70-120	5	15	
Ethylbenzene	9.63	0.50	"	10.0	ND	96	70-130	5	15	
Xylenes (total)	29.3	0.50	"	30.0	ND	98	80-125	5	15	
Methyl tert-butyl ether	119	0.50	"	10.0	100	190	50-140	0	25	QM04
Di-isopropyl ether	10.6	0.50	"	10.0	ND	106	70-130	2	35	
Ethyl tert-butyl ether	10.6	0.50	"	10.0	ND	106	65-130	4	35	
tert-Amyl methyl ether	10.7	0.50	"	10.0	ND	107	65-135	4	25	
tert-Butyl alcohol	776	20	"	200	540	118	60-135	2	35	
<i>Surrogate: Dibromofluoromethane</i>	2.69		"	2.50		108	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>	2.56		"	2.50		102	60-120			

Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose CA, 95112

Project: 510 E. 14th Street, Oakland  
Project Number: 97601734  
Project Manager: Michael Ninokata

S611393  
**Reported:**  
12/01/06 16:46

**Notes and Definitions**

- QM05 The spike recovery was below control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- QM04 The spike recovery was above control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- HC-11 The result for this hydrocarbon is elevated due to the presence of single analyte peak(s) in the quantitation range.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
- 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       CHECK BOX TO VERIFY IF NO INCIDENT # APPLIES

NETWORK DEV / FE       BILL CONSULTANT

COMPLIANCE       RMT/CRMT

INCIDENT # (ES ONLY): **9 7 6 0 1 7 3 4**

DATE: **11-13-06**

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

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

SITE ADDRESS: Street and City: **510 E. 14th Street, Oakland**      State: **CA**      GLOBAL ID NO.: **T0600112421**

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

EDF DELIVERABLE TO (Name, Company, Office Location): **Dennis Baertshi, Cambria, Eureka Office**      PHONE NO.: **707-268-3813**      E-MAIL: **sonomaedf@cambria-env.com**      CONSULTANT PROJECT NO.: **BTS # 06U13-J10-1**

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

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

SAMPLER NAME(S) (Print): **Dan Rompf**      LAB USE ONLY

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

REQUESTED ANALYSIS: **Shell 1313**

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 (8010B)	Total Lead (8010B)	Total Oil and Grease (1684A)	TEMPERATURE ON RECEIPT C°	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
		DATE	TIME																						
	MW-1	11-13-06	1125	H <sub>2</sub> O	3	X	X	X																	-01
	MW-2	11-13-06	1010			X	X	X																	-02
	MW-3	11-13-06	0850			X	X	X																	-03
	MW-4	11-13-06	1105			X	X	X																	-04
	MW-5	11-13-06	1140	↓	↓	X	X	X																	-05

Relinquished by: (Signature) \_\_\_\_\_      Received by: (Signature) \_\_\_\_\_ (Sample custodian)

Relinquished by: (Signature) \_\_\_\_\_      Received by: (Signature) \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_      Received by: (Signature) \_\_\_\_\_

Date: **11-13-06**      Time: **1620**

Date: **11-13-06**      Time: **1710**

Date: **11-13-06**      Time: **18:00**

*Handwritten notes:* **11/14/06 1480**      **11/15/06 1500**



## WELL GAUGING DATA

Project # 061113-JD-1 Date 11-13-06 Client shell

Site 510 E. 14th St, 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 TOS	Notes
MW-1	0815	4	N				11.05	20.77	↓	2
MW-2	0828	4	N				10.11	24.15		5
MW-3	0810	4	N				10.85	27.57		1
MW-4	0820	4	N				10.05	21.61		3
MW-5	0824	4	N				9.82	21.79		4





**SHELL WELL MONITORING DATA SHEET**

BTS #: <u>061113-SD-1</u>	Site: <u>510 E. 14th St, Oakland</u>
Sampler: <u>Dan R.</u>	Date: <u>11-13-06</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>(4)</u> 6 8 _____
Total Well Depth (TD): <u>24.15</u>	Depth to Water (DTW): <u>10.11</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>RVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>12.91</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: \_\_\_\_\_

$9.1 \text{ (Gals.)} \times 3 = 27.3 \text{ Gals.}$ 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
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
1005	69.5	7.3	961	71,000	9.1	murky brown
1007	69.4	7.0	936	438	18.2	clear
1008	70.3	7.0	907	181	27.3	clear

Did well dewater? Yes  No Gallons actually evacuated: 27.3

Sampling Date: 11-13-06 Sampling Time: 1010 Depth to Water: \_\_\_\_\_

Sample I.D.: MW-2 Laboratory: STL Other: TA

Analyzed for: TPH-G BTEX MTBE TPH-D Other: oxy's

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 #: 061113 - JD-1	Site: 510 E. 14th St, Oakland
Sampler: Dan R.	Date: 11-13-06
Well I.D.: MW-3	Well Diameter: 2 3 ④ 6 8
Total Well Depth (TD): 27.57	Depth to Water (DTW): 10.85
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.94	

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

$10.8 \text{ (Gals.)} \times 3 = 32.4 \text{ Gals.}$ I Case Volume      Specified Volumes      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 <input checked="" type="checkbox"/> µS)	Turbidity (NTUs)	Gals. Removed	Observations
0840	65.6	6.7	689	71,000	10.8	brownish
0842	66.1	6.8	695	397	21.6	more clear
0844	66.1	6.8	705	112	32.4	clear

Did well dewater? Yes  No  Gallons actually evacuated: 32.4

Sampling Date: 11-13-06 Sampling Time: 0850 Depth to Water: 11.32

Sample I.D.: MW-3 Laboratory: STL Other: TA

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D Other: oxy's

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

**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558**



**SHELL WELL MONITORING DATA SHEET**

BTS #: <b>061113 - JD-1</b>	Site: <b>510 E. 14th St, Oakland</b>
Sampler: <b>Dan R.</b>	Date: <b>11-13-06</b>
Well I.D.: <b>MW-5</b>	Well Diameter: 2 3 <b>(4)</b> 6 8
Total Well Depth (TD): <b>21.79</b>	Depth to Water (DTW): <b>9.82</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>(C)</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <b>12.21</b>	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric <b>(S)</b> ubmersible	Waterra Peristaltic Extraction Pump Other: _____	Sampling Method: <b>(B)</b> ailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
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$7.8 \text{ (Gals.)} \times 3 = 23.4 \text{ Gals.}$ 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
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 µS)	Turbidity (NTUs)	Gals. Removed	Observations
0940	70.8	10.8	4417	84	7.8	clear
0941	72.5	10.9	4950	56	15.6	clear
well de-watered @ 16 gallons @ 0942.						
1138	68.6	9.0	938	25	-	clear

Did well dewater? **(Yes)** No      Gallons actually evacuated: **16**

Sampling Date: **11-13-06**      Sampling Time: **1140**      Depth to Water: **11.21**

Sample I.D.: **MW-5**      Laboratory: STL Other **(O) TA**

Analyzed for: **(S) TPH-G (D) BTEX MTBE TPH-D Other: (C) oxy's**

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