



**Shell Oil Products US**

May 28, 2004

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

ALAMEDA COUNTY  
JUN 02 2004  
ENVIRONMENTAL HEALTH

**Subject: Shell-branded Service Station**  
11989 Dublin Boulevard  
Dublin, California

Dear Mr. Seery:

Attached for your review and comment is a copy of the *Groundwater Monitoring Report - Second Quarter 2004* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (559) 645-9306 with any questions or concerns.

Sincerely,

**Shell Oil Products US**

*Karen Petryna*

Karen Petryna  
Sr. Environmental Engineer

## C A M B R I A

May 28, 2004

Mr. Scott Seery  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Re: **Groundwater Monitoring Report – Second Quarter 2004**  
Shell-branded Service Station  
11989 Dublin Road  
Dublin, California  
SAP Code 135243  
Incident No. 98995328



Dear Mr. Seery:

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.

### **SECOND QUARTER 2004 ACTIVITIES**

Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells and prepared a summary table of field gauging and laboratory analytical data. Cambria prepared a vicinity/area well survey map (Figure 1), a groundwater contour/chemical concentration map (Figure 2), and an MTBE isoconcentration contour map (Figure 3). Blaine's report, presenting the laboratory report, is included as Appendix A.

### **ANTICIPATED THIRD QUARTER 2004 ACTIVITIES**

Blaine will gauge and sample the site wells according to the existing sampling schedule and tabulate the data. Cambria will prepare a groundwater monitoring report.

### **HISTORICAL REMEDIATION SUMMARY**

Previous site remediation was performed on a weekly basis from June 30 to August 19, 2003, by periodic groundwater extraction (GWE) from well MW-2. The program removed a total of 1,587 gallons of groundwater for an estimate of 0.079 pounds of total petroleum hydrocarbons as gasoline and 1.159 pounds of MTBE. MTBE concentrations in MW-2 declined from 12,000 parts per billion (ppb) prior to periodic GWE to 4,800 ppb the sample event immediately after.

**Cambria  
Environmental  
Technology, Inc.**

270 Perkins Street  
P.O. Box 259  
Sonoma, CA 95476  
Tel (707) 935-4850  
Fax (707) 935-6649

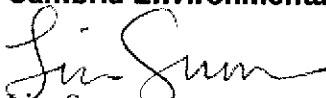
# C A M B R I A

## CLOSING

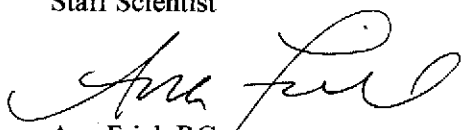
If you have any questions regarding the contents of this document, please call Ana Friel at (707) 442-2700.

Sincerely,

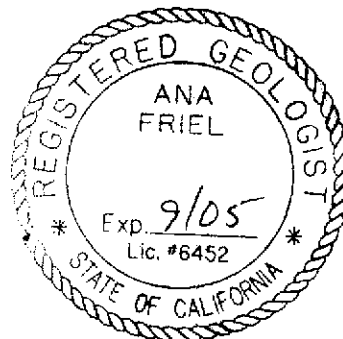
**Cambria Environmental Technology, Inc.**



Lisa Summers  
Staff Scientist



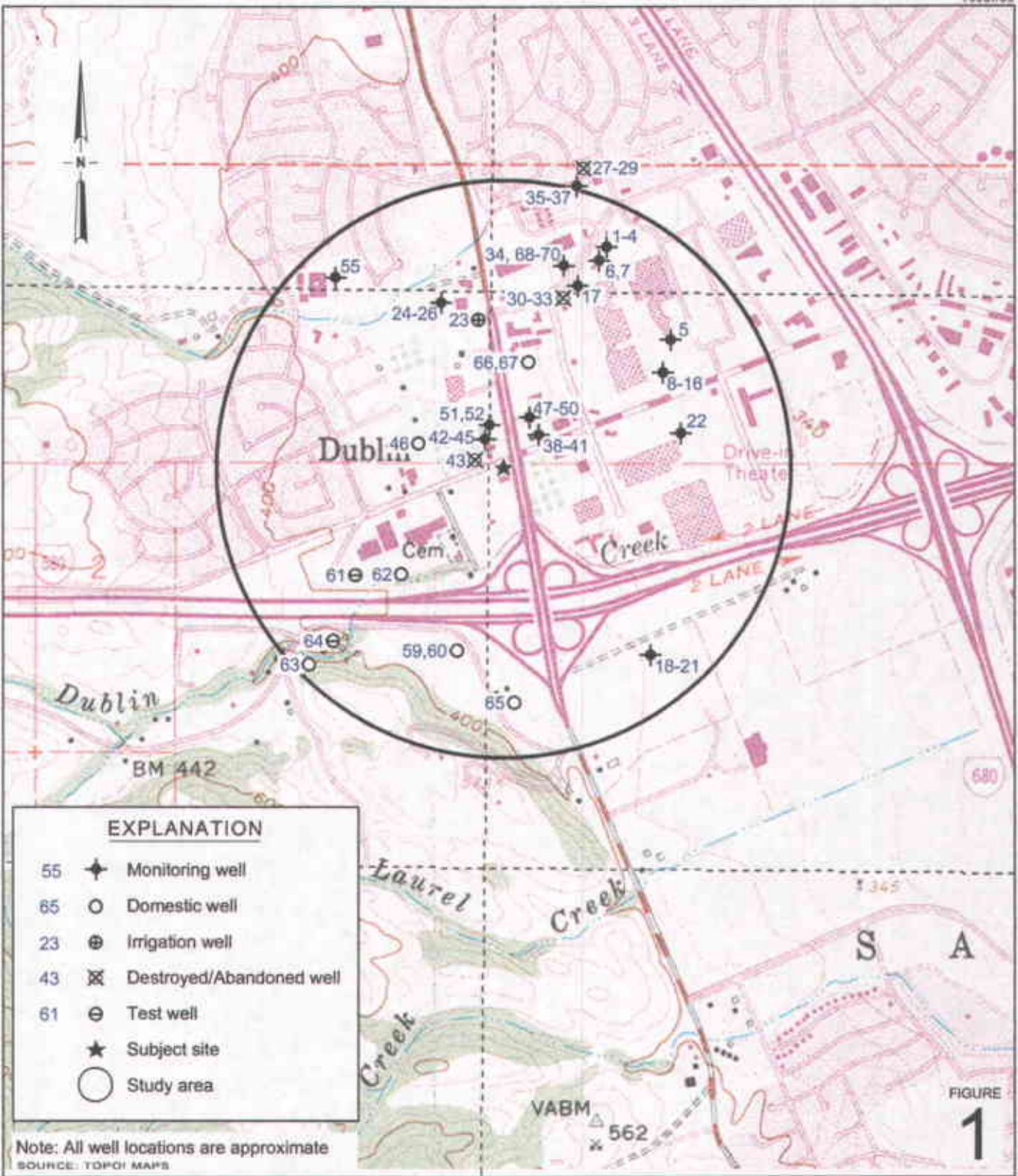
Ana Friel, RG  
Senior Project Geologist  
RG# 6452



### Attachments:

- Figure 1. Vicinity/Area Well Survey Map
  - Figure 2. Groundwater Contour/Chemical Concentration Map
  - Figure 3. MTBE Isoconcentration Contour Map
- Appendix A. Blaine Tech Services Inc., Groundwater Monitoring Report

cc: Karen Petryna, Shell



EXPLANATION	
55	◆ Monitoring well
65	○ Domestic well
23	⊕ Irrigation well
43	⊗ Destroyed/Abandoned well
61	⊖ Test well
★	★ Subject site
○	○ Study area

Note: All well locations are approximate  
SOURCE: TOPOI MAPS



**Shell-branded Service Station**  
11989 Dublin Boulevard  
Dublin, California

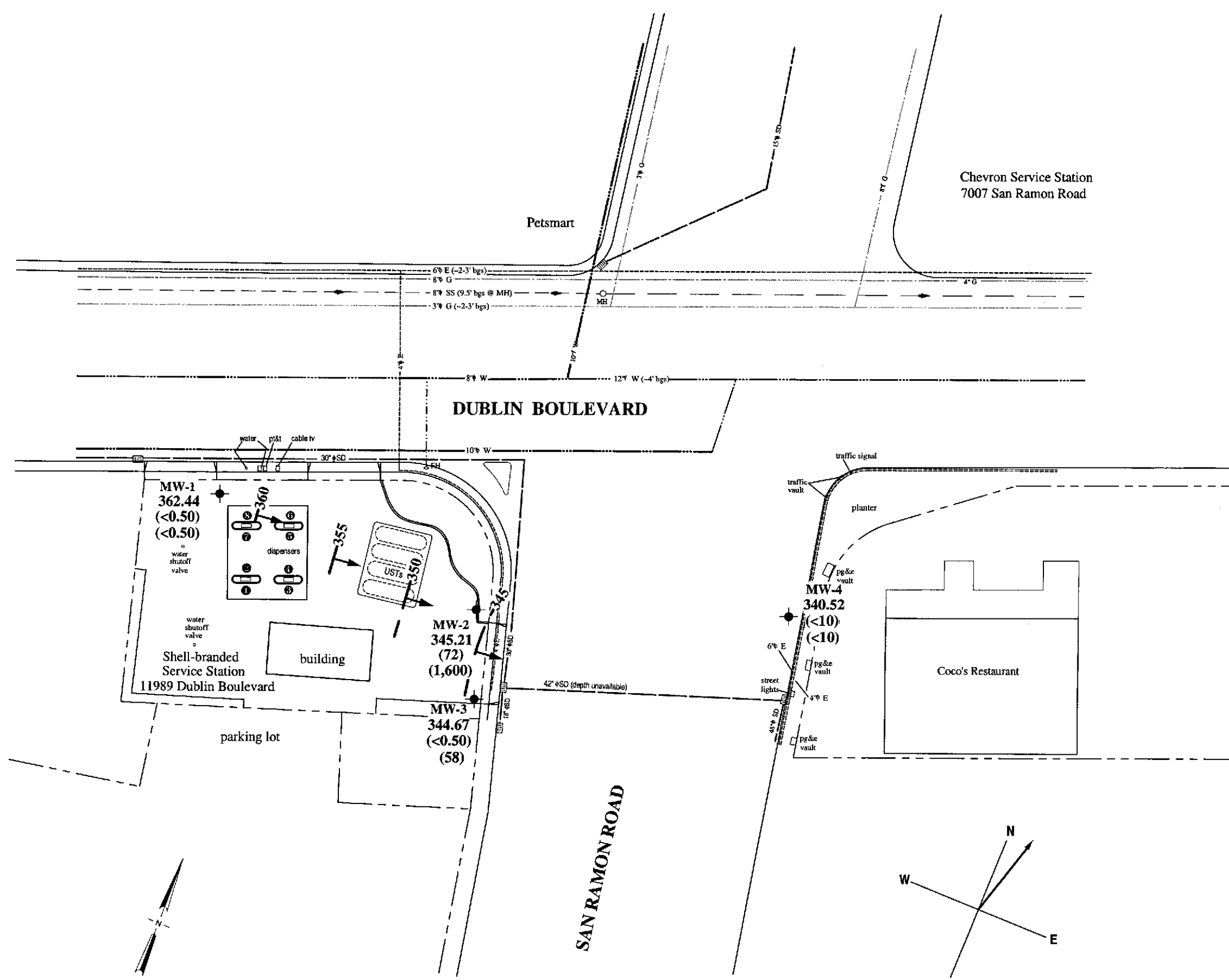


C A M B R I A

**Vicinity/Area Well Survey Map**

(1/2 Mile Radius)

FIGURE  
**1**



**EXPLANATION**

- Monitoring well location
- Product dispenser number
- FH ○ Fire Hydrant (FH)
- MH ○ Manhole (MH)
- ▣ Storm drain inlet
- 8.28' bgs Utility depth below ground surface
- ➔ Flow direction indicator
- Gas line (G)
- Storm Drain line (SD)
- Water line (W)
- Sanitary Sewer line (SS)
- Electric line (E)

Groundwater elevation contour in feet referenced to mean sea level (ft msl). Arrows indicate approximate groundwater flow direction

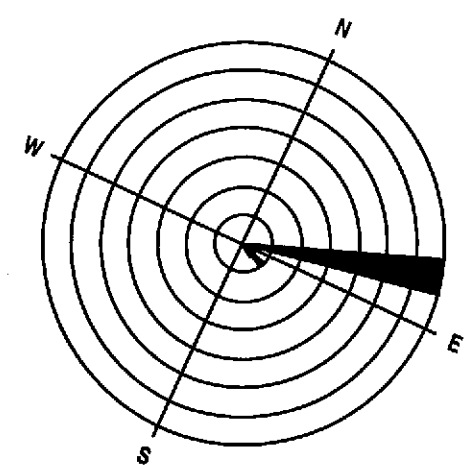
362.04 Groundwater elevation in ft msl

<0.050 Benzene concentration in parts per billions (ppb)

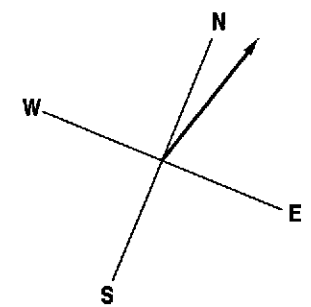
<0.50 MTBE concentration in ppb

<x Not detected at reporting limit x

Approximate hydraulic gradient = 0.11



Groundwater Gradient Direction  
(07/20/99 to 01/05/04)



Nearest Domestic Well to Site  
(0.19 miles, NNE)

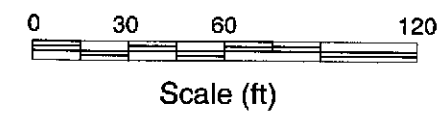
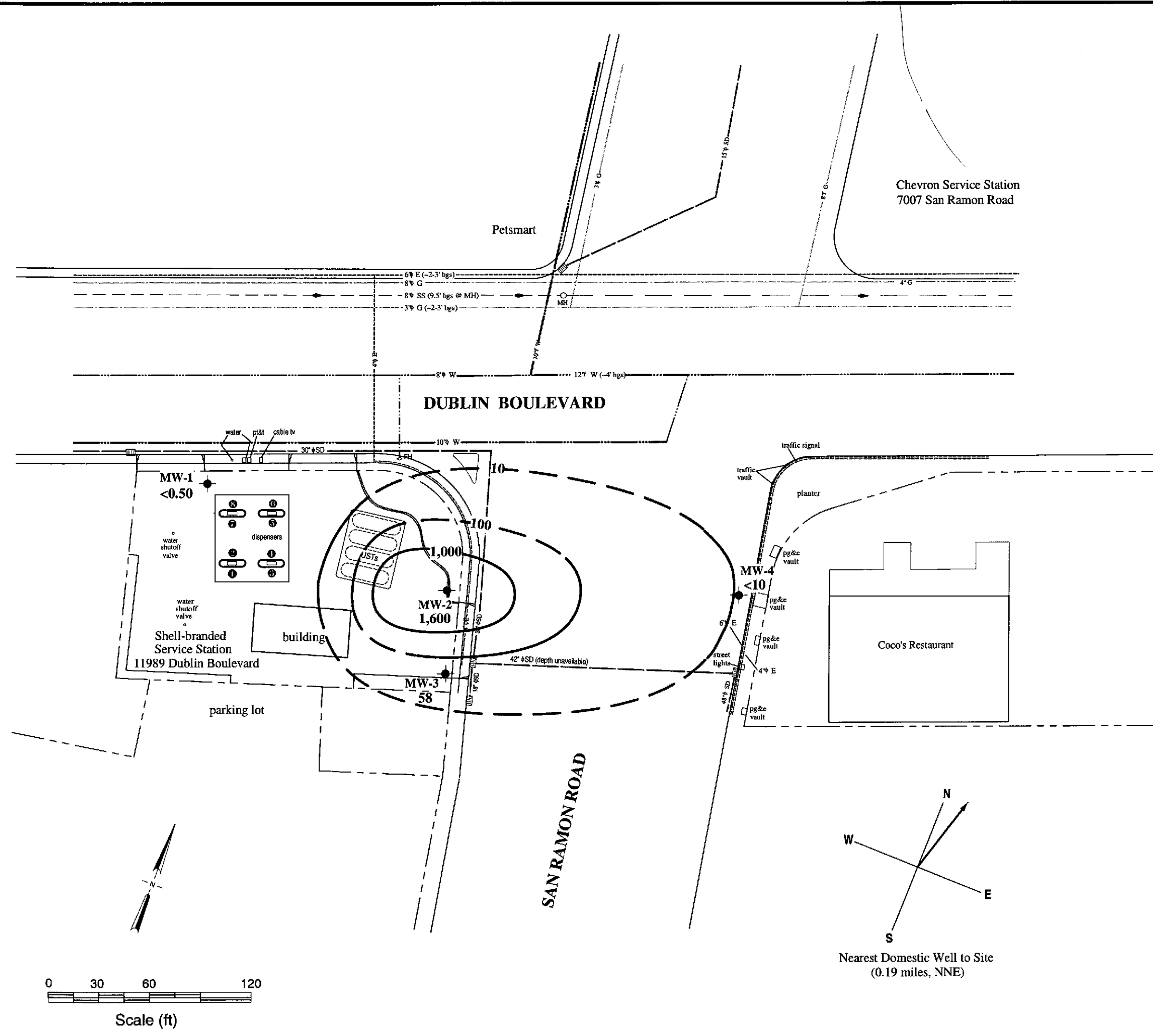
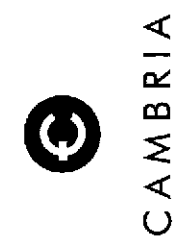


FIGURE  
**2**



**EXPLANATION**

- Monitoring well location
- Product dispenser number
- FH ○ Fire Hydrant (FH)
- MH ○ Manhole (MH)
- ▣ Storm drain inlet
- 8.28' bgs Utility depth below ground surface
- ▶ Flow direction indicator
- Gas line (G)
- Storm Drain line (SD)
- Water line (W)
- Sanitary Sewer line (SS)
- Electric line (E)
- MTBE isoconcentration contour - dashed where inferred.
- <0.50 MTBE concentration in ppb
- <x Not detected at reporting limit x

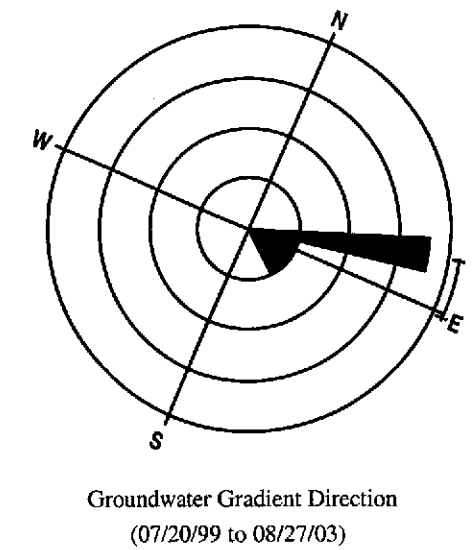
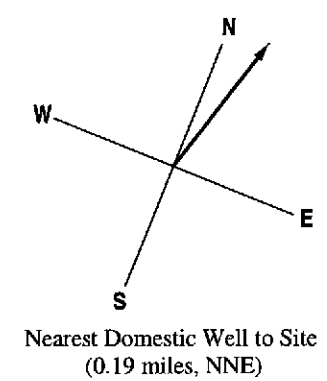


FIGURE 3

**Appendix A**

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

**BLAINE**  
TECH SERVICES, INC.



1680 ROGERS AVENUE  
SAN JOSE, CA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE  
CONTRACTOR'S LICENSE #746684  
www.blainetech.com

May 7, 2004

Karen Petryna  
Shell Oil Products US  
P.O. Box 7869  
Burbank, CA 91510-7869

Second Quarter 2004 Groundwater Monitoring at  
Shell-branded Service Station  
11989 Dublin Boulevard  
Dublin, CA

Monitoring performed on April 9, 2004

---

Groundwater Monitoring Report **040409-DW-3**

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. Purge water (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,

Leon Gearhart  
Project Coordinator

LG/ks

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

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

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**11989 Dublin Boulevard**  
**Dublin, CA**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	D.O. Reading (ppm)
MW-1	07/20/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	NA	367.99	6.24	361.75	NA
MW-1	10/25/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	NA	367.99	6.36	361.63	NA
MW-1	01/27/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	367.99	5.65	362.34	NA
MW-1	04/03/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	367.99	5.68	362.31	1.2/1.6
MW-1	07/27/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	367.99	5.69	362.30	1.0/1.1
MW-1	10/16/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	367.99	5.74	362.25	1.2/0.8
MW-1	01/16/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	367.99	5.71	362.28	0.59/2.8
MW-1	04/19/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	367.99	5.63	362.36	1.4/1.5
MW-1	07/13/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.70	362.29	2.3/3.1
MW-1	08/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	367.99	5.72	362.27	NA
MW-1	10/26/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.73	362.26	0.4/0.0
MW-1	01/11/2002	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.55	362.44	5.4/2.0
MW-1	05/22/2002	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.55	362.44	NA
MW-1	07/15/2002	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.70	362.29	NA
MW-1	10/11/2002	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.87	362.12	NA
MW-1	01/17/2003	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.79	362.20	NA
MW-1	05/01/2003	52	NA	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	NA	367.99	5.61	362.38	NA
MW-1	08/27/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	367.99	5.84	362.15	NA
MW-1	10/03/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	367.99	5.95	362.04	NA
MW-1	01/05/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	367.99	5.66	362.33	NA
MW-1	04/09/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	367.99	5.55	362.44	NA
MW-2	07/20/1999	2,600	699	55.0	<2.50	59.5	<2.50	9,370	NA	NA	NA	NA	NA	NA	365.43	20.31	345.12	NA
MW-2	10/25/1999	4,710	761	61.1	<10.0	74.6	<10.0	22,800	NA	NA	NA	NA	NA	NA	365.43	22.80	342.63	NA
MW-2	01/27/2000	3,820	1490	60.8	<10.0	156	<10.0	13,400	15,000a	NA	NA	NA	NA	NA	365.43	19.17	346.26	NA
MW-2	04/03/2000	7,130	NA	184	14.9	238	18.8	34,200	28,000	NA	NA	NA	NA	NA	365.43	19.03	346.40	1.6/1.7
MW-2	07/27/2000	311	NA	10.0	<0.500	<0.500	<0.500	280	NA	NA	NA	NA	NA	NA	365.43	19.09	346.34	1.9/1.7
MW-2	10/16/2000	3,970	NA	123	<5.00	68.5	<5.00	14,000	15,600	NA	NA	NA	NA	NA	365.43	23.98	341.45	0.5/0.5
MW-2	01/16/2001	5,780	NA	125	9.71	139	6.93	7,660	7,810	NA	NA	NA	NA	NA	365.43	22.12	343.31	0.90/2.61
MW-2	04/19/2001	4,460	NA	114	7.61	115	4.87	15,200	18,400	NA	NA	NA	NA	NA	365.43	20.95	344.48	1.6/1.5
MW-2	07/13/2001	<5,000	NA	<25	<25	110	<25	NA	15,000	NA	NA	NA	NA	NA	365.43	22.62	342.81	2.7/1.8
MW-2	08/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	365.43	22.33	343.10	NA
MW-2	10/26/2001	3,700	NA	<20	<20	66	<20	NA	9,200	<20	<20	<20	1,800	<500	365.43	22.32	343.11	0.7/0.8
MW-2	01/11/2002	<5,000	NA	<50	<50	54	<50	NA	15,000	NA	NA	NA	NA	NA	365.43	18.72	346.71	5.1/c
MW-2	05/22/2002	<5,000	NA	53	<50	57	<50	NA	20,000	<50	<50	<50	6,300	NA	365.43	20.59	344.84	NA
MW-2	07/15/2002	<5,000	NA	<50	<50	<50	<50	NA	16,000	<50	<50	<50	3,100	NA	365.43	21.90	343.53	NA
MW-2	10/11/2002	3,600	NA	<20	<20	48	<20	NA	8,200	<20	<20	<20	1,600	NA	365.43	22.45	342.98	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**11989 Dublin Boulevard**  
**Dublin, CA**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	D.O. Reading (ppm)
MW-2	01/17/2003	4,700	NA	<25	<25	87	<25	NA	13,000	<25	<25	<25	7,700	NA	365.43	19.27	346.16	NA
MW-2	05/01/2003	6,000	NA	<50	<50	110	<100	NA	12,000	<200	<200	<200	6,700	NA	365.43	19.09	346.34	NA
MW-2	08/27/2003	2,500	NA	32	<25	100	<50	NA	4,800	<100	<100	<100	9,100	NA	365.43	22.53	342.90	NA
MW-2	10/03/2003	5,500 d	NA	32	<13	86	<25	NA	2,200	<50	<50	<50	9,900	NA	365.43	23.02	342.41	NA
MW-2	01/05/2004	6,500	NA	22	<13	58	<25	NA	1,200	<50	<50	<50	7,400	NA	365.43	19.08	346.35	NA
MW-2	04/09/2004	6,500	NA	72	<13	30	<25	NA	1,600	<50	<50	<50	11,000	NA	365.43	20.22	345.21	NA
MW-3	07/20/1999	208	177	4.69	<0.500	<0.500	<0.500	664	NA	NA	NA	NA	NA	NA	364.97	24.23	340.74	NA
MW-3	10/25/1999	378	182	9.49	<0.500	<0.500	<0.500	1,410	NA	NA	NA	NA	NA	NA	364.97	23.26	341.71	NA
MW-3	01/27/2000	428	100	29.4	<0.500	<0.500	<0.500	941	NA	NA	NA	NA	NA	NA	364.97	19.53	345.44	NA
MW-3	04/03/2000	<125	NA	11.4	<1.25	<1.25	<1.25	639	NA	NA	NA	NA	NA	NA	364.97	19.13	345.84	1.4/1.9
MW-3	07/27/2000	4,360	NA	78.4	6.95	85.8	2.61	26,600	25,200b	NA	NA	NA	NA	NA	364.97	19.10	345.87	1.9/2.0
MW-3	10/16/2000	586	NA	21.3	<0.500	<0.500	<0.500	3,310	NA	NA	NA	NA	NA	NA	364.97	24.11	340.86	1.1/0.8
MW-3	01/16/2001	558	NA	14.7	<0.500	<0.500	<0.500	2,210	NA	NA	NA	NA	NA	NA	364.97	22.19	342.78	0.87/3.5
MW-3	04/19/2001	376	NA	9.08	<0.500	<0.500	<0.500	667	NA	NA	NA	NA	NA	NA	364.97	20.96	344.01	1.7/1.4
MW-3	07/13/2001	370	NA	<2.0	<2.0	<2.0	<2.0	NA	670	NA	NA	NA	NA	NA	364.97	22.77	342.20	3.1/4.8
MW-3	08/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	364.97	22.59	342.38	NA
MW-3	10/26/2001	<200	NA	<2.0	<2.0	<2.0	<2.0	NA	680	<2.0	<2.0	<2.0	79	<500	364.97	22.81	342.16	1.0/3.2
MW-3	01/11/2002	480	NA	<2.0	<2.0	<2.0	<2.0	NA	830	NA	NA	NA	NA	NA	364.97	18.88	346.09	1.1/3.2
MW-3	05/22/2002	570	NA	<1.0	<1.0	<1.0	<1.0	NA	680	<2.0	<2.0	<2.0	58	NA	364.97	20.75	344.22	NA
MW-3	07/15/2002	420	NA	1.1	<1.0	<1.0	1.1	NA	520	<2.0	<2.0	<2.0	53	NA	364.97	22.09	342.88	NA
MW-3	10/11/2002	730	NA	<0.50	<0.50	<0.50	<0.50	NA	320	<2.0	<2.0	<2.0	330	NA	364.97	22.68	342.29	NA
MW-3	01/17/2003	740	NA	<0.50	<0.50	<0.50	<0.50	NA	150	<2.0	<2.0	<2.0	440	NA	364.97	19.34	345.63	NA
MW-3	05/01/2003	890	NA	<0.50	<0.50	<0.50	<1.0	NA	78	<2.0	<2.0	<2.0	300	NA	364.97	19.27	345.70	NA
MW-3	08/27/2003	920 d	NA	<0.50	<0.50	<0.50	<1.0	NA	52	<2.0	<2.0	<2.0	330	NA	364.97	22.73	342.24	NA
MW-3	10/03/2003	870 d	NA	<0.50	<0.50	<0.50	<1.0	NA	65	<2.0	<2.0	<2.0	520	NA	364.97	23.15	341.82	NA
MW-3	01/05/2004	860 d	NA	<0.50	<0.50	<0.50	<1.0	NA	40	<2.0	<2.0	<2.0	750	NA	364.97	19.60	345.37	NA
MW-3	04/09/2004	420 d	NA	<0.50	<0.50	<0.50	<1.0	NA	58	<2.0	<2.0	<2.0	280	NA	364.97	20.30	344.67	NA
MW-4	08/10/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	364.01	25.63	338.38	NA
MW-4	08/13/2001	2,400	NA	<10	<10	<10	<10	NA	8,300	NA	NA	NA	NA	NA	364.01	26.32	337.69	4.2/2.7
MW-4	10/26/2001	<2,000	NA	<20	<20	<20	<20	NA	8,600	NA	NA	NA	NA	NA	364.01	26.02	337.99	3.1/2.8
MW-4	01/11/2002	<2,000	NA	<20	<20	<20	<20	NA	5,100	NA	NA	NA	NA	NA	364.01	22.25	341.76	7.9/3.0
MW-4	05/22/2002	<500	NA	<5.0	<5.0	<5.0	<5.0	NA	3,200	<5.0	<5.0	<5.0	2,500	NA	364.01	23.96	340.05	NA
MW-4	07/15/2002	<2,500	NA	<20	<20	<20	<20	NA	7,000	<20	<20	<20	2,000	NA	363.97	25.18	338.79	NA
MW-4	10/11/2002	1,900	NA	<5.0	<5.0	<5.0	<5.0	NA	2,900	<5.0	<5.0	<5.0	5,100	NA	363.97	25.91	338.06	NA
MW-4	01/17/2003	580	NA	<2.5	<2.5	<2.5	<2.5	NA	59	<2.5	<2.5	<2.5	7,000	NA	363.97	22.38	341.59	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**11989 Dublin Boulevard**  
**Dublin, CA**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	D.O. Reading (ppm)
MW-4	05/01/2003	770	NA	<5.0	<5.0	<5.0	<10	NA	73	<20	<20	<20	4,300	NA	363.97	21.92	342.05	NA
MW-4	08/27/2003	<1,000	NA	<10	<10	<10	<20	NA	370	<40	<40	<40	11,000	NA	363.97	25.31	338.66	NA
MW-4	10/03/2003	<1,000	NA	<10	<10	<10	<20	NA	190	<40	<40	<40	11,000	NA	363.97	26.00	337.97	NA
MW-4	01/05/2004	<1,000	NA	<10	<10	<10	<20	NA	<10	<40	<40	<40	7,400	NA	363.97	23.48	340.49	NA
MW-4	04/09/2004	<1,000	NA	<10	<10	<10	<20	NA	<10	<40	<40	<40	5,700	NA	363.97	23.45	340.52	NA

**Abbreviations:**

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to July 13, 2001, analyzed by EPA Method 8015.

TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to July 13, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether by EPA Method 8020.

DIPE = Di-Isopropyl ether, analyzed by EPA Method 8260

ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260

TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260

TBA = Tert-butyl alcohol, analyzed by EPA Method 8260

TOC = Top of Casing Elevation

GW = Groundwater

DO = Dissolved Oxygen

ug/L = Parts per billion

ppm = Parts per million

MSL = Mean sea level

ft = Feet

<n = Below detection limit

n/n = Pre-purge/Post-purge DO Readings

NA = Not applicable

**Notes:**

a = Sample was analyzed outside the EPA recommended holding time.

b = Concentration is an estimate.

c = D.O. meter malfunctioning.

d = Hydrocarbon does not match pattern of laboratory's standard.

Wells surveyed June 21, 1999, by Virgil Chavez Land Surveying of Vallejo, California.

Wells surveyed August 23, 2001, and February 18, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

**Blaine Tech Services, Inc.**

April 26, 2004

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attn.: Leon Gearhart  
Project#: 040409-DW-3  
Project: 98995328  
Site: 11989 Dublin Boulevard, Dublin

Dear Mr. Gearhart,

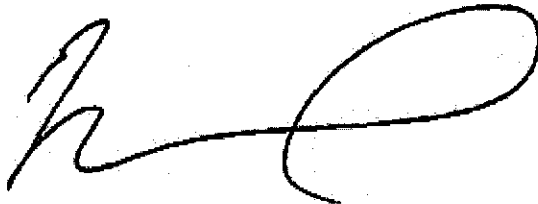
Attached is our report for your samples received on 04/12/2004 17:19  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
05/27/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,  
please call me at (925) 484-1919.

You can also contact me via email. My email address is: [vvancil@stl-inc.com](mailto:vvancil@stl-inc.com)

Sincerely,



Vincent Vancil  
Project Manager

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3

98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin

**Samples Reported**

Sample Name	Date Reported	Matrix	Count
MW-1	04/09/2004 15:20	Water	1

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

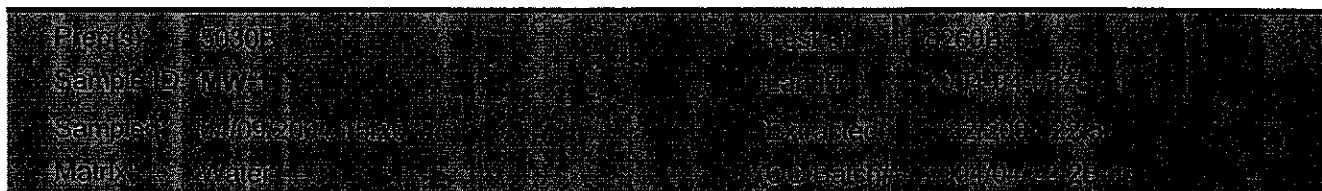
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3

98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	04/22/2004 22:50	
Benzene	ND	0.50	ug/L	1.00	04/22/2004 22:50	
Toluene	ND	0.50	ug/L	1.00	04/22/2004 22:50	
Ethylbenzene	ND	0.50	ug/L	1.00	04/22/2004 22:50	
Total xylenes	ND	1.0	ug/L	1.00	04/22/2004 22:50	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/22/2004 22:50	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	109.1	76-130	%	1.00	04/22/2004 22:50	
Toluene-d8	96.6	78-115	%	1.00	04/22/2004 22:50	

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/22/2004 18:47	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/22/2004 18:47	
Benzene	ND	0.5	ug/L	04/22/2004 18:47	
Toluene	ND	0.5	ug/L	04/22/2004 18:47	
Ethylbenzene	ND	0.5	ug/L	04/22/2004 18:47	
Total xylenes	ND	1.0	ug/L	04/22/2004 18:47	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	96.2	76-130	%	04/22/2004 18:47	
Toluene-d8	99.8	78-115	%	04/22/2004 18:47	



**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

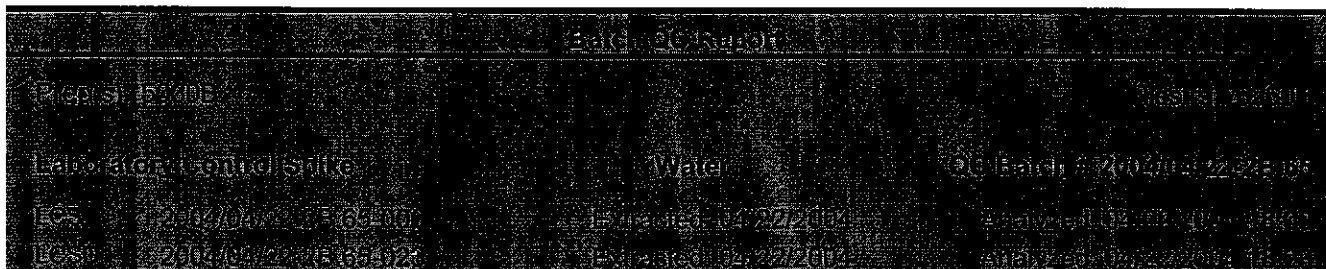
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	23.2	22.2	25	92.8	88.8	4.4	65-165	20		
Benzene	23.2	22.8	25	92.8	91.2	1.7	69-129	20		
Toluene	22.3	23.4	25	89.2	93.6	4.8	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	462	441	500	92.4	88.2		76-130			
Toluene-d8	481	513	500	96.2	102.6		78-115			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/26/2004 15:42

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin

**Samples Reported**

Sample Name	Date/Time	Matrix	Lot #
MW-2	04/09/2004 14:09	Water	2
MW-3	04/09/2004 15:30	Water	3
MW-4	04/09/2004 14:34	Water	4

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/26/2004 15:42

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	6500	1300	ug/L	25.00	04/22/2004 23:13	
Benzene	72	13	ug/L	25.00	04/22/2004 23:13	
Toluene	ND	13	ug/L	25.00	04/22/2004 23:13	
Ethylbenzene	30	13	ug/L	25.00	04/22/2004 23:13	
Total xylenes	ND	25	ug/L	25.00	04/22/2004 23:13	
tert-Butyl alcohol (TBA)	11000	130	ug/L	25.00	04/22/2004 23:13	
Methyl tert-butyl ether (MTBE)	1600	13	ug/L	25.00	04/22/2004 23:13	
Di-isopropyl Ether (DIPE)	ND	50	ug/L	25.00	04/22/2004 23:13	
Ethyl tert-butyl ether (ETBE)	ND	50	ug/L	25.00	04/22/2004 23:13	
tert-Amyl methyl ether (TAME)	ND	50	ug/L	25.00	04/22/2004 23:13	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	114.1	76-130	%	25.00	04/22/2004 23:13	
Toluene-d8	95.2	78-115	%	25.00	04/22/2004 23:13	

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

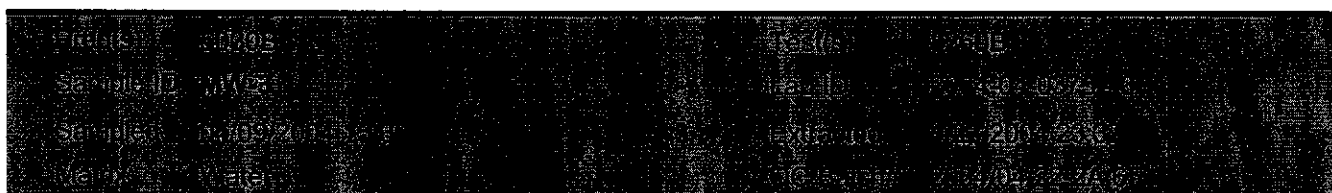
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	420	50	ug/L	1.00	04/22/2004 23:37	g
Benzene	ND	0.50	ug/L	1.00	04/22/2004 23:37	
Toluene	ND	0.50	ug/L	1.00	04/22/2004 23:37	
Ethylbenzene	ND	0.50	ug/L	1.00	04/22/2004 23:37	
Total xylenes	ND	1.0	ug/L	1.00	04/22/2004 23:37	
tert-Butyl alcohol (TBA)	280	5.0	ug/L	1.00	04/22/2004 23:37	
Methyl tert-butyl ether (MTBE)	58	0.50	ug/L	1.00	04/22/2004 23:37	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	04/22/2004 23:37	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	04/22/2004 23:37	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	04/22/2004 23:37	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	101.2	76-130	%	1.00	04/22/2004 23:37	
Toluene-d8	97.7	78-115	%	1.00	04/22/2004 23:37	

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

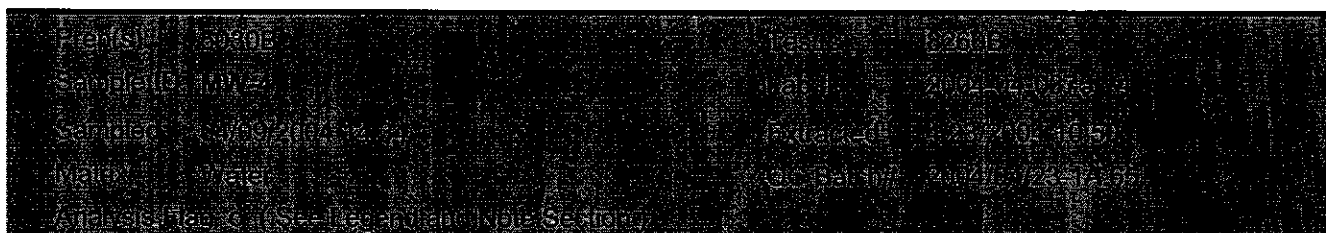
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/L	20.00	04/23/2004 10:50	
Benzene	ND	10	ug/L	20.00	04/23/2004 10:50	
Toluene	ND	10	ug/L	20.00	04/23/2004 10:50	
Ethylbenzene	ND	10	ug/L	20.00	04/23/2004 10:50	
Total xylenes	ND	20	ug/L	20.00	04/23/2004 10:50	
tert-Butyl alcohol (TBA)	5700	100	ug/L	20.00	04/23/2004 10:50	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	20.00	04/23/2004 10:50	
Di-isopropyl Ether (DIPE)	ND	40	ug/L	20.00	04/23/2004 10:50	
Ethyl tert-butyl ether (ETBE)	ND	40	ug/L	20.00	04/23/2004 10:50	
tert-Amyl methyl ether (TAME)	ND	40	ug/L	20.00	04/23/2004 10:50	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	97.1	76-130	%	20.00	04/23/2004 10:50	
Toluene-d8	106.4	78-115	%	20.00	04/23/2004 10:50	

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

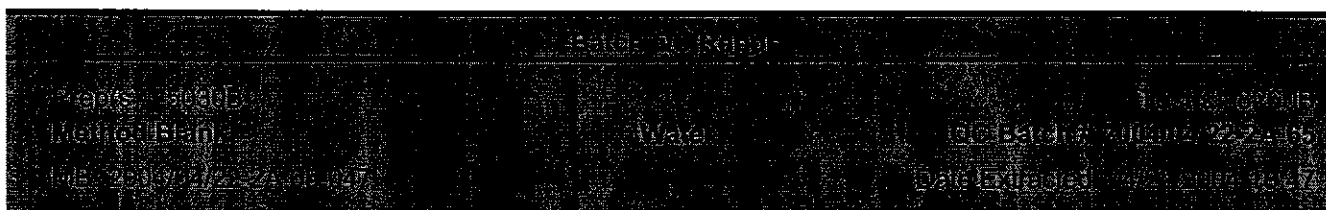
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/22/2004 18:47	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	04/22/2004 18:47	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/22/2004 18:47	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	04/22/2004 18:47	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	04/22/2004 18:47	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	04/22/2004 18:47	
Benzene	ND	0.5	ug/L	04/22/2004 18:47	
Toluene	ND	0.5	ug/L	04/22/2004 18:47	
Ethylbenzene	ND	0.5	ug/L	04/22/2004 18:47	
Total xylenes	ND	1.0	ug/L	04/22/2004 18:47	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	96.2	76-130	%	04/22/2004 18:47	
Toluene-d8	99.8	78-115	%	04/22/2004 18:47	

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

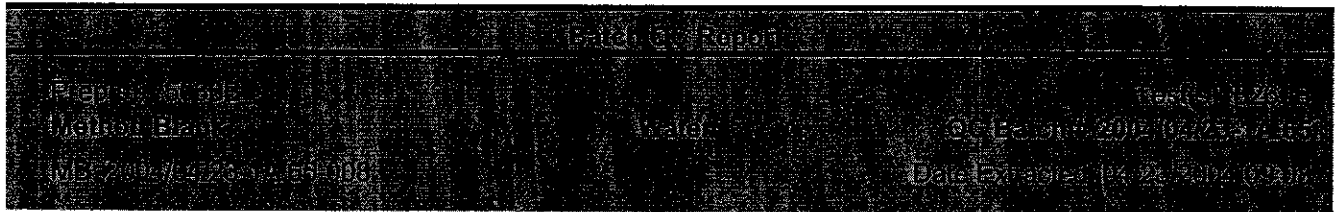
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/23/2004 09:08	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	04/23/2004 09:08	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/23/2004 09:08	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	04/23/2004 09:08	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	04/23/2004 09:08	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	04/23/2004 09:08	
Benzene	ND	0.5	ug/L	04/23/2004 09:08	
Toluene	ND	0.5	ug/L	04/23/2004 09:08	
Ethylbenzene	ND	0.5	ug/L	04/23/2004 09:08	
Total xylenes	ND	1.0	ug/L	04/23/2004 09:08	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	97.6	76-130	%	04/23/2004 09:08	
Toluene-d8	102.0	78-115	%	04/23/2004 09:08	

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	23.2	22.2	25	92.8	88.8	4.4	65-165	20		
Benzene	23.2	22.8	25	92.8	91.2	1.7	69-129	20		
Toluene	22.3	23.4	25	89.2	93.6	4.8	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	462	441	500	92.4	88.2		76-130			
Toluene-d8	481	513	500	96.2	102.6		78-115			



**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

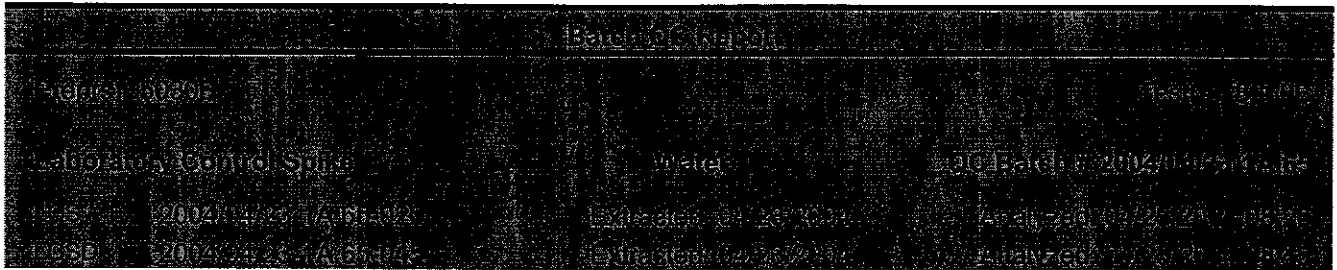
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	24.7	22.0	25	98.8	88.0	11.6	65-165	20		
Benzene	22.2	25.0	25	88.8	100.0	11.9	69-129	20		
Toluene	20.9	23.7	25	83.6	94.8	12.6	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	464	475	500	92.8	95.0		76-130			
Toluene-d8	464	501	500	92.8	100.2		78-115			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/26/2004 15:42

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 040409-DW-3  
98995328

Received: 04/12/2004 17:19

Site: 11989 Dublin Boulevard, Dublin



**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

**Result Flag**

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

# SHELL Chain Of Custody Record

84741

LAB: 21  
 Lab Identification (if necessary):  
 Address:  
 City, State, ZIP:

Shell Project Manager to be involved:  
 SHELL PROJECT MANAGER  
 SHELL OPERATIONS  
 SHELL CUSTOMER  
 Karen Perryna  
**2004-04-0375**

9	8	9	9	5	3	2	8
PAGE NO. (PRINT NUMBER) (5-DIGIT)							

DATE: 4-9-04  
 PAGE: 1 of 1

Customer Company: **Blaine Tech Services**  
 Address: **1880 Rogers Avenue, San Jose, CA 95132**  
 Project Contact Name: **John Geahm**  
 Telephone: **408-578-0265**  
 Fax: **408-578-7771**  
 E-Mail: **lgeahm@blainetech.com**

Site Address (Street and City): **11989 Dublin Boulevard, Dublin**  
 Site Address (To Responsible Party of Sample):  
 Name: **Ann Friel**  
 Phone No.: **(707) 442-2700**

Global ID No.: **T0600102083**  
 Email: **sonomaedf@ambha-env.com**  
 Controlling Project No.: **040409-0W3**

TURNAROUND TIME (BUSINESS DAYS):  
 10 DAYS  5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

LABORATORY NAME: **Dave Walker**

LA - RWOC REPORT FORMAT  GET ASSAY  
 GC/MS TYPE CONFIRMATION: HIGHEST \_\_\_\_\_ MEDIUM \_\_\_\_\_ LOW \_\_\_\_\_  
 SPECIAL INSTRUCTIONS OR NOTES: \_\_\_\_\_  
 CHECK BOX IF BOD IS NOT NEEDED:

REQUESTED ANALYSIS

FIELD NOTES:  
 Container/Preservative  
 or PID Readings  
 or Laboratory No(s)  
3°C  
 TEMPERATURE ON RECEIPT

Field Sample Identification	SAMPLING		MATRIX	NO. OF COPIES	TYPE OF CONTAINER	PRESERVATIVE	DATE/TIME	ANALYSIS/ASSAY	METHOD	LABORATORY	EPA Agency	TYPE - Sample Substrate (optional)
	DATE	TIME										
RAW-1	4/9/04	15:20	W	3	✓	✓						
RAW-2	4/9/04	15:20	W	3	✓	✓						
RAW-3	4/9/04	15:20	W	3	✓	✓						
RAW-4	4/9/04	15:20	W	3	✓	✓						

Signature: *[Handwritten Signature]*  
 Date: 4/12/04  
 Title: 1257  
 Date: 4/12/04  
 Title: 1219