**Shell Oil Products US**

January 14, 2004

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

**Subject:** **Shell-branded Service Station**
29 Wildwood Avenue
Piedmont, California

Dear Mr. Seery:

Attached for your review and comment is a copy of the *Fourth Quarter 2003 Monitoring Report* 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

P.O. Box 7869 Burbank, CA 91510-7869 Phone (559) 645-9306 Facsimile (559) 645-5643

CAMBRIA

January 14, 2004

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

Re: **Fourth Quarter 2003 Monitoring Report**
Shell-branded Service Station
29 Wildwood Avenue
Piedmont, California
Incident #98995822
Cambria Project# 246-0687-002

Dear Mr. Seery:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell), Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

## FOURTH QUARTER 2003 ACTIVITIES

***Groundwater Monitoring:*** Blaine Tech Services, Inc. (Blaine) of San Jose, California measured dissolved oxygen (DO) concentrations, gauged and sampled all site wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map that includes previously submitted well survey information (Figure 1) and a groundwater elevation contour map (Figure 2). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

***May 16, 2003 Agency Letter:*** The Alameda County Health Care Services Agency's May 16, 2003 letter directed Shell to continue analyzing all groundwater monitoring samples for the fuel oxygenates methyl tertiary butyl ether (MTBE), tert amyl methyl ether (TAME), ethyl tert butyl ether (ETBE), di-isopropyl ether (DIPE), and tert butyl alcohol (TBA) by EPA Method 8260 until further notice. During this quarter, samples from all wells were analyzed for these target analytes. Cambria has tabulated all historical oxygenate analytical data (Table 1). Results of all oxygenate analyses to date indicate that TAME was previously detected only in the October 2002 sample from well MW-3 at a concentration of 7.4 parts per billion (ppb). TBA has previously been detected in only MW-2 and MW-3. The current results indicate TBA is not present in any site wells above the reporting limits.

**Cambria Environmental Technology, Inc.**

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

The October 2001 and July 2003 samples from wells MW-2 and MW-3 were also analyzed for ethanol, and ethanol was previously detected only in MW-2. The MW-2 ethanol results were 150,000 ppb in October 2001 and 7,000 ppb in July 2003. The current samples from MW-2 and MW-3 were analyzed for ethanol, and it was not detected above the reporting limits. The October 2002 samples from all wells were analyzed for the lead scavengers 1,2-dichlorethane (1,2-DCA) and ethylene dibromide (EDB). 1,2-DCA and EDB were below reporting limits for all samples.

The laboratory results of the sample from well MW-5 contained "discrete peaks" on the sample chromatogram. The laboratory identified the chemicals as tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene. These chemicals have been previously detected in samples from MW-4 and MW-5, as reported in prior monitoring reports.

***August 2003 Well Survey and Site Conceptual Model Report:*** Cambria submitted the agency-requested well survey and site conceptual model report on August 14, 2003. To date, no response or comments on the report have been received.

## ANTICIPATED FIRST QUARTER 2004 ACTIVITIES

***Groundwater Monitoring:*** Blaine will measure DO, gauge and sample all site wells, and tabulate the data. Cambria will submit a monitoring report by April 15, 2004.

***Additional Oxygenate Analysis:*** Groundwater samples from all monitoring wells will be analyzed for four additional oxygenates (TAME, ETBE, DIPE, TBA) in addition to the regular analysis for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, total xylenes, and MTBE. Samples from wells MW-2 and MW-3 will also be analyzed for ethanol. The results will be included in the monitoring report.

**CLOSING**

We appreciate the opportunity to work with you on this project. Please call Matt Derby at (510) 420-3332 if you have any questions or comments.

Sincerely,
**Cambria Environmental Technology, Inc**

Anni Kreml
Senior Staff Scientist

Matthew W. Derby, P.E.
Senior Project Manager

REGISTERED PROFESSIONAL ENGINEER
MATTHEW W. DERBY
No. C055475
Exp. 12/31/04
CIVIL
STATE OF CALIFORNIA

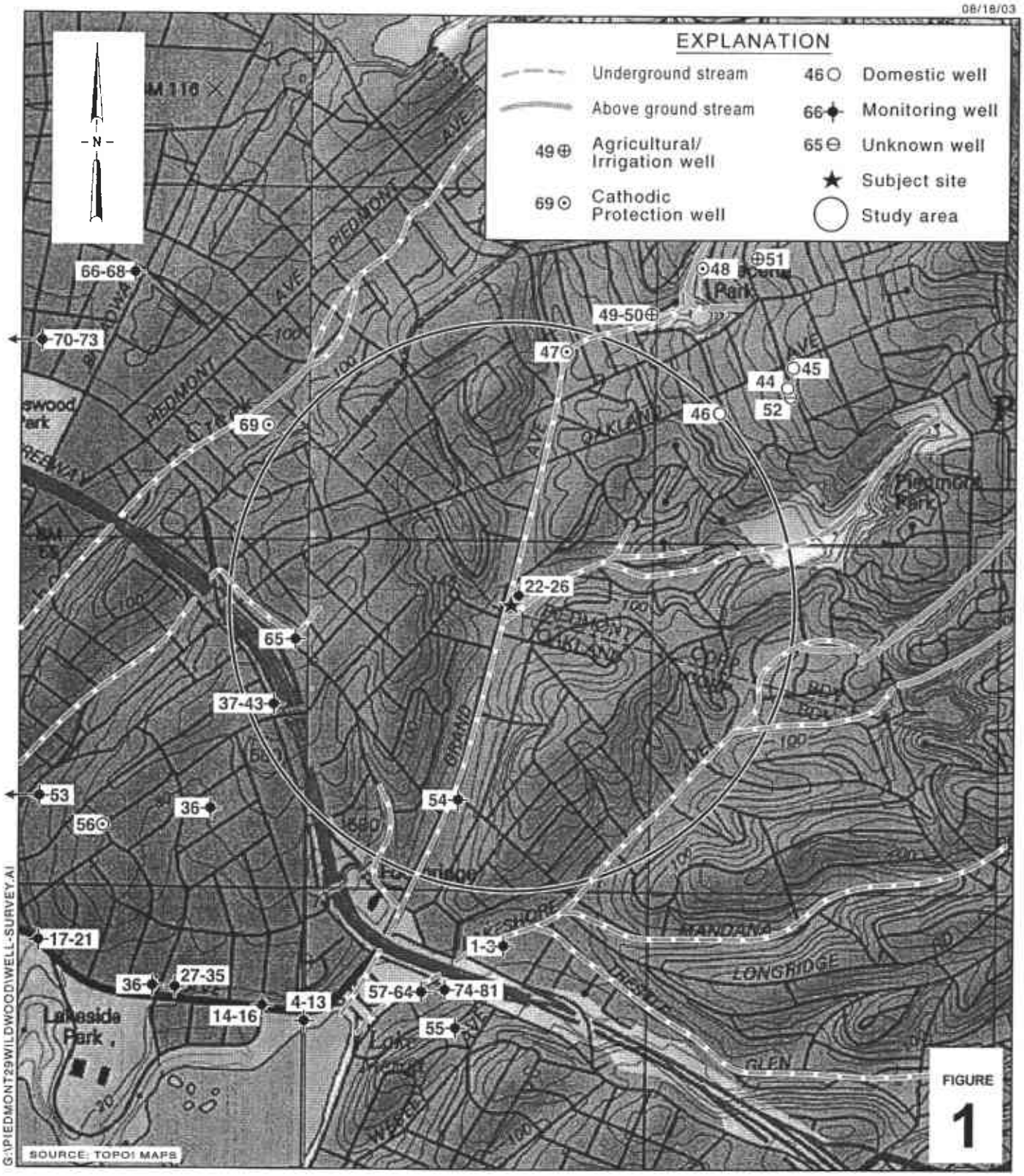
Figures: 1 – Vicinity/Area Well Survey Map
2 - Groundwater Elevation Contour Map

Table: 1 - Groundwater Analytical Data - Oxygenates

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Shell Oil Products US, 20945 South Wilmington, Carson, CA 90810

G:\Piedmont 29 Wildwood\QM\4q03\4q03qm.doc




0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

**Shell-branded Service Station**
29 Wildwood Avenue
Piedmont, California
Incident #98995822

CAMBRIA

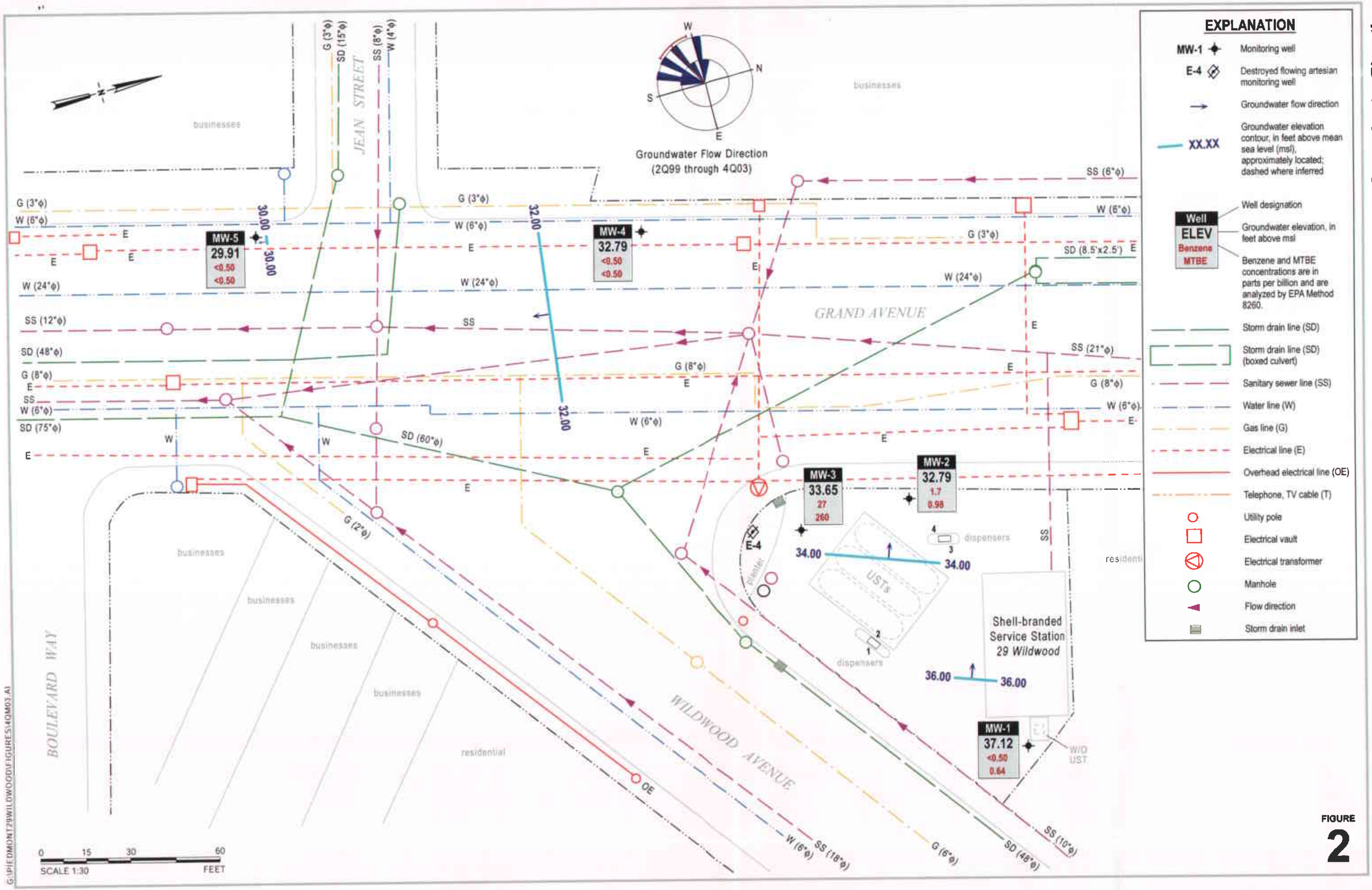
**Vicinity/Area Well Survey Map**

1/2 Mile Radius

01/05/04

# Groundwater Elevation Contour Map

October 23, 2003




## EXPLANATION

- MW-1 — Monitoring well
- E-4 — Destroyed flowing artesian monitoring well
- Groundwater flow direction
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located; dashed where inferred
- Well designation
- Well / ELEV / Benzene / MTBE — Groundwater elevation, in feet above msl; Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.
- Storm drain line (SD)
- Storm drain line (SD) (boxed culvert)
- Sanitary sewer line (SS)
- Water line (W)
- Gas line (G)
- Electrical line (E)
- Overhead electrical line (OE)
- Telephone, TV cable (T)
- Utility pole
- Electrical vault
- Electrical transformer
- Manhole
- Flow direction
- Storm drain inlet

**Shell-branded Service Station**
29 Wildwood Avenue
Piedmont, California
Incident #98995822

FIGURE
**2**

CAMBRIA

G:\PIEDMONT\29WILDWOOD\FIGURES\4QM03.AI

**Table 1.** **Groundwater Analytical Data - Oxygenates -** Former Shell Service Station, Incident #98995822, 29 Wildwood Avenue, Piedmont, California

| Sample ID | Date Sampled | MTBE | DIPE | ETBE | TAME | TBA | Ethanol | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| | | ← (Concentrations in ppb) → | | | | | | | |
| MW-1 | 10/23/02 | <0.50 | <2.0 | <2.0 | <2.0 | <50 | -- | <2.0 | <2.0 |
| | 07/14/03 | 1.4 | <2.0 | <2.0 | <2.0 | <5.0 | -- | -- | -- |
| | **10/23/03** | **0.64** | **<2.0** | **<2.0** | **<2.0** | **<5.0** | -- | -- | -- |
| MW-2 | 10/31/01 | <100 | <100 | <100 | <100 | <1,000 | 150,000 | -- | -- |
| | 10/23/02 | 140 | <2.0 | <2.0 | <2.0 | <50 | -- | <2.0 | <2.0 |
| | 07/14/03 | 60 | <2.0 | <2.0 | <2.0 | 8.6 | 7,000 | -- | -- |
| | **10/23/03** | **0.98** | **<2.0** | **<2.0** | **<2.0** | **<5.0** | **<50** | -- | -- |
| MW-3 | 10/31/01 | 31 | <2.0 | <2.0 | <2.0 | <50 | <500 | -- | -- |
| | 10/23/02 | 1,400 | <5.0 | <5.0 | 7.4 | 300 | -- | <5.0 | <5.0 |
| | 07/14/03 | 360 | <10 | <10 | <10 | 72 | <250 | -- | -- |
| | **10/23/03** | **260** | **<20** | **<20** | **<20** | **<50** | **<500** | -- | -- |
| MW-4 | 10/23/02 | <0.50 | <2.0 | <2.0 | <2.0 | <50 | -- | <2.0 | <2.0 |
| | 07/14/03 | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | -- | -- | -- |
| | **10/23/03** | **<0.50** | **<2.0** | **<2.0** | **<2.0** | **<5.0** | -- | -- | -- |
| MW-5 | 10/23/02 | <0.50 | <2.0 | <2.0 | <2.0 | <50 | -- | <2.0 | <2.0 |
| | 07/14/03 | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | -- | -- | -- |
| | **10/23/03** | **<0.50** | **<2.0** | **<2.0** | **<2.0** | **<5.0** | -- | -- | -- |

**Table 1.** **Groundwater Analytical Data - Oxygenates** - Former Shell Service Station, Incident #98995822, 29 Wildwood Avenue, Piedmont, California

| Sample ID | Date Sampled | MTBE | DIPE | ETBE | TAME | TBA | Ethanol | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| | | ← (Concentrations in ppb) → | | | | | | | |

**Abbreviations & Notes:**

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260
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
Ethanol analyzed by EPA Method 8260
1,2-DCA = 1,2-Dichloroethane, analyzed by EPA Method 8260
EDB = 1,2-Dibromoethane, analyzed by EPA Method 8260
ppb = Parts per billion

# ATTACHMENT A

## Blaine Groundwater Monitoring Report and Field Notes

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

November 26, 2003

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

Fourth Quarter 2003 Groundwater Monitoring at
Shell-branded Service Station
29 Wildwood Avenue
Piedmont, CA

Monitoring performed on October 23, 2003

Groundwater Monitoring Report **031023-BA-1**

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

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

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

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

Please call if you have any questions.

Yours truly,

Leon Gearhart
Project Coordinator

LG/jt

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

cc: Anni Kreml
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Oakland, CA 94608

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 07/12/1989 | <50 | <0.5 | <1 | <1 | <3 | NA | NA | 37.96 | 2.76 | 35.20 | NA |
| MW-1 | 01/30/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.10 | 34.86 | NA |
| MW-1 | 04/27/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.24 | 34.72 | NA |
| MW-1 | 07/31/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.26 | 33.70 | NA |
| MW-1 | 10/30/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.25 | 33.71 | NA |
| MW-1 | 01/31/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.66 | 34.30 | NA |
| MW-1 | 04/30/1991 | <50 | 0.8 | <0.5 | 0.6 | 1.2 | NA | NA | 37.96 | 3.46 | 34.50 | NA |
| MW-1 | 07/30/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.14 | 33.82 | NA |
| MW-1 | 10/29/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.96 | 34.00 | NA |
| MW-1 | 01/20/1992 | <30 | <0.3 | <0.3 | <0.3 | <0.3 | NA | NA | 37.96 | 3.59 | 34.37 | NA |
| MW-1 | 04/14/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.18 | 31.71 | NA |
| MW-1 | 07/21/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.17 | 33.79 | NA |
| MW-1 | 10/02/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.29 | 33.67 | NA |
| MW-1 | 01/20/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 2.32 | 35.64 | NA |
| MW-1 | 05/03/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.50 | 34.46 | 1.9 |
| MW-1 | 06/28/1993 | NA | NA | NA | NA | NA | NA | NA | 37.96 | 3.76 | 34.20 | NA |
| MW-1 | 07/21/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.09 | 33.87 | 4.6 |
| MW-1 | 10/19/1993 | 50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.58 | 34.38 | 4.3 |
| MW-1 | 01/20/1994 | Well inaccessible | | NA | NA | NA | NA | NA | 37.96 | NA | NA | NA |
| MW-1 | 04/12/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.60 | 34.36 | 7.5 |
| MW-1 | 07/20/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.10 | 33.86 | 3.2 |
| MW-1 | 10/06/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 4.30 | 33.66 | 3.2 |
| MW-1 | 01/20/1995 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 2.94 | 35.02 | 10.6 |
| MW-1 | 07/06/1995 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 3.68 | 34.28 | NA |
| MW-1 | 01/24/1996 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 37.96 | 2.12 | 35.84 | NA |
| MW-1 | 07/12/1996 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 | NA | 37.96 | 3.58 | 34.38 | 2.7 |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 01/16/1997 | 120 | 14 | 10 | 3.6 | 14 | <2.5 | NA | 37.96 | 2.30 | 35.66 | 3 |
| MW-1 | 10/24/1997 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 8.6 | NA | 37.96 | 3.66 | 34.30 | 4.5 |
| MW-1 | 05/13/1998 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 37.96 | 2.81 | 35.15 | 5.1 |
| MW-1 | 10/01/1998 | <50 | <0.50c | <0.50c | <0.50c | <0.50c | <2.5c | NA | 37.96 | 3.75 | 34.21 | 5.0 |
| MW-1 | 04/29/1999 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 37.96 | 3.52 | 34.44 | 4.1 |
| MW-1 | 11/01/1999 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 5.03 | NA | 37.96 | 4.05 | 33.91 | 3.6 |
| MW-1 | 04/05/2000 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 3.22 | NA | 37.96 | 3.74 | 34.22 | 4.2 |
| MW-1 | 10/30/2000 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 37.96 | 2.19 | 35.77 | 4.1 |
| MW-1 | 04/27/2001 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 37.96 | 4.43 | 33.53 | 1.9 |
| MW-1 | 10/31/2001 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 37.96 | 4.34 | 33.62 | 2.4 |
| MW-1 | 05/09/2002 | Well inaccessible | | NA | NA | NA | NA | NA | 37.96 | NA | NA | NA |
| MW-1 | 07/25/2002 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 37.96 | 3.53 | 34.43 | 1.2 |
| MW-1 | 10/23/2002 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 40.94 | 3.68 | 37.26 | 3.5 |
| MW-1 | 01/22/2003 | Well inaccessible | | NA | NA | NA | NA | NA | 40.94 | NA | NA | NA |
| MW-1 | 01/29/2003 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 40.94 | 3.25 | 37.69 | 3.7 |
| MW-1 | 04/30/2003 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | NA | <5.0 | 40.94 | 2.76 | 38.18 | 3.6 |
| MW-1 | 07/14/2003 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | NA | <1.4 | 40.94 | 3.15 | 37.79 | 0.5 |
| **MW-1** | **10/23/2003** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **NA** | **0.64** | **40.94** | **3.82** | **37.12** | **3.9** |
| MW-2 | 07/12/1989 | 60 | 2.7 | <1 | <1 | <3 | NA | NA | 34.89 | 3.66 | 31.23 | NA |
| MW-2 | 01/30/1990 | <50 | 6.6 | <0.5 | 0.54 | 0.93 | NA | NA | 34.89 | 3.49 | 31.40 | NA |
| MW-2 | 04/27/1990 | 60 | 2.1 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 3.79 | 31.10 | NA |
| MW-2 | 07/31/1990 | 70 | 1.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 4.03 | 30.86 | NA |
| MW-2 | 10/30/1990 | 70 | <0.5 | 0.7 | <0.5 | 1.6 | NA | NA | 34.89 | 4.21 | 30.68 | NA |
| MW-2 | 01/31/1991 | 80 | <0.5 | <0.5 | 0.9 | 1.9 | NA | NA | 34.89 | 4.09 | 30.80 | NA |
| MW-2 | 04/30/1991 | 100 | 5.9 | 0.6 | 0.7 | 2 | NA | NA | 34.89 | 3.95 | 30.94 | NA |
| MW-2 | 07/30/1991 | <50 | <0.5 | <0.7 | <0.5 | <0.5 | NA | NA | 34.89 | 4.07 | 30.82 | NA |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 10/29/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 4.11 | 30.78 | NA |
| MW-2 | 01/20/1992 | <30 | 0.84 | <0.3 | <0.41 | <0.48 | NA | NA | 34.89 | 3.86 | 31.03 | NA |
| MW-2 | 04/14/1992 | 70 | 16 | <0.5 | 3.1 | 2.1 | NA | NA | 34.89 | 3.66 | 34.30 | NA |
| MW-2 | 07/21/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 3.92 | 30.97 | NA |
| MW-2 | 10/02/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 4.45 | 30.44 | NA |
| MW-2 | 01/20/1993 | <50 | 3.8 | <0.5 | 0.52 | <0.5 | NA | NA | 34.89 | 3.74 | 31.15 | NA |
| MW-2 | 05/03/1993 | 680a | 2.8 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 3.77 | 31.12 | 0.9 |
| MW-2 | 06/28/1993 | NA | NA | NA | NA | NA | NA | NA | 34.89 | 3.96 | 30.93 | NA |
| MW-2 | 07/21/1993 | <50 | 8 | 1.2 | 1.8 | 7.9 | NA | NA | 34.89 | 4.39 | 30.50 | 5.9 |
| MW-2 | 10/19/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 3.92 | 30.97 | 5.7 |
| MW-2 | 01/20/1994 | <50 | 1.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 4.45 | 30.44 | 3.2 |
| MW-2 | 04/12/1994 | <50 | 2.9 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 4.72 | 30.17 | 11.4 |
| MW-2 | 07/20/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 5.32 | 29.57 | 2.4 |
| MW-2 | 10/06/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 4.03 | 30.86 | 2.9 |
| MW-2 | 01/20/1995 | 290 | 28 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 3.89 | 31.00 | 4.6 |
| MW-2 | 07/06/1995 | 120 | 3 | <0.5 | <0.5 | <0.5 | NA | NA | 34.89 | 8.84 | 26.05 | NA |
| MW-2 | 01/24/1996 | 70 | 3.1 | <0.5 | 0.8 | 1.5 | NA | NA | 34.89 | 3.80 | 31.09 | NA |
| MW-2 (D) | 01/24/1996 | 70 | 3.2 | 0.5 | 0.7 | 1.5 | NA | NA | 34.89 | NA | NA | NA |
| MW-2 | 07/12/1996 | <50 | 0.68 | <0.5 | <0.5 | <0.5 | 270 | NA | 34.89 | 3.85 | 31.04 | 3.8 |
| MW-2 | 01/16/1997 | 230 | 34 | 1.6 | 1.6 | 4.2 | 460 | NA | 34.89 | 3.84 | 31.05 | NA |
| MW-2 | 10/24/1997 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 54 | NA | 34.89 | 3.75 | 31.14 | 2.9 |
| MW-2 | 05/13/1998 | NA | NA | NA | NA | NA | NA | NA | 34.89 | 3.78 | 31.11 | NA |
| MW-2 | 10/01/1998 | <50 | <0.50c | <0.50c | <0.50c | <0.50c | 100 | NA | 34.89 | 4.90 | 29.99 | 3.0 |
| MW-2 | 04/29/1999 | NA | NA | NA | NA | NA | NA | NA | 34.89 | 4.69 | 30.20 | NA |
| MW-2 | 11/01/1999 | <50.0 | <0.500 | 1.29 | 0.669 | 4.52 | 7.21 | NA | 34.89 | 5.24 | 29.65 | 2.9 |
| MW-2 | 04/05/2000 | 376d | 68.1d | 3.10d | 2.88d | 5.35d | 729d | NA | 34.89 | 3.43 | 31.46 | 3.6 |
| MW-2 | 10/30/2000 | 5,790 | 59.2 | 315 | 162 | 1320 | 346 | NA | 34.89 | 2.35 | 32.54 | 2.8 |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 04/27/2001 | 2,720 | 90.8 | 22.8 | 18.1 | 165 | 512 | 578 | 34.89 | 4.67 | 30.22 | 0.9 |
| MW-2 | 10/31/2001 | <10,000 | <100 | <100 | <100 | <100 | NA | <100 | 34.89 | 3.68 | 31.21 | 1.3 |
| MW-2 | 05/09/2002 | 490 | 1.5 | 7.8 | 2.1 | 14 | NA | 200 | 34.89 | 3.18 | 31.71 | 1.1 |
| MW-2 | 07/25/2002 | 1,200 | 1.0 | 3.3 | 1.3 | 8.3 | NA | 45 | 34.89 | 3.30 | 31.59 | 0.4 |
| MW-2 | 10/23/2002 | 1,100 | 0.85 | 3.8 | 1.3 | 7.9 | NA | 140 | 37.87 | 3.87 | 34.00 | 0.8 |
| MW-2 | 01/22/2003 | 730 | <0.50 | 100 | 0.96 | 5.4 | NA | 230 | 37.87 | 2.68 | 35.19 | 1.5 |
| MW-2 | 04/30/2003 | <500 | <5.0 | 23 | <5.0 | <10 | NA | 410 | 37.87 | 3.42 | 34.45 | 0.1 |
| MW-2 | 07/14/2003 | <800 | 1.2 | 59 | 1.4 | 9.8 | NA | 60 | 37.87 | 3.50 | 34.37 | 1.1 |
| **MW-2** | **10/23/2003** | **2,000** | **1.7** | **0.88** | **1.5** | **<1.0** | **NA** | **0.98** | **37.87** | **5.08** | **32.79** | **0.8** |
| MW-3 | 07/12/1989 | 3,900 | 380 | 41 | 99 | 30 | NA | NA | 35.00 | 3.83 | 31.17 | NA |
| MW-3 | 01/30/1990 | 5,500 | 440 | 35 | 79 | 130 | NA | NA | 35.00 | 3.24 | 31.76 | NA |
| MW-3 | 04/27/1990 | 4,500 | 310 | 26 | 37 | 110 | NA | NA | 35.00 | 4.02 | 30.98 | NA |
| MW-3 | 07/31/1990 | 3,500 | 210 | 17 | 8.4 | 62 | NA | NA | 35.00 | 4.31 | 30.69 | NA |
| MW-3 | 10/30/1990 | 2,300 | 610 | <0.5 | <0.5 | 28 | NA | NA | 35.00 | 4.52 | 30.48 | NA |
| MW-3 | 01/31/1991 | 4,100 | 300 | 20 | 19 | 81 | NA | NA | 35.00 | 4.33 | 30.67 | NA |
| MW-3 | 04/30/1991 | 3,800 | 370 | 19 | 8.6 | 60 | NA | NA | 35.00 | 3.79 | 31.21 | NA |
| MW-3 | 07/30/1991 | 3,300 | 160 | 13 | 15 | 87 | NA | NA | 35.00 | 4.37 | 30.63 | NA |
| MW-3 | 10/29/1991 | 1,000 | 35 | 2.8 | 2.9 | 8.1 | NA | NA | 35.00 | 4.00 | 31.00 | NA |
| MW-3 | 01/20/1992 | 6,900 | 380 | 18 | 47 | 48 | NA | NA | 35.00 | 3.87 | 31.13 | NA |
| MW-3 | 04/14/1992 | 6,000 | 480 | 38 | 41 | 55 | NA | NA | 35.00 | 3.15 | 31.85 | NA |
| MW-3 | 07/21/1992 | 3,700 | 330 | 13 | 30 | 23 | NA | NA | 35.00 | 4.17 | 30.83 | NA |
| MW-3 | 10/02/1992 | 4,200 | 260 | 10 | 13 | 12 | NA | NA | 35.00 | 4.43 | 30.57 | NA |
| MW-3 | 01/20/1993 | 4,200 | 360 | 15 | 32 | 26 | NA | NA | 35.00 | 2.20 | 32.80 | NA |
| MW-3 (D) | 01/20/1993 | 3,900 | 370 | 15 | 32 | 26 | NA | NA | 35.00 | NA | NA | NA |
| MW-3 | 05/03/1993 | 12,000 | 290 | 520 | 120 | 620 | NA | NA | 35.00 | 3.50 | 31.50 | 0.6 |
| MW-3 | 06/28/1993 | NA | NA | NA | NA | NA | NA | NA | 35.00 | 4.08 | 30.92 | NA |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 07/21/1993 | 2,000 | 170 | 12 | <10 | 11 | NA | NA | 35.00 | 4.12 | 30.88 | 4.3 |
| MW-3 (D) | 07/21/1993 | 2,000 | 170 | 10 | <10 | 14 | NA | NA | 35.00 | NA | NA | NA |
| MW-3 | 10/19/1993 | 2,000 | 240 | <0.5 | <0.5 | <0.5 | NA | NA | 35.00 | 4.20 | 30.80 | 5.7 |
| MW-3 | 01/20/1994 | 4,200 | 280 | <10 | <10 | <10 | NA | NA | 35.00 | 4.08 | 30.92 | 4.1 |
| MW-3 (D) | 01/20/1994 | 3,800 | 250 | <10 | <10 | <10 | NA | NA | 35.00 | NA | NA | 4.1 |
| MW-3 | 04/12/1994 | 4,700 | 380 | <10 | <10 | <10 | NA | NA | 35.00 | 3.70 | 31.30 | 10.6 |
| MW-3 (D) | 04/12/1994 | 3,400 | 370 | <25 | <25 | <25 | NA | NA | 35.00 | NA | NA | NA |
| MW-3 | 07/20/1994 | 5,100 | 320 | 77 | 15 | 34 | NA | NA | 35.00 | 4.26 | 30.74 | 2.3 |
| MW-3 (D) | 07/20/1994 | 4,400 | 250 | 14 | 13 | 32 | NA | NA | 35.00 | NA | NA | NA |
| MW-3 | 10/06/1994 | 4,300 | 280 | 9.7 | 4 | 15 | NA | NA | 35.00 | 4.31 | 30.69 | 2.3 |
| MW-3 | 01/20/1995 | 4,600 | 180 | 18 | 16 | 10 | NA | NA | 35.00 | 3.00 | 32.00 | 11.1 |
| MW-3 (D) | 01/20/1995 | 4,300 | 170 | 12 | 15 | 7.2 | NA | NA | 35.00 | NA | NA | NA |
| MW-3 | 07/06/1995 | 3,900 | 310 | <0.5 | 7.6 | 13 | NA | NA | 35.00 | 3.75 | 31.25 | NA |
| MW-3 (D) | 07/06/1995 | 4,100 | 330 | <0.5 | 7.9 | 2.4 | NA | NA | 35.00 | NA | NA | NA |
| MW-3 | 01/24/1996 | 5,000 | 210 | 14 | 14 | 12 | NA | NA | 35.00 | 3.26 | 31.74 | NA |
| MW-3 | 07/12/1996 | 2,700 | 210 | <0.5 | <0.5 | <0.5 | 3,600 | NA | 35.00 | 3.77 | 31.23 | 2.4 |
| MW-3 (D) | 07/12/1996 | 2,800 | 210 | <0.5 | <0.5 | <0.5 | 3,400 | NA | 35.00 | NA | NA | 2.4 |
| MW-3 | 01/16/1997 | 4,200 | 130 | 19 | 10 | 34 | 4,400 | 4,600 | 35.00 | 2.38 | 32.62 | 2.3 |
| MW-3 | 10/24/1997 | 4,100 | 270 | 9 | 5.1 | 8.8 | 2,000 | NA | 35.00 | 4.12 | 30.88 | 1.9 |
| MW-3 (D) | 10/24/1997 | 1,700 | 220 | <5.0 | <5.0 | <5.0 | 1,500 | NA | 35.00 | NA | NA | 1.9 |
| MW-3 | 05/13/1998 | NA | NA | NA | NA | NA | NA | NA | 35.00 | 3.22 | 31.78 | NA |
| MW-3 | 10/01/1998 | 1,400 | 84c | <5.0c | <5.0c | <5.0c | 2,300 | NA | 35.00 | 4.15 | 30.85 | 2.0 |
| MW-3 (D) | 10/01/1998 | 2,100 | 100c | <10c | <10c | <10c | 2,600 | NA | 35.00 | NA | NA | 2.0 |
| MW-3 | 04/29/1999 | NA | NA | NA | NA | NA | NA | NA | 35.00 | 4.27 | 30.73 | NA |
| MW-3 | 11/01/1999 | 1,850 | 94.3 | 6.09 | <5.00 | 6.67 | 4,140 | NA | 35.00 | 4.65 | 30.35 | 2.2 |
| MW-3 | 04/05/2000 | 3,070 | 96.9 | 12.1 | <10.0 | <10.0 | 1,050 | NA | 35.00 | 3.50 | 31.50 | 2.7 |
| MW-3 | 10/30/2000 | 1,570 | 56.8 | 1.91 | 1.39 | 3.06 | 572 | 524 | 35.00 | 3.40 | 31.60 | 3.1 |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 04/27/2001 | 2,420 | 103 | 12.6 | <5.00 | 15.6 | 314 | NA | 35.00 | 3.67 | 31.33 | 0.9 |
| MW-3 | 10/31/2001 | <50 | 0.71 | <0.50 | <0.50 | <0.50 | NA | 31 | 35.00 | 3.79 | 31.21 | 1.6 |
| MW-3 | 05/09/2002 | 2,000 | 52 | <10 | <10 | <10 | NA | 4,100 | 35.00 | 3.76 | 31.24 | 0.9 |
| MW-3 | 07/25/2002 | 1,800 | 50 | <5.0 | <5.0 | <5.0 | NA | 1,900 | 35.00 | 4.17 | 30.83 | 3.7 |
| MW-3 | 10/23/2002 | 1,700 | 27 | <5.0 | <5.0 | <5.0 | NA | 1,400 | 37.97 | 4.36 | 33.61 | 1.6 |
| MW-3 | 01/22/2003 | 1,800 | 38 | 2.4 | 1.5 | 2.4 | NA | 390 | 37.97 | 3.09 | 34.88 | 1.3 |
| MW-3 | 04/30/2003 | 3,300 | 56 | 5.2 | <5.0 | <10 | NA | 540 | 37.97 | 3.39 | 34.58 | 1.5 |
| MW-3 | 07/14/2003 | 1,000 | 20 | 2.7 | <2.5 | <5.0 | NA | 360 | 37.97 | 4.05 | 33.92 | 1.5 |
| **MW-3** | **10/23/2003** | **2,100** | **27** | **<5.0** | **<5.0** | **<10** | **NA** | **260** | **37.97** | **4.32** | **33.65** | **1.0** |
| MW-4 | 01/30/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.50 | 29.23 | NA |
| MW-4 | 04/27/1990 | 130a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.62 | 30.11 | NA |
| MW-4 | 07/31/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.19 | 29.54 | NA |
| MW-4 | 10/30/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.19 | 29.54 | NA |
| MW-4 | 01/31/1991 | 50a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.49 | 29.24 | NA |
| MW-4 | 04/30/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.02 | 29.71 | NA |
| MW-4 | 07/30/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.39 | 29.34 | NA |
| MW-4 | 10/29/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.75 | 29.98 | NA |
| MW-4 | 01/20/1992 | <30 | <0.3 | <0.3 | <0.3 | <0.3 | NA | NA | 33.73 | 3.94 | 29.79 | NA |
| MW-4 | 04/14/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.71 | 30.02 | NA |
| MW-4 | 07/21/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.02 | 29.71 | NA |
| MW-4 | 10/02/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.13 | 29.60 | NA |
| MW-4 | 01/20/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.10 | 30.63 | NA |
| MW-4 | 05/03/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.70 | 30.03 | 1.7 |
| MW-4 | 06/28/1993 | NA | NA | NA | NA | NA | NA | NA | 33.73 | 3.81 | 29.92 | NA |
| MW-4 | 07/21/1993 | <50 | 0.56 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.81 | 29.92 | 4.5 |
| MW-4 | 10/19/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.94 | 29.79 | 5.8 |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 01/20/1994 | <50 | 0.71 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.00 | 29.73 | 4.4 |
| MW-4 | 04/12/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 4.01 | 29.72 | 7.3 |
| MW-4 | 07/20/1994 | 160 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.91 | 29.82 | 6.4 |
| MW-4 | 10/06/1994 | 410 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.99 | 29.74 | 5.0 |
| MW-4 | 01/20/1995 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.56 | 30.17 | 4.9 |
| MW-4 | 07/06/1995 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 33.73 | 3.85 | 29.88 | NA |
| MW-4 | 01/24/1996 | <50 | <0.5 | <0.5 | 0.6 | 1.8 | NA | NA | 33.73 | 2.56 | 31.17 | NA |
| MW-4 | 07/12/1996 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | b | NA | 33.73 | 3.36 | 30.37 | 2.7 |
| MW-4 | 01/16/1997 | Well inaccessible | | NA | NA | NA | NA | NA | 33.73 | NA | NA | NA |
| MW-4 | 10/24/1997 | Well inaccessible | | NA | NA | NA | NA | NA | 33.73 | NA | NA | NA |
| MW-4 | 05/13/1998 | Well inaccessible | | NA | NA | NA | NA | NA | 33.73 | NA | NA | NA |
| MW-4 | 10/01/1998 | <50 | <0.50c | <0.50c | <0.50c | 0.74c | 8.1 | NA | 33.73 | 3.90 | 29.83 | 2.5 |
| MW-4 | 04/29/1999 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 5.7 | NA | 33.73 | 3.97 | 29.76 | 2.1 |
| MW-4 | 11/01/1999 | Well inaccessible | | NA | NA | NA | NA | NA | 33.73 | NA | NA | NA |
| MW-4 | 04/05/2000 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 3.64 | NA | 33.73 | 3.63 | 30.10 | 2.1 |
| MW-4 | 10/30/2000 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 33.73 | 3.33 | 30.40 | 3.0 |
| MW-4 | 04/27/2001 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 33.73 | 3.48 | 30.25 | 2.2 |
| MW-4 | 10/31/2001 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 33.73 | 3.58 | 30.15 | 2.8 |
| MW-4 | 05/09/2002 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 33.73 | 3.74 | 29.99 | 2.0 |
| MW-4 | 07/25/2002 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 33.73 | 3.71 | 30.02 | 1.3 |
| MW-4 | 10/23/2002 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 36.72 | 3.93 | 32.79 | 2.6 |
| MW-4 | 01/22/2003 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 36.72 | 3.67 | 33.05 | 3.1 |
| MW-4 | 04/30/2003 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | NA | <5.0 | 36.72 | 3.46 | 33.26 | 2.8 |
| MW-4 | 07/14/2003 | 56 a | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | 36.72 | 3.75 | 32.97 | 2.4 |
| **MW-4** | **10/23/2003** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **NA** | **<0.50** | **36.72** | **3.93** | **32.79** | **2.0** |
| MW-5 | 01/30/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 7.12 | 24.26 | NA |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-5 | 04/27/1990 | 210a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.19 | 27.19 | NA |
| MW-5 | 07/31/1990 | 90 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.09 | 27.29 | NA |
| MW-5 | 10/30/1990 | 100 | 0.8 | 0.7 | 0.6 | 1.4 | NA | NA | 31.38 | 4.39 | 26.99 | NA |
| MW-5 | 01/31/1991 | 80a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.49 | 26.89 | NA |
| MW-5 | 04/30/1991 | 90 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.27 | 27.11 | NA |
| MW-5 | 07/30/1991 | 90 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.32 | 27.06 | NA |
| MW-5 | 10/29/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 3.79 | 27.59 | NA |
| MW-5 | 01/20/1992 | <30 | <0.3 | <0.3 | <0.3 | <0.3 | NA | NA | 31.38 | 4.09 | 27.29 | NA |
| MW-5 | 04/14/1992 | <50a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.12 | 27.26 | NA |
| MW-5 | 07/21/1992 | 74a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.13 | 27.25 | NA |
| MW-5 | 10/02/1992 | 76a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.30 | 27.08 | NA |
| MW-5 | 01/20/1993 | 72a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 3.12 | 28.26 | NA |
| MW-5 | 05/03/1993 | 70a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.07 | 27.31 | 1.6 |
| MW-5 (D) | 05/04/1993 | 80a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | NA | NA | NA |
| MW-5 | 06/28/1993 | NA | NA | NA | NA | NA | NA | NA | 31.38 | 4.08 | 27.30 | NA |
| MW-5 | 07/21/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.05 | 27.33 | 3.5 |
| MW-5 | 10/19/1993 | 51 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.20 | 27.18 | 3.8 |
| MW-5 | 01/20/1994 | 90 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.40 | 26.98 | 4.2 |
| MW-5 | 04/12/1994 | 67 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.18 | 27.20 | NA |
| MW-5 | 07/20/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.06 | 27.32 | 3.2 |
| MW-5 | 10/06/1994 | 80 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.01 | 27.37 | 2.1 |
| MW-5 (D) | 10/06/1994 | 60 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | NA | NA | NA |
| MW-5 | 01/20/1995 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 3.49 | 27.89 | 3.2 |
| MW-5 | 07/06/1995 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 31.38 | 4.06 | 27.32 | NA |
| MW-5 | 01/24/1996 | 70 | <0.5 | <0.5 | 0.8 | 2.9 | NA | NA | 31.38 | 2.90 | 28.48 | NA |
| MW-5 | 07/12/1996 | 62 | <0.5 | <0.5 | <0.5 | <0.5 | b | NA | 31.38 | 4.02 | 27.36 | 1.9 |
| MW-5 | 01/16/1997 | 66 | 0.91 | 0.89 | <0.50 | 1.7 | <2.5 | NA | 31.38 | 2.59 | 28.79 | 2.2 |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-5 (D) | 01/16/1997 | <50 | 0.7 | 0.78 | <0.50 | 1.3 | <2.5 | NA | 31.38 | NA | NA | 2.2 |
| MW-5 | 10/24/1997 | 59 | <0.50 | <0.50 | <0.50 | <0.50 | 17 | NA | 31.38 | 4.15 | 27.23 | 4.6 |
| MW-5 | 05/13/1998 | 72 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 31.38 | 3.64 | 27.74 | 2.1 |
| MW-5 (D) | 05/13/1998 | 70 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 31.38 | NA | NA | 2.1 |
| MW-5 | 10/01/1998 | 57 | <0.50c | <0.50c | <0.50c | 0.62c | 20 | NA | 31.38 | 4.25 | 27.13 | 2.2 |
| MW-5 | 04/29/1999 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 16 | NA | 31.38 | 4.56 | 26.82 | 2.0 |
| MW-5 | 11/01/1999 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 3.06 | NA | 31.38 | 4.19 | 27.19 | 2.2 |
| MW-5 | 04/05/2000 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 22.5 | NA | 31.38 | 4.34 | 27.04 | 2.2 |
| MW-5 | 10/30/2000 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 19.3 | NA | 31.38 | 3.25 | 28.13 | 4.0 |
| MW-5 | 04/27/2001 | 51.5 | <0.500 | <0.500 | <0.500 | <0.500 | 4.29 | NA | 31.38 | 4.07 | 27.31 | 1.0 |
| MW-5 | 10/31/2001 | 210 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 31.38 | 4.02 | 27.36 | 1.5 |
| MW-5 | 05/09/2002 | 280 | 0.71 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 31.38 | 4.31 | 27.07 | 1.7 |
| MW-5 | 07/25/2002 | 410 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 31.38 | 4.32 | 27.06 | 0.7 |
| MW-5 | 10/23/2002 | 290 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 34.36 | 4.37 | 29.99 | 2.3 |
| MW-5 | 01/22/2003 | 260 | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 34.36 | 4.12 | 30.24 | 2.4 |
| MW-5 | 04/30/2003 | 90 e | <0.50 | <0.50 | <0.50 | <1.0 | NA | <5.0 | 34.36 | 3.88 | 30.48 | 1.5 |
| MW-5 | 07/14/2003 | 72 a | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | 34.36 | 4.57 | 29.79 | 1.0 |
| **MW-5** | **10/23/2003** | **120 f** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **NA** | **<0.50** | **34.36** | **4.45** | **29.91** | **1.8** |
| E-4 | 07/12/1989 | <50 | <0.5 | <1 | <1 | <3 | NA | NA | 34.63 | NA | >39.13 | NA |
| E-4 | 01/30/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 04/27/1990 | 120a | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 07/31/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 10/30/1990 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 01/31/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 04/30/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 07/30/1991 | <50 | <0.5 | 0.6 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E-4 | 10/29/1991 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 01/20/1992 | <30 | <0.3 | <0.3 | <0.3 | <0.3 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 04/14/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 07/21/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 10/02/1992 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 01/20/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 05/03/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | 0.6 |
| E-4 | 06/28/1993 | NA | NA | NA | NA | NA | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 07/21/1993 | <50 | 5.4 | 0.72 | 1 | 4.4 | NA | NA | 34.63 | NA | >34.63 | 5.4 |
| E-4 | 10/19/1993 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | 5.6 |
| E-4 | 01/20/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | NA |
| E-4 | 04/12/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | 9.4 |
| E-4 | 07/20/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | 2.0 |
| E-4 | 10/06/1994 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | 1.3 |
| E-4 | 01/20/1995 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 34.63 | NA | >34.63 | 3.7 |
| E-4 | 05/16/1995 | Well abandoned | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 29 Wildwood Avenue
## Piedmont, CA

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to October 31, 2001, analyzed by EPA Method 8015.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to October 31, 2001, analyzed by EPA Method 8020.
MTBE = Methyl-tertiary-butyl ether
TOC = Top of Casing Elevation
SPH = Separate-Phase Hydrocarbons
GW = Groundwater
DO = Dissolved Oxygen
ug/L = Parts per billion
ppm = Parts per million
MSL = Mean sea level
ft = Feet
<n = Below detection limit
D = Duplicate sample
NA = Not applicable

Notes:
a = Chromatogram pattern indicated an unidentified hydrocarbon/ hydrocarbon reported does not match pattern of laboratory's standard.
b = Due to coelution with early eluters, no result could be determined for MTBE
c = Laboratory reported 1.3 ug/L benzene, 11 ug/L toluene, 0.98 ug/L ethyl benzene, and 6.5 ug/L total xylenes in the equipment blank.
d = Result reported was generated out of hold time.
e = Hydrocarbon reported does not match laboratory's gasoline standard.
f = Sample contains discrete peaks which are Chlorinated solvents, in addition to gasoline.
Well E-4 is a flowing artesian well; potentiometric surface above top-of-casing elevation.
Site surveyed March 5, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

SEVERN TRENT STL

**Submission#: 2003-10-0912**

**Blaine Tech Services, Inc.**

November 06, 2003

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: 031023-BA1
Project: 98995822
Site: 29 Wildwood Ave., Piedmont

Dear Mr.Gearhart,

Attached is our report for your samples received on 10/24/2003 18:19
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

The report contains a Case Narrative detailing sample receipt and analysis.

Please note that any unused portion of the samples will be discarded after 12/08/2003 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

Sincerely,

Vincent Vancil
Project Manager

SEVERN TRENT STL

**Submission#: 2003-10-0912**

**Blaine Tech Services, Inc.**

November 06, 2003

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: 031023-BA1
Project: 98995822
Site: 29 Wildwood Ave., Piedmont

## Case Narrative

General and Sample Comments

We (STL San Francisco) received 5 Water samples , on Friday, October 24, 2003 6:19 PM.
The discrete peaks which were found in the gasoline range are Chlorinated solvents. We have identified the presence of Tetrachloroethene , Trichloroethene , and cis-1,2-Dichloroethene.

Analysis Coments and Flags by QC Batch

| Selectable Gas/BTEX Fuel Oxygenates by 8260B | Water | QC Batch#: 2003/10/31-01.65 |
|---|---|---|

MW-3 2003-10-0912-003

Analysis Flag(s)

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

| Selectable Gas/BTEX Fuel Oxygenates by 8260B | Water | QC Batch#: 200311032A62 |
|---|---|---|

MW-5 2003-10-0912-005

Compound Flag(s)

dp Sample contains discrete peak in addition to gasoline.

SEVERN TRENT STL

Submission #: 2003-10-0912

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

**Samples Reported**

| Sample Name | Date Sampled | Matrix | Lab # |
|---|---|---|---|
| MW-1 | 10/23/2003 10:50 | Water | 1 |
| MW-2 | 10/23/2003 11:00 | Water | 2 |
| MW-3 | 10/23/2003 11:20 | Water | 3 |
| MW-4 | 10/23/2003 09:20 | Water | 4 |
| MW-5 | 10/23/2003 09:45 | Water | 5 |

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | **MW-1** | Lab ID: | 2003-10-0912 - 1 |
| Sampled: | 10/23/2003 10:50 | Extracted: | 10/31/2003 13:06 |
| Matrix: | Water | QC Batch#: | 2003/10/31-01.65 |

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline | ND | 50 | ug/L | 1.00 | 10/31/2003 13:06 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 10/31/2003 13:06 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 10/31/2003 13:06 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 10/31/2003 13:06 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 10/31/2003 13:06 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 1.00 | 10/31/2003 13:06 | |
| Methyl tert-butyl ether (MTBE) | 0.64 | 0.50 | ug/L | 1.00 | 10/31/2003 13:06 | |
| Di-isopropyl Ether (DIPE) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 13:06 | |
| Ethyl tert-butyl ether (ETBE) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 13:06 | |
| tert-Amyl methyl ether (TAME) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 13:06 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 91.1 | 76 | % | 1.00 | 10/31/2003 13:06 | |
| Toluene-d8 | 93.9 | 78 | % | 1.00 | 10/31/2003 13:06 | |

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | MW-2 | Lab ID: | 2003-10-0912 - 2 |
| Sampled: | 10/23/2003 11:00 | Extracted: | 10/31/2003 23:22 |
| Matrix: | Water | QC Batch#: | 2003/10/31-01.65 |

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline | 2000 | 50 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Benzene | 1.7 | 0.50 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Toluene | 0.88 | 0.50 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Ethylbenzene | 1.5 | 0.50 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 10/31/2003 23:22 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Methyl tert-butyl ether (MTBE) | 0.98 | 0.50 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Di-isopropyl Ether (DIPE) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Ethyl tert-butyl ether (ETBE) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 23:22 | |
| tert-Amyl methyl ether (TAME) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 23:22 | |
| Ethanol | ND | 50 | ug/L | 1.00 | 10/31/2003 23:22 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 78.2 | 76 | % | 1.00 | 10/31/2003 23:22 | |
| Toluene-d8 | 98.7 | 78 | % | 1.00 | 10/31/2003 23:22 | |

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | MW-3 | Lab ID: | 2003-10-0912 - 3 |
| Sampled: | 10/23/2003 11:20 | Extracted: | 10/31/2003 13:52 |
| Matrix: | Water | QC Batch#: | 2003/10/31-01.65 |

Analysis Flag: o ( See Legend and Note Section )

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline | 2100 | 500 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Benzene | 27 | 5.0 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Toluene | ND | 5.0 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Ethylbenzene | ND | 5.0 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Total xylenes | ND | 10 | ug/L | 10.00 | 10/31/2003 13:52 | |
| tert-Butyl alcohol (TBA) | ND | 50 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Methyl tert-butyl ether (MTBE) | 260 | 5.0 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Di-isopropyl Ether (DIPE) | ND | 20 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Ethyl tert-butyl ether (ETBE) | ND | 20 | ug/L | 10.00 | 10/31/2003 13:52 | |
| tert-Amyl methyl ether (TAME) | ND | 20 | ug/L | 10.00 | 10/31/2003 13:52 | |
| Ethanol | ND | 500 | ug/L | 10.00 | 10/31/2003 13:52 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 97.8 | 76 | % | 10.00 | 10/31/2003 13:52 | |
| Toluene-d8 | 98.1 | 78 | % | 10.00 | 10/31/2003 13:52 | |

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | MW-4 | Lab ID: | 2003-10-0912 - 4 |
| Sampled: | 10/23/2003 09:20 | Extracted: | 10/31/2003 14:14 |
| Matrix: | Water | QC Batch#: | 2003/10/31-01.65 |

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline | ND | 50 | ug/L | 1.00 | 10/31/2003 14:14 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 10/31/2003 14:14 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 10/31/2003 14:14 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 10/31/2003 14:14 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 10/31/2003 14:14 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 1.00 | 10/31/2003 14:14 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.50 | ug/L | 1.00 | 10/31/2003 14:14 | |
| Di-isopropyl Ether (DIPE) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 14:14 | |
| Ethyl tert-butyl ether (ETBE) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 14:14 | |
| tert-Amyl methyl ether (TAME) | ND | 2.0 | ug/L | 1.00 | 10/31/2003 14:14 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 87.1 | 76 | % | 1.00 | 10/31/2003 14:14 | |
| Toluene-d8 | 92.1 | 78 | % | 1.00 | 10/31/2003 14:14 | |

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | MW-5 | Lab ID: | 2003-10-0912 - 5 |
| Sampled: | 10/23/2003 09:45 | Extracted: | 11/4/2003 01:50 |
| Matrix: | Water | QC Batch#: | 2003/11/03-2A.52 |

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline | 120 | 50 | ug/L | 1.00 | 11/04/2003 01:50 | dp |
| Benzene | ND | 0.50 | ug/L | 1.00 | 11/04/2003 01:50 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 11/04/2003 01:50 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 11/04/2003 01:50 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 11/04/2003 01:50 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 1.00 | 11/04/2003 01:50 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.50 | ug/L | 1.00 | 11/04/2003 01:50 | |
| Di-isopropyl Ether (DIPE) | ND | 2.0 | ug/L | 1.00 | 11/04/2003 01:50 | |
| Ethyl tert-butyl ether (ETBE) | ND | 2.0 | ug/L | 1.00 | 11/04/2003 01:50 | |
| tert-Amyl methyl ether (TAME) | ND | 2.0 | ug/L | 1.00 | 11/04/2003 01:50 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 102.2 | 76 | % | 1.00 | 11/04/2003 01:50 | |
| Toluene-d8 | 98.6 | 78 | % | 1.00 | 11/04/2003 01:50 | |

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

**Batch QC Report**

Prep(s): 5030B — Test(s): 8260B
**Method Blank** — **Water** — **QC Batch # 2003/10/31-01.65**
MB: 2003/10/31-01.65-022 — Date Extracted: 10/31/2003 10:22

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| Gasoline | ND | 50 | ug/L | 10/31/2003 10:22 | |
| Benzene | ND | 0.5 | ug/L | 10/31/2003 10:22 | |
| Toluene | ND | 0.5 | ug/L | 10/31/2003 10:22 | |
| Ethylbenzene | ND | 0.5 | ug/L | 10/31/2003 10:22 | |
| Total xylenes | ND | 1.0 | ug/L | 10/31/2003 10:22 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 10/31/2003 10:22 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | ug/L | 10/31/2003 10:22 | |
| Di-isopropyl Ether (DIPE) | ND | 2.0 | ug/L | 10/31/2003 10:22 | |
| Ethyl tert-butyl ether (ETBE) | ND | 2.0 | ug/L | 10/31/2003 10:22 | |
| tert-Amyl methyl ether (TAME) | ND | 2.0 | ug/L | 10/31/2003 10:22 | |
| Ethanol | ND | 50 | ug/L | 10/31/2003 10:22 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 88.1 | 76-130 | % | 10/31/2003 10:22 | |
| Toluene-d8 | 97.5 | 78-115 | % | 10/31/2003 10:22 | |

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

**Batch QC Report**

Prep(s): 5030B — Test(s): 8260B

**Method Blank** — **Water** — **QC Batch # 2003/11/03-2A.62**

MB: 2003/11/03-2A 62-037 — Date Extracted: 11/03/2003 23:37

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| Gasoline | ND | 50 | ug/L | 11/03/2003 23:37 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 11/03/2003 23:37 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | ug/L | 11/03/2003 23:37 | |
| Di-isopropyl Ether (DIPE) | ND | 2.0 | ug/L | 11/03/2003 23:37 | |
| Ethyl tert-butyl ether (ETBE) | ND | 2.0 | ug/L | 11/03/2003 23:37 | |
| tert-Amyl methyl ether (TAME) | ND | 2.0 | ug/L | 11/03/2003 23:37 | |
| Benzene | ND | 0.5 | ug/L | 11/03/2003 23:37 | |
| Toluene | ND | 0.5 | ug/L | 11/03/2003 23:37 | |
| Ethylbenzene | ND | 0.5 | ug/L | 11/03/2003 23:37 | |
| Total xylenes | ND | 1.0 | ug/L | 11/03/2003 23:37 | |
| Ethanol | ND | 50 | ug/L | 11/03/2003 23:37 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 96.0 | 76-130 | % | 11/03/2003 23:37 | |
| Toluene-d8 | 95.6 | 78-115 | % | 11/03/2003 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

## Batch QC Report

Prep(s): 5030B — Test(s): 8260B

**Laboratory Control Spike** — **Water** — **QC Batch # 2003/10/31-01.65**

LCS 2003/10/31-01.65-038 — Extracted: 10/31/2003 — Analyzed: 10/31/2003 09:38

LCSD 2003/10/31-01.65-000 — Extracted: 10/31/2003 — Analyzed: 10/31/2003 10:00

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Benzene | 23.5 | 24.3 | 25.0 | 94.0 | 97.2 | 3.3 | 69-129 | 20 | | |
| Toluene | 25.6 | 24.5 | 25.0 | 102.4 | 98.0 | 4.4 | 70-130 | 20 | | |
| Methyl tert-butyl ether (MTBE) | 22.3 | 21.6 | 25.0 | 89.2 | 86.4 | 3.2 | 65-165 | 20 | | |
| ***Surrogates(s)*** | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 439 | 437 | 500 | 87.8 | 87.4 | | 76-130 | | | |
| Toluene-d8 | 520 | 508 | 500 | 104.0 | 101.6 | | 78-115 | | | |

SEVERN TRENT STL

Submission #: 2003-10-0912

## 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

**Batch QC Report**

Prep(s): 5030B — Test(s): 8260B

**Laboratory Control Spike** — **Water** — **QC Batch # 2003/11/03-2A.62**

LCS 2003/11/03-2A.62-053 — Extracted: 11/03/2003 — Analyzed: 11/03/2003 22:53

LCSD 2003/11/03-2A.62-015 — Extracted: 11/03/2003 — Analyzed: 11/03/2003 23:15

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Methyl tert-butyl ether (MTBE) | 20.8 | 24.7 | 25 | 83.2 | 98.8 | 17.1 | 65-165 | 20 | | |
| Benzene | 25.1 | 23.2 | 25 | 100.4 | 92.8 | 7.9 | 69-129 | 20 | | |
| Toluene | 25.5 | 25.1 | 25 | 102.0 | 100.4 | 1.6 | 70-130 | 20 | | |
| *Surrogates(s)* | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 444 | 541 | 500 | 88.8 | 108.2 | | 76-130 | | | |
| Toluene-d8 | 498 | 515 | 500 | 99.6 | 103.0 | | 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: 031023-BA1
98995822

Received: 10/24/2003 18:19

Site: 29 Wildwood Ave., Piedmont

### Legend and Notes

**Analysis Flag**

o

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

**Result Flag**

dp

Sample contains discrete peak in addition to gasoline.

LAB: STL

# SHELL Chain Of Custody Record

79542

Lab Identification (if necessary):

Address:

City, State, Zip:

**Shell Project Manager to be Invoiced:** Karen Petryna

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

2003-10-0912

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 8 2 2

SAP or CRMT NUMBER (TS/CRMT):

DATE: 10/23/03

PAGE: 1 of 1

| | | | |
|---|---|---|---|
| Sampling Company: Blaine Tech Services | Lab Code: BTSS | SITE ADDRESS (Street and City): 29 Wildwood Avenue, Piedmont | Global ID No.: T0600101246 |
| Address: 1680 Rogers Avenue, San Jose, CA 95112 | | EDF DELIVERABLE TO (Responsible Party or Designee): Anni Kreml | Phone No.: 510-420-3335 |
| Project Contact (Hardcopy or PDF Report to): Leon Gearhart | | E-mail: ShellOaklandEDF@cambria-env.com | Consultant Project No.: 031023-BA0 |
| Telephone: 408-573-0555 | Fax: 408-573-7771 | E-mail: lgearhart@blainetech.com | BTS #: |
| Sampler Name(s) (Print): Brian Arcoren | | | Lab Use Only |

Turnaround Time (Business Days): ☒ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ 1A - RWQCB REPORT FORMAT ☐ LIST AGENCY:

GCMS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

**REQUESTED ANALYSIS**

| Lab Use Only | Field Sample Identification | Sampling Date | Sampling Time | Matrix | No. of Cont. | TPH - Gas, Purgeable | BTEX | MTBE (8021B - 5ppb RL) | MTBE (8260B - 0.5ppb RL) | Oxygenates (5) by (8260B) | Ethanol (8260B) | Methanol | 1,2-DCA (8260B) | EDB (8260B) | TPH - Diesel, Extractable (8015m) | Temperature on Receipt C° |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW-1 | 10/23 | 1050 | W | 3 | X | X | | | X | | | | | | |
| | MW-2 | | 1100 | | | X | X | | | X | | | | | | |
| | MW-3 | | 1120 | | | X | X | | | X | | | | | | |
| | MW-4 | | 0920 | | | X | X | | | X | | | | | | |
| | MW-5 | " | 0945 | " | " | X | X | | | X | | | | | | |

FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes

4.7

| Relinquished by: (Signature) | Received by: (Signature) | Date | Time |
|---|---|---|---|
| | | 10/24/03 | 1005 |
| Relinquished by: (Signature) 10/24/03 1419 | Received by: (Signature) | Date 10/24/03 | Time 1019 |
| Relinquished by: (Signature) | Received by: (Signature) | Date | Time |

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client

10/14/00 Revision

QEQ Graphic (714) 998-3792

# WELL GAUGING DATA

Project # 031023-BA1 Date 10/23/03 Client Shell

Site 29 Wildwood, Piedmont

| Well ID | 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 | |
|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 4 | | | | | 3.82 | 13.07 | TOC | |
| MW-2 | 4 | | | | | 5.08 | 11.40 | | |
| MW-3 | 4 | | | | | 4.32 | 8.95 | | |
| MW-4 | 4 | | | | | 3.93 | 13.08 | | |
| MW-5 | 4 | | | | | 4.45 | 15.98 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 031023-3A1 | Site: 29 Wildwood Ave, Piedmont |
| Sampler: Brian Allcorn | Date: 10/23/03 |
| Well I.D.: MW-1 | Well Diameter: 2 3 (4) 6 8 ____ |
| Total Well Depth (TD): 13.07 | Depth to Water (DTW): 3.82 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.67 | |

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

6.1 (Gals.) X 3 = 18.3 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 | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1024 | 70.6 | 7.3 | 820 | 42 | 6.1 | clear, mild odor |
| 1026 | 69.6 | 7.1 | 808 | 45 | 12.2 | " |
| 1026 | Well Dewatered @ | | 12 gallons | | | DTW 8.62 |
| 1050 | 67.7 | 7.1 | 815 | 74 | 12.2 | clear w/ black debris, odor DTW 3.77 |
| | | | | | | |

Did well dewater? (Yes) No Gallons actually evacuated: 12.2

Sampling Date: 10/23/03 Sampling Time: 1050 Depth to Water: 3.77

Sample I.D.: MW-1 Laboratory: (STL) Other_____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxys All by 8260

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:) | 3.9 | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | | mV |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 031023-3A1 | Site: 29 WILDWOOD AVE, PIEDMONT |
| Sampler: BRIAN ALLEN | Date: 10/23/03 |
| Well I.D.: MW-2 | Well Diameter: 2 3 (4) 6 8 ____ |
| Total Well Depth (TD): 11.40 | Depth to Water (DTW): ~~11~~ 5.08 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.34 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, (Electric Submersible), Waterra Peristaltic, Extraction Pump, Other____

Sampling Method: ~~Bailer~~, (Disposable Bailer), Extraction Port, Dedicated Tubing, Other: ____

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 | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 0956 | 72.4 | 6.4 | 2,204 | 459 | 4.1 | cloudy strong light gray, odor, sheen |
| 0957 | Well | Dewatered @ | 6 gallons | | | DTW 9.57 |
| 1100 | 71.8 | 6.9 | 1,494 | 383 | 6.0 | " |
| Replaced ORCs | | | | | | |

* Note: Due to dirty condition of well, disposable bailer used + DO reading taken in cup

| | | | |
|---|---|---|---|
| Did well dewater? (Yes) No | | Gallons actually evacuated: 6 | |
| Sampling Date: 10/23/03 | Sampling Time: 1100 | Depth to Water: 6.32 | |
| Sample I.D.: MW-2 | | Laboratory: (STL) Other____ | |
| Analyzed for: ~~TPH-G~~ ~~BTEX~~ MTBE TPH-D | | Other: Oxys ALL by 8260 | |
| 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): | 0.8 mg/L (NEW CUP) |
| O.R.P. (if req'd): Pre-purge: | mV | Post-purge: | mV |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 031023-BA1 | Site: 29 Wildwood Ave, Piedmont |
| Sampler: Brian Alcorn | Date: 10/23/03 |
| Well I.D.: MW-3 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): 8.95 | Depth to Water (DTW): 4.32 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.25 | |

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

| 3.0 (Gals.) X | 3 | = | 9.0 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 | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1011 | 73.6 | 7.7 | 1,131 | 140 | 3.0 | clear, mild odor |
| 1012 | 74.4 | 7.8 | 1,090 | 81 | 6.0 | " |
| 1012 | Well | Dewatered @ | 6 gallons | | | DTW 6.73 |
| 1120 | 72.5 | 7.5 | 1,057 | 42 | 6.0 | " DTW 4.32 |
| Replaced ORCs | | | | | | |

Did well dewater? (Yes) No Gallons actually evacuated: 6

Sampling Date: 10/23/03 Sampling Time: 1120 Depth to Water: 4.32

Sample I.D.: MW-3 Laboratory: (STL) Other_____

Analyzed for: ~~TPH-G~~ ~~BTEX~~ MTBE TPH-D Other: Oxys All by 8260

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:) | 1.0 | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | | mV |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 031023-BA1 | Site: 29 Wildwood Ave, Piedmont |
| Sampler: Brian Alcorn | Date: 10/23/03 |
| Well I.D.: MW-4 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): 13.08 | Depth to Water (DTW): 3.93 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.76 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: (Bailer), Disposable Bailer, Extraction Port, Dedicated Tubing, Other: _____

| 1 Case Volume | Specified Volumes | Calculated Volume |
|---|---|---|
| 6.0 (Gals.) X | 3 | = 18.0 Gals. |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 0915 | 70.3 | 7.1 | 506 | 36 | 6.0 | clear, mild odor |
| 0916 | 70.4 | 7.1 | 509 | 94 | 12.0 | " |
| 0916 | Well Dewatered @ 12 gallons | | | | | DTW 9.77 |
| 0920 | 71.8 | 7.0 | 525 | >1,000 | 12.0 | cloudy mild gray, odor |
| | | | | | | |

Did well dewater? (Yes) No Gallons actually evacuated: 12

Sampling Date: 10/23/03 Sampling Time: 0920 Depth to Water: 9.77 TRAFFIC WELL

Sample I.D.: MW-4 Laboratory: (STL) Other_____

Analyzed for: ~~TPH-G~~ ~~BTEX~~ MTBE TPH-D Other: Oxys ALL by 8260

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:) | 2.0 | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | | mV |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 031023-3A1 | Site: 29 Wildwood Ave, Piedmont |
| Sampler: Brian Allcorn | Date: 10/23/03 |
| Well I.D.: MW-5 | Well Diameter: 2 3 (4) 6 8 ____ |
| Total Well Depth (TD): 15.98 | Depth to Water (DTW): 4.45 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.76 | |

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible); Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

7.5 (Gals.) X 3 = 22.5 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 | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 0938 | 69.8 | 7.1 | 755 | 111 | 7.5 | cloudy, mild sewage odor |
| 0940 | 70.8 | 7.1 | 756 | 34 | 15.0 | clear, mild odor |
| 0942 | 71.1 | 7.1 | 765 | 19 | 22.5 | " DTW 6.89 |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 22.5

Sampling Date: 10/23/03 Sampling Time: 0945 Depth to Water: 6.88 TRAFFIC WELL

Sample I.D.: MW-5 Laboratory: (STL) Other____

Analyzed for: ~~TPH-G~~ ~~BTEX~~ MTBE TPH-D Other: Oxys All by 8260

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:) | 1.8 | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | | mV |