RO-404

CAMBRIA

August 7, 2002

eva chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: **First and Second Quarter 2002 Monitoring Report**
Former Shell Service Station
8930 Bancroft Avenue
Oakland, California
Incident #98995742
Cambria Project #244-1408-002

AUG 12 2002

Dear Ms. chu:

Effective March 1, 2002, Equiva Services LLC and Equilon Enterprises LLC are now doing business as (dba) Shell Oil Products US (Shell). On behalf of Shell, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

## REMEDIATION SUMMARY

Weekly groundwater extraction (GWE) was performed on well MW-4 during March through May 2000. Approximately 1,075 gallons of water were extracted from the well, and an estimated 0.1 pounds of methyl tertiary butyl ether were removed. GWE was discontinued due to low extraction volumes.

## FIRST QUARTER 2002 ACTIVITIES

***Groundwater Monitoring:*** On February 26, 2002, Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells. Blaine calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map which 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.

Oakland, CA
San Ramon, CA
Sonoma, CA

**Cambria Environmental Technology, Inc.**

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

Separate phase hydrocarbons (SPH) were encountered in well MW-5 during the sampling event. Blaine returned to the site on March 12, 2002, measured SPH thickness in well MW-5, and collected an SPH sample from well MW-5. The SPH sample collected from well MW-5 was inadvertently not transported within hold time to an analytical laboratory, and it was therefore not analyzed. As stated below, Blaine resampled SPH detected in well MW-5 during the second quarter 2002 monitoring event.

***Oxygenate Analysis:*** As requested in a February 27, 2002 Alameda County Health Care Services correspondence, collected quarterly samples were analyzed additionally for diisopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, tertiary butyl alcohol, 1,2-dichloroethane and 1,2-dibromoethane. None of the additional analytes were detected in the site wells. Analytical results are presented in Table 1.

***Oxygen Releasing Compound (ORC):*** As recommended in our November 26, 2001 *Third Quarter 2001 Monitoring Report*, Blaine installed ORC in well MW-4 during the fourth quarter 2001 to enhance the biological degradation of residual chemicals in groundwater at the site. The ORC in well MW-4 will be replaced approximately every six months. To monitor the ORC effectiveness, Blaine measured dissolved oxygen (DO) concentrations in well MW-4 and in upgradient (background) well MW-3.

## SECOND QUARTER 2002 ACTIVITIES

***Groundwater Monitoring:*** On June 6, 2002, Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells. Blaine calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map which includes previously submitted well survey information (Figure 1) and a groundwater elevation contour map (Figure 3). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment B.

SPH were encountered in well MW-5 during the sampling event. Blaine collected an SPH sample from well MW-5 which was submitted to Westhollow Technology Center (WTC) of Houston, Texas. The analytical report is included as Attachment C. According to WTC, the SPH sample collected from well MW-5 contained unleaded, weathered gasoline most likely regular grade product produced after 1996. The SPH sample collected from well MW-5 did not match samples collected from dispenser number 1 of each grade gasoline sold onsite. Based on the laboratory results, it could not be determined whether the SPH encountered are in well MW-5 as a result of a more recent or a previous release. Shell has not owned or operated underground

storage tanks at the site since 1999. Prior to February 2002, no SPH had been encountered at the site. Soil samples collected during site demolition in July 1999 from beneath the tanks, dispensers and piping removed by Shell did not contain any total petroleum hydrocarbons as gasoline (TPHg) or benzene, except for 3.2 parts per million (ppm) TPHg in tank sample T1-2-13' and 12 ppm TPHg in sample P-5-4' (see Attachment D).

***ORC:*** The ORC installed in well MW-4 was replaced during the second quarter 2002 monitoring event.

## ANTICIPATED THIRD QUARTER 2002 ACTIVITIES

***Groundwater Monitoring:*** Blaine will gauge and sample selected site wells, measure DO concentrations in selected site wells, and tabulate the data. Cambria will prepare a monitoring report.

***Short-Term Mobile GWE:*** Based on the recent SPH detections in well MW-5 and the inconclusive SPH analytical results, Shell will voluntarily conduct short-term GWE from well MW-5. Cambria will coordinate four weekly mobile GWE events at the site beginning in August 2002. Mobile GWE is the process of extracting groundwater from wells using a vacuum truck. In this process, the vacuum created by the truck is applied to a dedicated extraction "stinger" installed in the extraction well. The extracted water is contained by the truck and removed from the site for disposal. The volume of extracted fluid is recorded and used to calculate the quantity of aqueous-phase constituents removed from the subsurface. During the first two GWE events, SPH thickness in well MW-5 will be gauged prior to extraction, and if no SPH are detected, grab groundwater samples will be collected prior to GWE. In addition, groundwater samples will be collected from well MW-5 following extraction during the first two events. During the third and fourth events, groundwater samples will be collected following GWE only. Mass removal data will be presented in forthcoming quarterly monitoring reports, and continued groundwater extraction will be based on extracted groundwater volumes and groundwater concentration trends.

***ORC:*** The ORC installed in well MW-4 is due to be replaced during the fourth quarter 2002 monitoring event.

## CLOSING

We appreciate the opportunity to work with you on this project. Please call Jacquelyn Jones at (510) 420-3316 if you have any questions or comments.

Sincerely,
**Cambria Environmental Technology, Inc**

Jacquelyn L. Jones
Project Geologist

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


Figures: 1 - Vicinity/Well Survey Map
2 - Groundwater Elevation Contour Map – February 26, 2002
3 - Groundwater Elevation Contour Map – June 6, 2002

Table: 1 - Oxygenates

Attachments: A - Blaine Groundwater Monitoring Report and Field Notes – First Quarter 2002
B - Blaine Groundwater Monitoring Report and Field Notes – Second Quarter 2002
C - Laboratory Analytical Reports for SPH Sampling
D - Previous Soil Sampling Results

cc: Karen Petryna, Shell Oil Products US, P.O. Box 7869, Burbank, CA 91510-7869
Leroy Griffin, Fire Prevention Bureau, 250 Frank Ogawa Plaza, 3rd Floor, Suite 3341, Oakland, CA 94612
Sidhu Associates, 8930 Bancroft Ave., Oakland, CA 94605

\\1OAKDC\SHELL\Oakland 8930 Bancroft\QM\1q02\1q02qm.doc

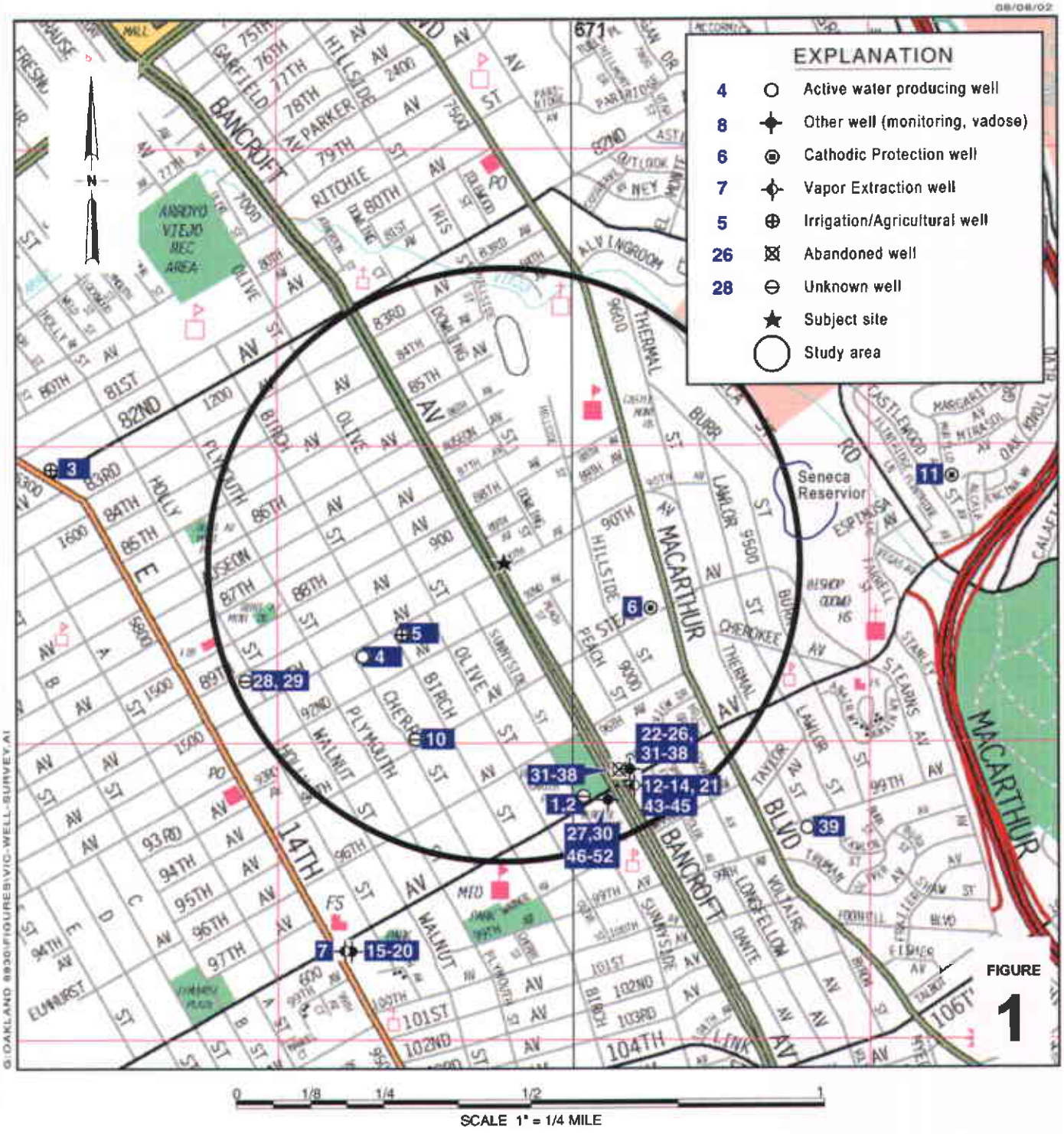



FIGURE 1

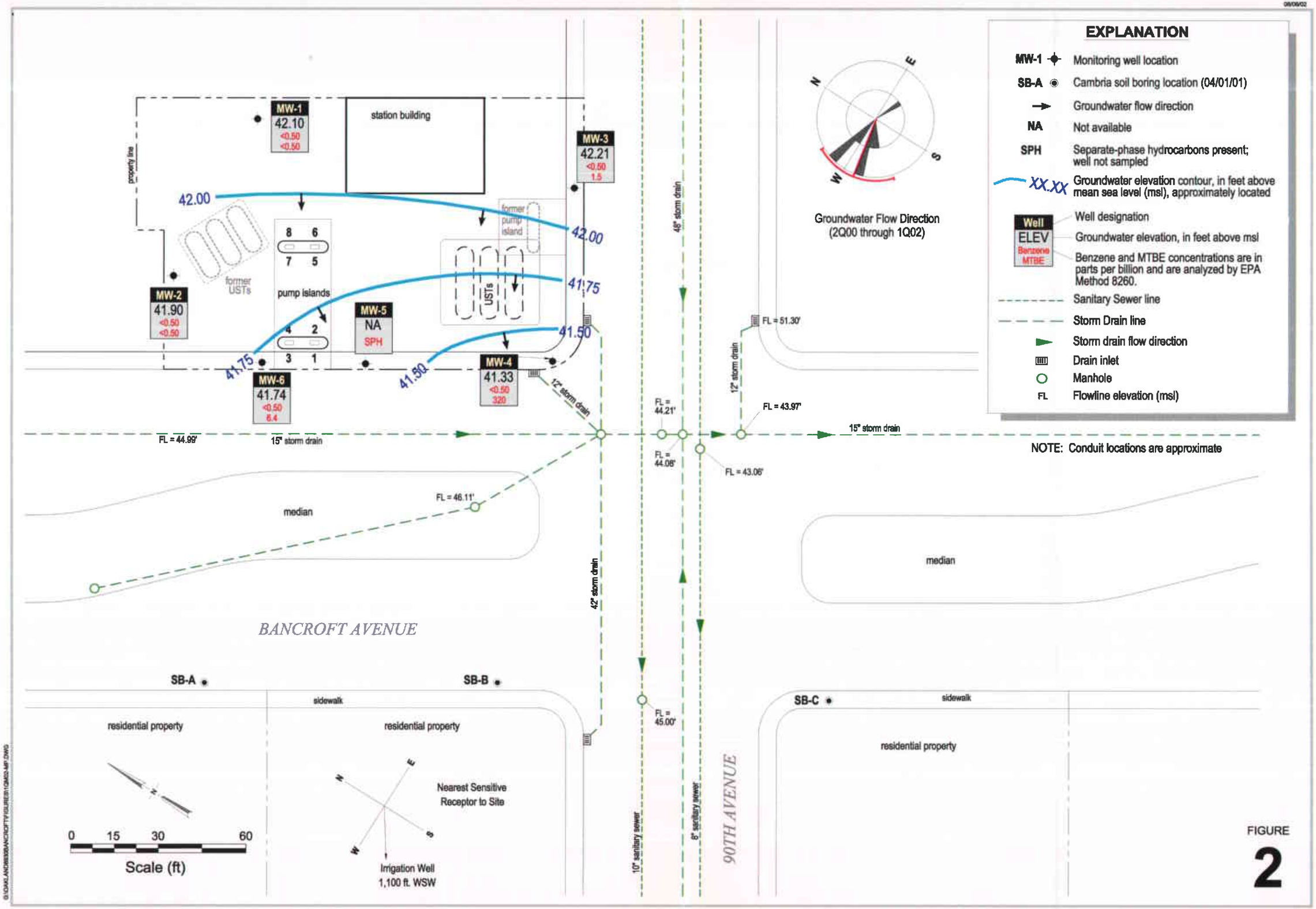
**Former Shell-branded Station**
8930 Bancroft Avenue
Oakland, California
Incident #98995742

CAMBRIA

**Vicinity / Well Survey Map**
(1/2 Mile Radius)

# Groundwater Elevation Contour Map

February 26, 2002




Groundwater Flow Direction
(2Q00 through 1Q02)

## EXPLANATION

- MW-1 — Monitoring well location
- SB-A — Cambria soil boring location (04/01/01)
- Groundwater flow direction
- NA — Not available
- SPH — Separate-phase hydrocarbons present; well not sampled
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located
- Well designation
- ELEV — Groundwater elevation, in feet above msl
- Benzene / MTBE — Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.
- Sanitary Sewer line
- Storm Drain line
- Storm drain flow direction
- Drain inlet
- Manhole
- FL — Flowline elevation (msl)

NOTE: Conduit locations are approximate

FIGURE

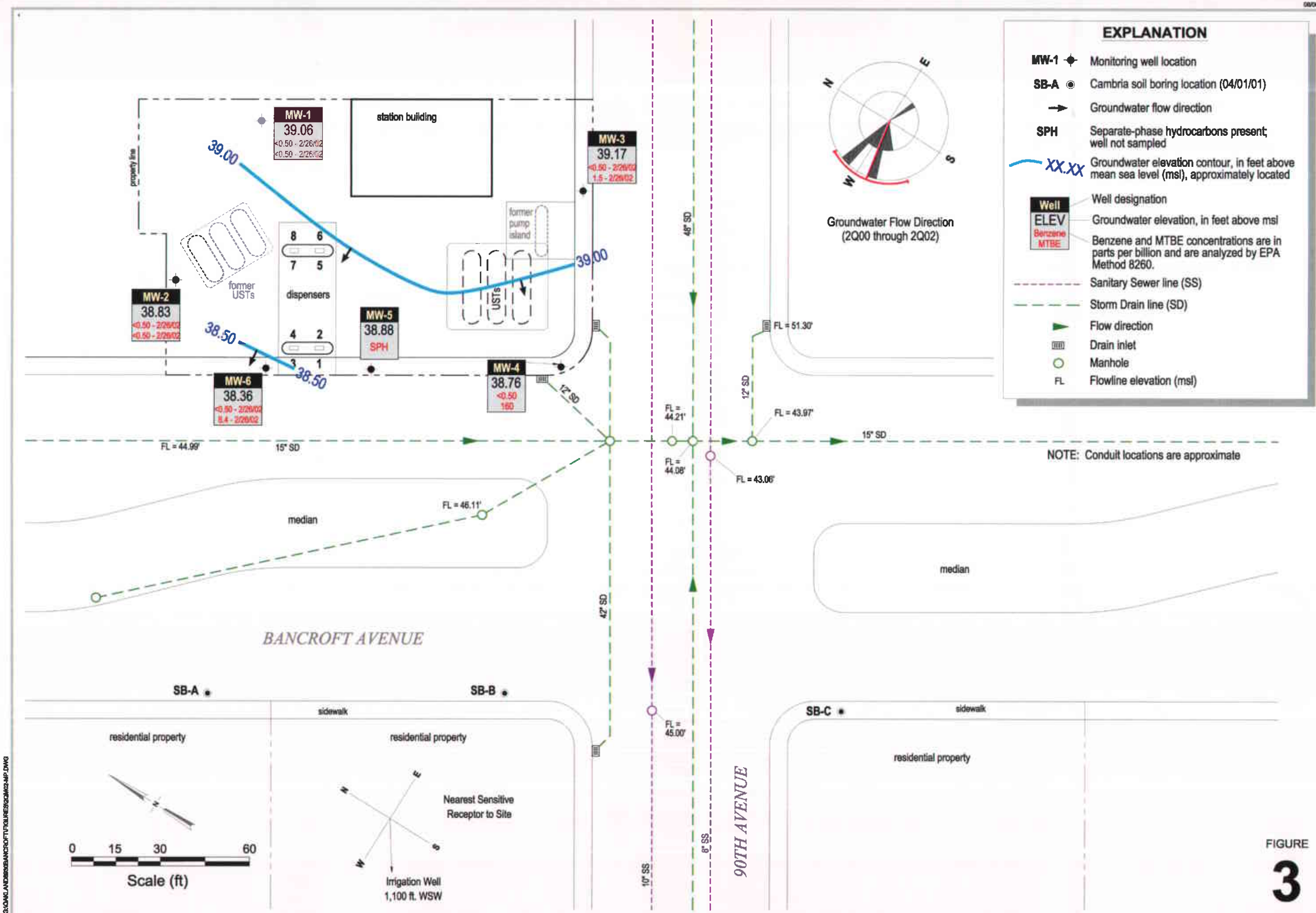
**2**

**Former Shell-branded Station**
8930 Bancroft Avenue
Oakland, California
Incident #98995742

CAMBRIA

# Groundwater Elevation Contour Map

June 6, 2002




## EXPLANATION

- MW-1 — Monitoring well location
- SB-A — Cambria soil boring location (04/01/01)
- Groundwater flow direction
- SPH — Separate-phase hydrocarbons present; well not sampled
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located
- Well / ELEV / Benzene / MTBE
  - Well designation
  - Groundwater elevation, in feet above msl
  - Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.
- Sanitary Sewer line (SS)
- Storm Drain line (SD)
- Flow direction
- Drain inlet
- Manhole
- FL — Flowline elevation (msl)

CAMBRIA

**Former Shell-branded Station**
8930 Bancroft Avenue
Oakland, California
Incident #98995742

FIGURE
**3**

G:\QM\CLANDB\9BANCROFT\FIGURES\QM0624P.DWG

**Table 1.** **Groundwater Analytical Data - Oxygenates** - Former Shell Service Station, Incident #98995742, 8930 Bancroft Avenue, Oakl

| Sample ID | Date Sampled | MTBE | DIPE | ETBE | TAME | TBA | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|
| | | ← (Concentrations in ppb) → | | | | | | |
| MW-1 | 02/26/02 | <0.50 | <2.0 | <2.0 | <2.0 | <50 | <2.0 | <2.0 |
| MW-2 | 02/26/02 | <0.50 | <2.0 | <2.0 | <2.0 | <50 | <2.0 | <2.0 |
| MW-3 | 02/26/02 | **1.5** | <2.0 | <2.0 | <2.0 | <50 | <2.0 | <2.0 |
| MW-4 | 02/26/02 | **320** | <2.0 | <2.0 | <2.0 | <50 | <2.0 | <2.0 |
| MW-5 | 02/26/02 | **6.4** | <2.0 | <2.0 | <2.0 | <50 | <2.0 | <2.0 |

**Abbreviations:**

MTBE = Methyl tert-butyl ether, analyzed by 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
1,2-DCA = 1,2-dichloroethane, analyzed by EPA Method 8260
EDB = 1,2-dibromomethane or ethlyene dibromide, analyzed by EPA Method 8260
ppb = Parts per billion

# ATTACHMENT A

## Blaine Groundwater Monitoring Report and Field Notes – First Quarter 2002

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

March 19, 2002

Karen Petryna
Equiva Services LLC
P.O. Box 7869
Burbank, CA 91510-7869

First Quarter 2002 Groundwater Monitoring at
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA

Monitoring performed on February 26 and
March 12, 2002

Groundwater Monitoring Report **020226-SO-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. Purgewater (if applicable) is, likewise, collected and transported to the Shell Martinez Manufacturing Complex.

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/mrb

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

cc: Anni Kreml
Cambria Environmental Technology, Inc.
1144 65th Street, Suite C
Oakland, CA 94608-2411

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 12/17/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 53.19 | 11.87 | NA | 41.32 | NA | NA |
| MW-1 | 03/09/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 8.21 | NA | 44.98 | NA | NA |
| MW-1 | 06/16/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 15.04 | NA | 38.15 | NA | NA |
| MW-1 | 09/30/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 16.02 | NA | 37.17 | NA | NA |
| MW-1 | 12/23/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 14.78 | NA | 38.41 | NA | NA |
| MW-1 | 03/22/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 8.44 | NA | 44.75 | NA | NA |
| MW-1 | 06/01/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 13.71 | NA | 39.48 | NA | NA |
| MW-1 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 14.95 | NA | 38.24 | NA | NA |
| MW-1 | 12/04/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 5.82 | NA | 53.19 | 13.85 | NA | 39.34 | NA | NA |
| MW-1 | 03/09/2001 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 9.07 | NA | 44.12 | NA | NA |
| MW-1 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 53.19 | 14.90 | NA | 38.29 | NA | NA |
| MW-1 | 09/20/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 53.19 | 15.53 | NA | 37.66 | NA | NA |
| MW-1 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 53.19 | 10.41 | NA | 42.78 | NA | 3.8 |
| **MW-1** | **02/26/2002** | **<50** | **NA** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **NA** | **<0.50** | **53.19** | **11.09** | **NA** | **42.10** | **NA** | **NA** |
| MW-2 | 12/17/1998 | 9,900 | NA | <5.0 | 37 | 22 | 47 | 48 | <20 | 52.66 | 11.65 | NA | 41.01 | NA | NA |
| MW-2 | 03/09/1999 | 2,760 | NA | 12.3 | 7.50 | 85.4 | 444 | <50.0 | NA | 52.66 | 8.07 | NA | 44.59 | NA | NA |
| MW-2 | 06/16/1999 | 2,570 | NA | 36.3 | 11.6 | 6.19 | 10.8 | <50.0 | NA | 52.66 | 14.63 | NA | 38.03 | NA | NA |
| MW-2 | 09/30/1999 | 1,960 | NA | 19.1 | 3.20 | 4.55 | 26.9 | <25.0 | NA | 52.66 | 15.63 | NA | 37.03 | NA | NA |
| MW-2 | 12/23/1999 | 145 | NA | 1.30 | <0.500 | <0.500 | 0.899 | <2.50 | NA | 52.66 | 14.42 | NA | 38.24 | NA | NA |
| MW-2 | 03/22/2000 | 6,060 | NA | 18.9 | <10.0 | 210 | 651 | <100 | NA | 52.66 | 8.19 | NA | 44.47 | NA | NA |
| MW-2 | 06/01/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 52.66 | 11.46 | NA | 41.20 | NA | NA |
| MW-2 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 52.66 | 14.63 | NA | 38.03 | NA | NA |
| MW-2 | 12/04/2000 | 201 | NA | 1.35 | <0.500 | 3.39 | 8.58 | <2.50 | NA | 52.66 | 13.45 | NA | 39.21 | NA | NA |
| MW-2 | 03/09/2001 | 396 | NA | 2.82 | <0.500 | 8.69 | 18.7 | <2.50 | NA | 52.66 | 8.89 | NA | 43.77 | NA | NA |
| MW-2 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 52.66 | 14.88 | NA | 37.78 | NA | NA |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 09/20/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 52.66 | 15.19 | NA | 37.47 | NA | NA |
| MW-2 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 52.66 | 10.02 | NA | 42.64 | NA | 2.8 |
| **MW-2** | **02/26/2002** | **180** | **NA** | **<0.50** | **<0.50** | **2.7** | **4.1** | **NA** | **<0.50** | **52.66** | **10.76** | **NA** | **41.90** | **NA** | **NA** |
| MW-3 | 12/17/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 10 | 11 | 51.30 | 11.85 | NA | 39.45 | NA | NA |
| MW-3 | 03/09/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 51.30 | 6.53 | NA | 44.77 | NA | NA |
| MW-3 | 06/16/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 51.30 | 12.71 | NA | 38.59 | NA | NA |
| MW-3 | 09/30/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 5.14 | NA | 51.30 | 14.07 | NA | 37.23 | NA | NA |
| MW-3 | 12/23/1999 | <500 | NA | <5.00 | <5.00 | <5.00 | <5.00 | <25.0 | NA | 51.30 | 12.82 | NA | 38.48 | NA | NA |
| MW-3 | 03/22/2000 | <50.0 | NA | <0.500 | 1.48 | <0.500 | 1.90 | <5.00 | NA | 51.30 | 6.81 | NA | 44.49 | NA | NA |
| MW-3 | 06/01/2000 | <50.0 | NA | <0.500 | 0.821 | <0.500 | <0.500 | 4.39 | NA | 51.30 | 11.85 | NA | 39.45 | NA | NA |
| MW-3 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 3.62 | NA | 51.30 | 12.55 | NA | 38.75 | NA | NA |
| MW-3 | 12/04/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | 0.588 | 4.74 | NA | 51.30 | 11.65 | NA | 39.65 | NA | NA |
| MW-3 | 03/09/2001 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 51.30 | 7.28 | NA | 44.02 | NA | NA |
| MW-3 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 51.30 | 13.16 | NA | 38.14 | NA | NA |
| MW-3 | 09/20/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 51.30 | 13.35 | NA | 37.95 | NA | NA |
| MW-3 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 51.30 | 8.14 | NA | 43.16 | NA | 1.2 |
| **MW-3** | **02/26/2002** | **<50** | **NA** | **<0.50** | **7.2** | **<0.50** | **<0.50** | **NA** | **1.5** | **51.30** | **9.09** | **NA** | **42.21** | **NA** | **0.6** |
| MW-4 | 12/17/1998 | 700 | NA | 4.3 | 0.88 | <0.50 | <0.50 | 21,000 | 26,000 | 50.73 | 10.80 | NA | 39.93 | NA | NA |
| MW-4 | 03/09/1999 | 83.9 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 17,900 | 23,700 | 50.73 | 6.91 | NA | 43.82 | NA | NA |
| MW-4 | 06/16/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 10,600 | 19,200 | 50.73 | 12.84 | NA | 37.89 | NA | NA |
| MW-4 | 09/30/1999 | 51.2 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 12,200 | 12,300 | 50.73 | 13.74 | NA | 36.99 | NA | NA |
| MW-4 | 12/23/1999 | <100 | NA | <1.00 | <1.00 | <1.00 | <1.00 | 7,990 | 8,400 | 50.73 | 12.40 | NA | 38.33 | NA | NA |
| MW-4 | 03/22/2000 | <500 | NA | <5.00 | <5.00 | <5.00 | <5.00 | 4,970 | 5,020 | 50.73 | 7.32 | NA | 43.41 | NA | NA |
| MW-4 | 06/01/2000 | <100 | NA | <1.00 | <1.00 | <1.00 | <1.00 | 5,260 | 3,580 | 50.73 | 11.50 | NA | 39.23 | NA | NA |
| MW-4 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 3,610 | 3,300a | 50.73 | 12.55 | NA | 38.18 | NA | NA |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 12/04/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 2,960 | 3,520a | 50.73 | 11.77 | NA | 38.96 | NA | NA |
| MW-4 | 03/09/2001 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 1,930 | 2,500 | 50.73 | 7.48 | NA | 43.25 | NA | NA |
| MW-4 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 1,100 | 1,100 | 50.73 | 12.97 | NA | 37.76 | NA | NA |
| MW-4 | 09/20/2001 | <250 | NA | 3.8 | 14 | 2.6 | 7.8 | NA | 940 | 50.73 | 13.30 | NA | 37.43 | NA | NA |
| MW-4 | 12/05/2001 | <200 | NA | <2.0 | <2.0 | <2.0 | <2.0 | NA | 750 | 50.73 | 8.41 | NA | 42.32 | NA | 1.2 |
| **MW-4** | **02/26/2002** | **<50** | **NA** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **NA** | **320** | **50.73** | **9.40** | **NA** | **41.33** | **NA** | **0.7** |
| MW-5 | 12/17/1998 | 750 | NA | <0.50 | 17 | 1.8 | 3.5 | 33 | 32 | 51.43 | 11.51 | NA | 39.92 | NA | NA |
| MW-5 | 03/09/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 51.43 | 7.15 | NA | 44.28 | NA | NA |
| MW-5 | 06/16/1999 | 646 | NA | 9.26 | 1.05 | <1.00 | <1.00 | <10.0 | NA | 51.43 | 13.47 | NA | 37.96 | NA | NA |
| MW-5 | 09/30/1999 | 484 | NA | 1.93 | 0.511 | <0.500 | <0.500 | 159 | NA | 51.43 | 14.41 | NA | 37.02 | NA | NA |
| MW-5 | 12/23/1999 | 944 | NA | 4.59 | 17.7 | 3.79 | 16.7 | 214 | NA | 51.43 | 14.07 | NA | 37.36 | NA | NA |
| MW-5 | 03/22/2000 | 8,770 | NA | 197 | 96.5 | <50.0 | 188 | 2,450 | NA | 51.43 | 7.31 | NA | 44.12 | NA | NA |
| MW-5 | 06/01/2000 | 227 | NA | 0.565 | <0.500 | <0.500 | <0.500 | 35.9 | NA | 51.43 | 12.15 | NA | 39.28 | NA | NA |
| MW-5 | 09/08/2000 | 159 | NA | 0.606 | <0.500 | <0.500 | 1.74 | 1,000 | NA | 51.43 | 13.30 | NA | 38.13 | NA | NA |
| MW-5 | 12/04/2000 | 1,510 | NA | 19.2 | <10.0 | <10.0 | 134 | 1,360 | NA | 51.43 | 12.19 | NA | 39.24 | NA | NA |
| MW-5 | 03/09/2001 | 3,460 | NA | 37.9 | 121 | 40.6 | 208 | 235 | NA | 51.43 | 7.79 | NA | 43.64 | NA | NA |
| MW-5 | 06/27/2001 | 310 | NA | 0.97 | <0.50 | <0.50 | <0.50 | 14 | NA | 51.43 | 13.89 | NA | 37.54 | NA | NA |
| MW-5 | 09/20/2001 | 310 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 21 | 51.43 | 13.95 | NA | 37.48 | NA | NA |
| MW-5 | 12/05/2001 | 8,800 | NA | 14 | 2.9 | 33 | 410 | NA | 2,300 | 51.43 | 8.89 | NA | 42.54 | NA | 0.6 |
| **MW-5** | **02/26/2002** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **51.43** | **9.87** | **NA** | **NA** | **b** | **NA** |
| **MW-5** | **03/12/2002** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **51.43** | **8.84** | **8.64** | **42.75** | **0.20** | **NA** |
| MW-6 | 12/17/1998 | 940 | NA | 27 | 0.32 | 2.4 | 2.3 | 3.0 | 3.2 | 51.88 | 11.37 | NA | 40.51 | NA | NA |
| MW-6 | 03/09/1999 | 336 | NA | 7.78 | 1.60 | 2.40 | 6.36 | <10.0 | NA | 51.88 | 8.10 | NA | 43.78 | NA | NA |
| MW-6 | 06/16/1999 | 308 | NA | 2.45 | <0.500 | <0.500 | <0.500 | 7.39 | NA | 51.88 | 14.49 | NA | 37.39 | NA | NA |
| MW-6 | 09/30/1999 | 80.2 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 24.8 | NA | 51.88 | 15.30 | NA | 36.58 | NA | NA |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6 | 12/23/1999 | 149 | NA | 0.518 | <0.500 | <0.500 | <0.500 | 6.43 | NA | 51.88 | 13.19 | NA | 38.69 | NA | NA |
| MW-6 | 03/22/2000 | 382 | NA | 3.31 | 2.18 | 0.619 | 2.35 | 5.61 | NA | 51.88 | 8.27 | NA | 43.61 | NA | NA |
| MW-6 | 06/01/2000 | 158 | NA | 0.830 | <0.500 | <0.500 | 1.10 | 10.9 | NA | 51.88 | 11.13 | NA | 40.75 | NA | NA |
| MW-6 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 51.88 | 14.28 | NA | 37.60 | NA | NA |
| MW-6 | 12/04/2000 | 231 | NA | 4.93 | <0.500 | <0.500 | <0.500 | 4.57 | NA | 51.88 | 12.62 | NA | 39.26 | NA | NA |
| MW-6 | 03/09/2001 | 789 | NA | 11.6 | 2.72 | <2.00 | <2.00 | 28.0 | NA | 51.88 | 8.65 | NA | 43.23 | NA | NA |
| MW-6 | 06/27/2001 | 140 | NA | <0.50 | 1.1 | <0.50 | <0.50 | <2.5 | NA | 51.88 | 14.95 | NA | 36.93 | NA | NA |
| MW-6 | 09/20/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 51.88 | 14.70 | NA | 37.18 | NA | NA |
| MW-6 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 51.88 | 9.62 | NA | 42.26 | NA | 1.8 |
| **MW-6** | **02/26/2002** | **130** | **NA** | **<0.50** | **2.6** | **0.69** | **4.1** | **NA** | **6.4** | **51.88** | **10.14** | **NA** | **41.74** | **NA** | **NA** |

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to September 20, 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 September 20, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

SPH = Separate-phase hydrocarbons

GW = Groundwater

ug/L = Parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

NA = Not applicable

DO = Dissolved oxygen

mg/L = Parts per million

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Notes:

a = This sample analyzed outside of EPA recommended holding time.

b = SPH detected in well, but exact thickness could not be measured.

When separate-phase hydrocarbons are present, groundwater elevation is adjusted using the relation:

Groundwater Elevation = Top-of-Casing Elevation - Depth to Water + (0.8 x Hydrocarbon Thickness).

KIFF ANALYTICAL LLC

Report Number : 25014
Date : 3/11/2002

Leon Gearhart
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 5 Water Samples
Project Name : 8930 Bancroft Avenue, Oakland
Project Number : 020226-SO-3
P.O. Number : 98995742

Dear Mr. Gearhart,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 25014
Date : 3/11/2002

Subject : 5 Water Samples
Project Name : 8930 Bancroft Avenue, Oakland
Project Number : 020226-SO-3
P.O. Number : 98995742

# Case Narrative

Matrix Spike/Matrix Spike Duplicate Results associated with samples MW-1, MW-3 for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 25014
Date : 3/11/2002

Project Name : **8930 Bancroft Avenue, Oakland**
Project Number : **020226-SO-3**

Sample : **MW-1** Matrix : Water Lab Number : 25014-01
Sample Date :2/26/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Diisopropyl ether (DIPE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethyl-t-butyl ether (ETBE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-amyl methyl ether (TAME)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-Butanol** | **< 50** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dichloroethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dibromoethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Toluene - d8 (Surr) | 96.7 | | % Recovery | EPA 8260B | 3/8/2002 |
| 4-Bromofluorobenzene (Surr) | 100 | | % Recovery | EPA 8260B | 3/8/2002 |
| Dibromofluoromethane (Surr) | 99.8 | | % Recovery | EPA 8260B | 3/8/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | % Recovery | EPA 8260B | 3/8/2002 |

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 25014
Date : 3/11/2002

Project Name : **8930 Bancroft Avenue, Oakland**
Project Number : **020226-SO-3**

Sample : **MW-2** Matrix : Water Lab Number : 25014-02
Sample Date :2/26/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethylbenzene** | **2.7** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Total Xylenes** | **4.1** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Diisopropyl ether (DIPE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethyl-t-butyl ether (ETBE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-amyl methyl ether (TAME)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-Butanol** | **< 50** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **TPH as Gasoline** | **180** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dichloroethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dibromoethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Toluene - d8 (Surr) | 99.9 | | % Recovery | EPA 8260B | 3/8/2002 |
| 4-Bromofluorobenzene (Surr) | 100 | | % Recovery | EPA 8260B | 3/8/2002 |
| Dibromofluoromethane (Surr) | 104 | | % Recovery | EPA 8260B | 3/8/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 99.1 | | % Recovery | EPA 8260B | 3/8/2002 |

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 25014
Date : 3/11/2002

Project Name : **8930 Bancroft Avenue, Oakland**
Project Number : **020226-SO-3**

Sample : **MW-3** Matrix : Water Lab Number : 25014-03
Sample Date :2/26/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Toluene** | **7.2** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Methyl-t-butyl ether (MTBE)** | **1.5** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Diisopropyl ether (DIPE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethyl-t-butyl ether (ETBE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-amyl methyl ether (TAME)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-Butanol** | **< 50** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dichloroethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dibromoethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Toluene - d8 (Surr) | 98.4 | | % Recovery | EPA 8260B | 3/8/2002 |
| 4-Bromofluorobenzene (Surr) | 99.5 | | % Recovery | EPA 8260B | 3/8/2002 |
| Dibromofluoromethane (Surr) | 101 | | % Recovery | EPA 8260B | 3/8/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 102 | | % Recovery | EPA 8260B | 3/8/2002 |

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 25014
Date : 3/11/2002

Project Name : **8930 Bancroft Avenue, Oakland**
Project Number : **020226-SO-3**

Sample : **MW-4** Matrix : Water Lab Number : 25014-04
Sample Date :2/26/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| **Methyl-t-butyl ether (MTBE)** | **320** | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| **Diisopropyl ether (DIPE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| **Ethyl-t-butyl ether (ETBE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| **Tert-amyl methyl ether (TAME)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| **Tert-Butanol** | **< 50** | 50 | ug/L | EPA 8260B | 3/2/2002 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 3/2/2002 |
| **1,2-Dichloroethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| **1,2-Dibromoethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| Toluene - d8 (Surr) | 102 | | % Recovery | EPA 8260B | 3/2/2002 |
| 4-Bromofluorobenzene (Surr) | 99.0 | | % Recovery | EPA 8260B | 3/2/2002 |
| Dibromofluoromethane (Surr) | 102 | | % Recovery | EPA 8260B | 3/2/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | % Recovery | EPA 8260B | 3/2/2002 |

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 25014
Date : 3/11/2002

Project Name : **8930 Bancroft Avenue, Oakland**
Project Number : **020226-SO-3**

Sample : **MW-6** Matrix : Water Lab Number : 25014-05
Sample Date :2/26/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Toluene** | **2.6** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethylbenzene** | **0.69** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Total Xylenes** | **4.1** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Methyl-t-butyl ether (MTBE)** | **6.4** | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| **Diisopropyl ether (DIPE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Ethyl-t-butyl ether (ETBE)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-amyl methyl ether (TAME)** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **Tert-Butanol** | **< 50** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **TPH as Gasoline** | **130** | 50 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dichloroethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| **1,2-Dibromoethane** | **< 2.0** | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Toluene - d8 (Surr) | 101 | | % Recovery | EPA 8260B | 3/8/2002 |
| 4-Bromofluorobenzene (Surr) | 98.3 | | % Recovery | EPA 8260B | 3/8/2002 |
| Dibromofluoromethane (Surr) | 103 | | % Recovery | EPA 8260B | 3/8/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 94.6 | | % Recovery | EPA 8260B | 3/8/2002 |

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 25014

Date : 3/11/2002

**QC Report : Method Blank Data**

Project Name : **8930 Bancroft Avenue, Oakland**

Project Number : **020226-SO-3**

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/8/2002 |
| Diisopropyl ether (DIPE) | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Ethyl-t-butyl ether (ETBE) | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Tert-amyl methyl ether (TAME) | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Tert-Butanol | < 50 | 50 | ug/L | EPA 8260B | 3/8/2002 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 3/8/2002 |
| 1,2-Dichloroethane | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| 1,2-Dibromoethane | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/8/2002 |
| Toluene - d8 (Surr) | 92.8 | | % | EPA 8260B | 3/8/2002 |
| 4-Bromofluorobenzene (Surr) | 98.1 | | % | EPA 8260B | 3/8/2002 |
| Dibromofluoromethane (Surr) | 93.3 | | % | EPA 8260B | 3/8/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 102 | | % | EPA 8260B | 3/8/2002 |
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 3/2/2002 |
| Diisopropyl ether (DIPE) | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| Ethyl-t-butyl ether (ETBE) | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| Tert-amyl methyl ether (TAME) | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| Tert-Butanol | < 50 | 50 | ug/L | EPA 8260B | 3/2/2002 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 3/2/2002 |
| 1,2-Dichloroethane | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| 1,2-Dibromoethane | < 2.0 | 2.0 | ug/L | EPA 8260B | 3/2/2002 |
| Toluene - d8 (Surr) | 102 | | % | EPA 8260B | 3/2/2002 |
| 4-Bromofluorobenzene (Surr) | 99.9 | | % | EPA 8260B | 3/2/2002 |
| Dibromofluoromethane (Surr) | 102 | | % | EPA 8260B | 3/2/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 101 | | % | EPA 8260B | 3/2/2002 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 25014

**QC Report : Matrix Spike/ Matrix Spike Duplicate**

Date : 3/11/2002

Project Name : **8930 Bancroft Avenue,**

Project Number : **020226-SO-3**

| Parameter | Spiked Sample | Sample Value | Spike Level | Spike Dup. Level | Spiked Sample Value | Duplicate Spiked Sample Value | Units | Analysis Method | Date Analyzed | Spiked Sample Percent Recov. | Duplicate Spiked Sample Percent Recov. | Relative Percent Diff. | Spiked Sample Percent Recov. Limit | Relative Percent Diff. Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 25046-01 | <0.50 | 40.0 | 40.0 | 39.9 | 39.1 | ug/L | EPA 8260B | 3/8/2002 | 99.7 | 97.7 | 2.05 | 70-130 | 25 |
| Toluene | 25046-01 | <0.50 | 40.0 | 40.0 | 39.3 | 38.8 | ug/L | EPA 8260B | 3/8/2002 | 98.3 | 97.0 | 1.28 | 70-130 | 25 |
| Tert-Butanol | 25046-01 | 88 | 200 | 200 | 291 | 283 | ug/L | EPA 8260B | 3/8/2002 | 102 | 97.3 | 4.20 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 25046-01 | 230 | 40.0 | 40.0 | 251 | 252 | ug/L | EPA 8260B | 3/8/2002 | 55.4 | 58.6 | 5.57 | 70-130 | 25 |
| Benzene | 25014-02 | <0.50 | 40.0 | 40.0 | 45.2 | 42.1 | ug/L | EPA 8260B | 3/2/2002 | 113 | 105 | 6.99 | 70-130 | 25 |
| Toluene | 25014-02 | <0.50 | 40.0 | 40.0 | 46.1 | 41.9 | ug/L | EPA 8260B | 3/2/2002 | 115 | 105 | 9.41 | 70-130 | 25 |
| Tert-Butanol | 25014-02 | <5.0 | 200 | 200 | 220 | 206 | ug/L | EPA 8260B | 3/2/2002 | 110 | 103 | 6.64 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 25014-02 | <0.50 | 40.0 | 40.0 | 44.7 | 43.6 | ug/L | EPA 8260B | 3/2/2002 | 112 | 109 | 2.51 | 70-130 | 25 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 25014

**QC Report : Laboratory Control Sample (LCS)**

Date : 3/11/2002

Project Name : **8930 Bancroft Avenue,**

Project Number : **020226-SO-3**

| Parameter | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|---|---|---|---|---|---|---|
| Benzene | 40.0 | ug/L | EPA 8260B | 3/8/2002 | 107 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 3/8/2002 | 98.6 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 3/8/2002 | 103 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 3/8/2002 | 97.1 | 70-130 |
| | | | | | | |
| Benzene | 40.0 | ug/L | EPA 8260B | 3/2/2002 | 109 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 3/2/2002 | 108 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 3/2/2002 | 105 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 3/2/2002 | 110 | 70-130 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

# EQUIVA Services LLC Chain Of Custody Record

LAB: _____

Lab Identification (if necessary):

Address:

City, State, Zip:

**Equiva Project Manager to be invoiced:**

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ GMT HOUSTON

Karen Petryna

25014

INCIDENT NUMBER (SAP ONLY): 98995742

SAP or CMT NUMBER (TSI/CRMT):

DATE: 2/26/02

PAGE: 1 of 1

| SAMPLING COMPANY | LOG CODE |
|---|---|
| Blaine Tech Services | BTSS |

ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112

PROJECT CONTACT (Hardcopy or PDF Report to): Leon Gearhart

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

SITE ADDRESS (Street and City): 8930 Bancroft Avenue, Oakland

GLOBAL ID NO.:

EDF DELIVERABLE TO (Responsible Party or Designee): Aarti Kremi PHONE NO: 510-420-3335 E-MAIL: ShellOaklandEDF@cambria-env.com CONSULTANT PROJECT NO: BTS # 020226-SO

SAMPLER NAME(S) (Print): Shawn O'Bryan

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 ☐ UST AGENCY: _____

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED ☑

REQUESTED ANALYSIS

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | NO. OF CONT. | TPH - Gas, Purgeable | BTEX | MTBE (8021B - 3ppb RL) | MTBE (8260B - 0.5ppb RL) | Oxygenates (5) by (8260B) | Ethanol (8260B) | Methanol | 1,2-DCA (8260B) | EDB (8260B) | TPH - Diesel, Extractable (8015m) | MTBE (8260B) Confirmation, See Note | MTBE Confirmation TBA | TEMPERATURE ON RECEIPT C° |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW-1 | 2/26/02 | 1214 | W | 3 | X | X | X | | | | | X | X | | | X | X |
| | MW-2 | | 1207 | | | X | X | X | | | | | X | X | | | X | X |
| | MW-3 | | 1218 | | | X | X | X | | | | | X | X | | | X | X |
| | MW-4 | | 1306 | | | X | X | X | | | | | X | X | | | X | X |
| | MW-6 | ↓ | 1253 | ↓ | 6 | X | X | X | | | | | X | X | | | X | X |

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

| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
|---|---|---|---|
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |

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

C&G Graphic (714) 956-9702

10/16/00 Revision

# EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

**Equiva Project Manager to be invoiced:** Karen Petryna

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

25014

INCIDENT NUMBER (S&E ONLY): 98995742

SAP or CRMT NUMBER (TS/CRMT):

DATE: 2/26/02

PAGE: 1 of 1

| SAMPLING COMPANY: | LOG CODE: | SITE ADDRESS (Street and City): | GLOBAL ID NO.: |
|---|---|---|---|
| Blaine Tech Services | BTSS | 8930 Bancroft Avenue, Oakland | |

ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112

PROJECT CONTACT (Hardcopy or PDF Report to): Leon Gearhart

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

EDF DELIVERABLE TO (Responsible Party or Designee): Anni Kremi PHONE NO.: 510-420-3335 E-MAIL: ShellOaklandEDF@cambria-env.com CONSULTANT PROJECT NO.: BTS # 020226-SD2

SAMPLER NAME(S) (Print): Shawn O'Bryan

LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS 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) | MTBE (8260B) Confirmation, See Note | TEMPERATURE ON RECEIPT C° |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW-1 | 2/26/02 | 1218 | W | 3 | X | X | X | | | | | | | | | -01 |
| | MW-2 | " | 1207 | " | " | X | X | X | | | | | | | | | -02 |
| | MW-3 | " | 1208 | " | " | X | X | X | | | | | | | | | -03 |
| | MW-4 | " | 1306 | " | " | X | X | X | | | | | | | | | -04 |
| | MW-6 | ✓ | 1233 | ✓ | 2 | X | X | X | | | | | | | | | -05 |

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

| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
|---|---|---|---|
| | | 2/27/02 | 11:16 |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| | | | |
| Relinquished by: (Signature) | Received by: (Signature) John Cuttle / Kiff Analytical | Date: 022702 | Time: 1122 |

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

10/16/00 Revision

O&Q Graphic (714) 898-9702

# WELL GAUGING DATA

Project # 020312-MM2 Date 3/12/02 Client Equiva

Site 8930 Bancroft Oakland CA

| 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-5 | 3 | | 8.64 | 0.20 | | 8.84 | - | TOC | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020312-MM2 | Site: 8930 BANCROFT, OAKLAND |
| Sampler: [redacted] MJM | Date: 3-12-02 |
| Well I.D.: MW1 (89 OCTANE) | Well Diameter: 2 3 4 6 8 ___ |
| Total Well Depth: | Depth to Water: |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method:
Bailer / Disposable Bailer / Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other:_____

_____(Gals.) X _____ = _____ 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: 1612 Sampling Date: 3-12-02

Sample I.D.: 89 OCTANE Laboratory: Sequoia Columbia Other WEST HOLLOW

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

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

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

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

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020312-MM2 | Site: 8930 BANCROFT, OAKLAND |
| Sampler: [redacted] MJM | Date: 3-12-02 |
| Well I.D.: Pump (87 OCTANE) | Well Diameter: 2 3 4 6 8 |
| Total Well Depth: | Depth to Water: |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method:
Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other_____

Sampling Method:
Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other:_____

_____(Gals.) X _____ = _____ 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: ~~87 OCTANE~~ 1611 Sampling Date: 3-12-02

Sample I.D.: 87 OCTANE Laboratory: Sequoia Columbia Other WEST HAZMAT

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

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

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

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

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020512-MM2 | Site: 8930 BANCROFT, OAKLAND |
| Sampler: MATHEW | Date: 3-12-02 |
| Well I.D.: PUMP (91 OCTANE) | Well Diameter: 2 3 4 6 8 ___ |
| Total Well Depth: | Depth to Water: |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other_____

Sampling Method: Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: _____

_____(Gals.) X _____ = _____ 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | |
|---|---|---|---|
| Did well dewater? Yes No | | Gallons actually evacuated: | |
| Sampling Time: 1613 | | Sampling Date: 3-12-02 | |
| Sample I.D.: 91 OCTANE | | Laboratory: Sequoia Columbia Other WEST HAZCON | |
| Analyzed for: TPH-G BTEX MTBE TPH-D Other: FUEL FINGER PRINT | | | |
| EB I.D. (if applicable): @ Time | | Duplicate I.D. (if applicable): | |
| Analyzed for: TPH-G BTEX MTBE TPH-D Other: | | | |
| D.O. (if req'd): Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): Pre-purge: | mV | Post-purge: | mV |

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020312-MM2 | Site: 8930 Bancroft |
| Sampler: MJM | Date: 3/12/02 |
| Well I.D.: MW-5 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth: — | Depth to Water: 8.84 |
| Depth to Free Product: 8.64 | Thickness of Free Product (feet): 0.20 |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method:
Bailer / Waterra
Disposable Bailer / Peristaltic
Middleburg / Extraction Pump
Electric Submersible / Other

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

___ (Gals.) X ___ = ___ 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | grab sample of | | product ~ 3/4 L water | | |
| | | | | | ~1/4 L of product | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 0

Sampling Time: 1605 Sampling Date: 3/12/02

Sample I.D.: MW-5 Laboratory: Sequoia Columbia Other KIFF

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

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

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

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

# WELLHEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client Equiva Inspection Date 3/12/02

Site Address 8930 Bancroft Oakland Inspected By MJM

| | | | |
|---|---|---|---|
| 1. Lid on box? | 6. Casing secure? | 12. Water standing in wellbox? | 15. Well cap functional? |
| 2. Lid broken? | 7. Casing cut level? | 12a. Standing above the top of casing? | 16. Can cap be pulled loose? |
| 3. Lid bolts missing? | 8. Debris in wellbox? | 12b. Standing below the top of casing? | 17. Can cap seal out water? |
| 4. Lid bolts stripped? | 9. Wellbox is too far above grade? | 12c. Water even with the top of casing? | 18. Padlock present? |
| 5. Lid seal intact? | 10. Wellbox is too far below grade? | 13. Well cap present? | 19. Padlock functional? |
| | 11. Wellbox is crushed/damaged? | 14. Well cap found secure? | |

☑ Check box if no deficiencies were found. Note below deficiencies you were able to correct.

| Well I.D. | Deficiency | Corrective Action Taken |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Note below all defiencies that could not be corrected and still need to be corrected.

| Well I.D. | Persisting Deficiency | BTS Office assigns or defers Correction to: | Date assigned | Date corrected |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

# WELL GAUGING DATA

Project # 020226-80-3 Date 2/26/02 Client Equiva

Site 8980 Bancroft Way, Oakland 5895742

| 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 | 3 | | | | | 11.09 | 16.88 | TOC | |
| MW-2 | 3 | | | | | 10.76 | 19.20 | | |
| MW-3 | 3 | | | | | 9.09 | 19.66 | | |
| MW-4 | 3 | Sheen / Odor | | | | 9.40 | 19.57 | | |
| MW-5 | 3 | Free Product | | | | 9.87 | 19.64 | | |
| MW-6 | 3 | | | | | 10.14 | 19.70 | | |
| | | | | | | | | | |
| | | * Pulled ORC Forgravity | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020226-802 | Site: 98995 7R |
| Sampler: O'Bryan | Date: 2/26/02 |
| Well I.D.: MW-1 | Well Diameter: 2 (3) 4 6 8 |
| Total Well Depth: 16.88 | Depth to Water: 11.09 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, ~~Electric Submersible~~, Waterra, Peristaltic, Extraction Pump, Other_____

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

| 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 |

2.1 (Gals.) X 3 = 6.3 Gals.
Case Volume | Specified Volumes | Calculated Volume

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1212 | 73.4 | 6.8 | 407 | >200 | 2.5 | Brown |
| 1213 | 72.0 | 6.8 | 377 | >200 | 4.5 | " |
| 1214 | 69.5 | 6.6 | 368 | >200 | 6.5 | " |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 6.5

Sampling Time: 1218 Sampling Date: 2/26/02

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

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

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

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

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

BLAINE TECH SERVICES 1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0555 • FAX (408) 573-7771 • CONTRACTOR'S LICENSE #746684

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020226-02 | Site: 789542 |
| Sampler: O'Morgan | Date: 2/26/02 |
| Well I.D.: MW-2 | Well Diameter: 2 3 4 6 8 |
| Total Well Depth: 19.20 | Depth to Water: 10.76 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method: Bailer / Disposable Bailer / Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other:

| 1 Case Volume | Specified Volumes | Calculated Volume |
|---|---|---|
| 3.1 (Gals.) X | 3 | = 9.3 Gals. |

| 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1159 | 74.1 | 7.3 | 327 | 7200 | 4 | Brown |
| 1200 | 70.9 | 7.4 | 583 | >200 | 8 | |
| 1201 | 69.8 | 7.2 | 395 | >200 | 12 | " |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes / No Gallons actually evacuated: 12

Sampling Time: 1207 Sampling Date: 2/26/02

Sample I.D.: MW-2 Laboratory: Kiff / Sequoia / Other_____

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

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

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

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

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020226-80-3 | Site: 9899.5742 |
| Sampler: O'Bryan | Date: 2/26/02 |
| Well I.D.: MW-3 | Well Diameter: 2 3 4 6 8 |
| Total Well Depth: 19.66 | Depth to Water: ~~9.89~~ 9.09 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other

| 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 |

3.9 (Gals.) X 3 = 11.7 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1242 1227 | 69.7 | 6.7 | 583 | >200 | 4 | Black/Gray/Odor/Fe |
| 1248 1238 | 69.6 | 6.3 | 585 | >200 | 8 | " " |
| 1244 1299 | 69.5 | 6.3 | 523 | >200 | 12 | " " |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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

Sampling Time: 1233 1248 Sampling Date: 2/26/02

Sample I.D.: MW-3 Laboratory: Kiff Sequoia Other

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

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

BLAINE TECH SERVICES 1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0555 • FAX (408) 573-7771 • CONTRACTOR'S LICENSE #746684

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020226-SD-3 | Site: 98995742 |
| Sampler: O'Bonsan | Date: 2/26/02 |
| Well I.D.: MW-4 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth: 19.57 | Depth to Water: 9.40 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other ____

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

| 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 |

3.8 (Gals.) X 3 = 11.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1300 | 70.9 | 6.8 | 395 | >200 | 4 | Black Grey/odor |
| 1301 | 70.0 | 7.1 | 376 | >200 | 8 | Brown/Bubbles |
| 1302 | 68.8 | 7.1 | 359 | >200 | 12 | " |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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

Sampling Time: 1306 Sampling Date: 2/26/02

Sample I.D.: MW-4 Laboratory: (Kiff) Sequoia Other ____

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

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: 8.7 mg/L Post-purge: mg/L

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

BLAINE TECH SERVICES, 1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0555 • FAX (408) 573-7771 • CONTRACTOR'S LICENSE #746684

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020226-80-3 | Site: 7899542 |
| Sampler: O'Bryan | Date: 2/26/02 |
| Well I.D.: MW-5 | Well Diameter: 2 3 4 6 8 ___ |
| Total Well Depth: 19.64 | Depth to Water: ? |
| Depth to Free Product: 9.87 | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

_____(Gals.) X _____ = _____ 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | Free product present in disposable Bailer, ~1" | | | | | |
| | (200 ml, ea.). Relased back in well due to | | | | | |
| | no drums present on-site. No sampling | | | | | |
| | performed | | | | | |
| | | | | | | |

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: — Sampling Date: 2/26/02

Sample I.D.: — Laboratory: Kiff Sequoia Other_____

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

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

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

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

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| STS #: 020226-SB-3 | Site: 9899 5742 |
| Sampler: O'Bryan | Date: 2/26/02 |
| Well I.D.: MW-6 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth: 19.70 | Depth to Water: 10.14 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

Purge Method: Bailer; Disposable Bailer; Middleburg; ~~Electric Submersible~~; Waterra; Peristaltic; Extraction Pump; Other ____

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

| 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 |

3.5 (Gals.) X 3 = 10.5 Gals.
Case Volume | Specified Volumes | Calculated Volume

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1227 | 68.6 | 6.7 | 461 | >200 | 4 | Black Grey/Odor Fe |
| 1228 | 68.4 | 6.4 | 727 | >200 | 8 | |
| 1229 | 68.1 | 6.5 | 750 | >200 | 12 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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

Sampling Time: 1333 Sampling Date: 2/26/02

Sample I.D.: MW-6 Laboratory: (Kiff) Sequoia Other ____

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

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

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

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

BLAINE TECH SERVICES 1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0555 • FAX (408) 573-7771 • CONTRACTOR'S LICENSE #746684

# ATTACHMENT B

## Blaine Groundwater Monitoring Report and Field Notes – Second Quarter 2002

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

June 19, 2002

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

Second Quarter 2002 Groundwater Monitoring at
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA

Monitoring performed on June 6, 2002

Groundwater Monitoring Report **020606-MM-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 Shell Martinez Manufacturing Complex.

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 Sheet

cc: Anni Kreml
Cambria Environmental Technology, Inc.
1144 65th Street, Suite C
Oakland, CA 94608-2411

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 12/17/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 53.19 | 11.87 | NA | 41.32 | NA | NA |
| MW-1 | 03/09/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 8.21 | NA | 44.98 | NA | NA |
| MW-1 | 06/16/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 15.04 | NA | 38.15 | NA | NA |
| MW-1 | 09/30/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 16.02 | NA | 37.17 | NA | NA |
| MW-1 | 12/23/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 14.78 | NA | 38.41 | NA | NA |
| MW-1 | 03/22/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 53.19 | 8.44 | NA | 44.75 | NA | NA |
| MW-1 | 06/01/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 13.71 | NA | 39.48 | NA | NA |
| MW-1 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 14.95 | NA | 38.24 | NA | NA |
| MW-1 | 12/04/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 5.82 | NA | 53.19 | 13.85 | NA | 39.34 | NA | NA |
| MW-1 | 03/09/2001 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 53.19 | 9.07 | NA | 44.12 | NA | NA |
| MW-1 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 53.19 | 14.90 | NA | 38.29 | NA | NA |
| MW-1 | 09/20/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 53.19 | 15.53 | NA | 37.66 | NA | NA |
| MW-1 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 53.19 | 10.41 | NA | 42.78 | NA | 3.8 |
| MW-1 | 02/26/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 53.19 | 11.09 | NA | 42.10 | NA | NA |
| **MW-1** | **06/06/2002** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **53.19** | **14.13** | **NA** | **39.06** | **NA** | **NA** |
| MW-2 | 12/17/1998 | 9,900 | NA | <5.0 | 37 | 22 | 47 | 48 | <20 | 52.66 | 11.65 | NA | 41.01 | NA | NA |
| MW-2 | 03/09/1999 | 2,760 | NA | 12.3 | 7.50 | 85.4 | 444 | <50.0 | NA | 52.66 | 8.07 | NA | 44.59 | NA | NA |
| MW-2 | 06/16/1999 | 2,570 | NA | 36.3 | 11.6 | 6.19 | 10.8 | <50.0 | NA | 52.66 | 14.63 | NA | 38.03 | NA | NA |
| MW-2 | 09/30/1999 | 1,960 | NA | 19.1 | 3.20 | 4.55 | 26.9 | <25.0 | NA | 52.66 | 15.63 | NA | 37.03 | NA | NA |
| MW-2 | 12/23/1999 | 145 | NA | 1.30 | <0.500 | <0.500 | 0.899 | <2.50 | NA | 52.66 | 14.42 | NA | 38.24 | NA | NA |
| MW-2 | 03/22/2000 | 6,060 | NA | 18.9 | <10.0 | 210 | 651 | <100 | NA | 52.66 | 8.19 | NA | 44.47 | NA | NA |
| MW-2 | 06/01/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 52.66 | 11.46 | NA | 41.20 | NA | NA |
| MW-2 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 52.66 | 14.63 | NA | 38.03 | NA | NA |
| MW-2 | 12/04/2000 | 201 | NA | 1.35 | <0.500 | 3.39 | 8.58 | <2.50 | NA | 52.66 | 13.45 | NA | 39.21 | NA | NA |
| MW-2 | 03/09/2001 | 396 | NA | 2.82 | <0.500 | 8.69 | 18.7 | <2.50 | NA | 52.66 | 8.89 | NA | 43.77 | NA | NA |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 52.66 | 14.88 | NA | 37.78 | NA | NA |
| MW-2 | 09/20/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 52.66 | 15.19 | NA | 37.47 | NA | NA |
| MW-2 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 52.66 | 10.02 | NA | 42.64 | NA | 2.8 |
| MW-2 | 02/26/2002 | 180 | NA | <0.50 | <0.50 | 2.7 | 4.1 | NA | <0.50 | 52.66 | 10.76 | NA | 41.90 | NA | NA |
| **MW-2** | **06/06/2002** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **52.66** | **13.83** | **NA** | **38.83** | **NA** | **NA** |
| MW-3 | 12/17/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 10 | 11 | 51.30 | 11.85 | NA | 39.45 | NA | NA |
| MW-3 | 03/09/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 51.30 | 6.53 | NA | 44.77 | NA | NA |
| MW-3 | 06/16/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 51.30 | 12.71 | NA | 38.59 | NA | NA |
| MW-3 | 09/30/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 5.14 | NA | 51.30 | 14.07 | NA | 37.23 | NA | NA |
| MW-3 | 12/23/1999 | <500 | NA | <5.00 | <5.00 | <5.00 | <5.00 | <25.0 | NA | 51.30 | 12.82 | NA | 38.48 | NA | NA |
| MW-3 | 03/22/2000 | <50.0 | NA | <0.500 | 1.48 | <0.500 | 1.90 | <5.00 | NA | 51.30 | 6.81 | NA | 44.49 | NA | NA |
| MW-3 | 06/01/2000 | <50.0 | NA | <0.500 | 0.821 | <0.500 | <0.500 | 4.39 | NA | 51.30 | 11.85 | NA | 39.45 | NA | NA |
| MW-3 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 3.62 | NA | 51.30 | 12.55 | NA | 38.75 | NA | NA |
| MW-3 | 12/04/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | 0.588 | 4.74 | NA | 51.30 | 11.65 | NA | 39.65 | NA | NA |
| MW-3 | 03/09/2001 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 51.30 | 7.28 | NA | 44.02 | NA | NA |
| MW-3 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 51.30 | 13.16 | NA | 38.14 | NA | NA |
| MW-3 | 09/20/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 51.30 | 13.35 | NA | 37.95 | NA | NA |
| MW-3 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 51.30 | 8.14 | NA | 43.16 | NA | 1.2 |
| MW-3 | 02/26/2002 | <50 | NA | <0.50 | 7.2 | <0.50 | <0.50 | NA | 1.5 | 51.30 | 9.09 | NA | 42.21 | NA | 0.6 |
| **MW-3** | **06/06/2002** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **51.30** | **12.13** | **NA** | **39.17** | **NA** | **0.8** |
| MW-4 | 12/17/1998 | 700 | NA | 4.3 | 0.88 | <0.50 | <0.50 | 21,000 | 26,000 | 50.73 | 10.80 | NA | 39.93 | NA | NA |
| MW-4 | 03/09/1999 | 83.9 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 17,900 | 23,700 | 50.73 | 6.91 | NA | 43.82 | NA | NA |
| MW-4 | 06/16/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 10,600 | 19,200 | 50.73 | 12.84 | NA | 37.89 | NA | NA |
| MW-4 | 09/30/1999 | 51.2 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 12,200 | 12,300 | 50.73 | 13.74 | NA | 36.99 | NA | NA |
| MW-4 | 12/23/1999 | <100 | NA | <1.00 | <1.00 | <1.00 | <1.00 | 7,990 | 8,400 | 50.73 | 12.40 | NA | 38.33 | NA | NA |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 03/22/2000 | <500 | NA | <5.00 | <5.00 | <5.00 | <5.00 | 4,970 | 5,020 | 50.73 | 7.32 | NA | 43.41 | NA | NA |
| MW-4 | 06/01/2000 | <100 | NA | <1.00 | <1.00 | <1.00 | <1.00 | 5,260 | 3,580 | 50.73 | 11.50 | NA | 39.23 | NA | NA |
| MW-4 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 3,610 | 3,300a | 50.73 | 12.55 | NA | 38.18 | NA | NA |
| MW-4 | 12/04/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 2,960 | 3,520a | 50.73 | 11.77 | NA | 38.96 | NA | NA |
| MW-4 | 03/09/2001 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 1,930 | 2,500 | 50.73 | 7.48 | NA | 43.25 | NA | NA |
| MW-4 | 06/27/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 1,100 | 1,100 | 50.73 | 12.97 | NA | 37.76 | NA | NA |
| MW-4 | 09/20/2001 | <250 | NA | 3.8 | 14 | 2.6 | 7.8 | NA | 940 | 50.73 | 13.30 | NA | 37.43 | NA | NA |
| MW-4 | 12/05/2001 | <200 | NA | <2.0 | <2.0 | <2.0 | <2.0 | NA | 750 | 50.73 | 8.41 | NA | 42.32 | NA | 1.2 |
| MW-4 | 02/26/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 320 | 50.73 | 9.40 | NA | 41.33 | NA | 0.7 |
| **MW-4** | **06/06/2002** | **<50** | **NA** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **NA** | **160** | **50.73** | **11.97** | **NA** | **38.76** | **NA** | **0.6** |
| MW-5 | 12/17/1998 | 750 | NA | <0.50 | 17 | 1.8 | 3.5 | 33 | 32 | 51.43 | 11.51 | NA | 39.92 | NA | NA |
| MW-5 | 03/09/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <5.00 | NA | 51.43 | 7.15 | NA | 44.28 | NA | NA |
| MW-5 | 06/16/1999 | 646 | NA | 9.26 | 1.05 | <1.00 | <1.00 | <10.0 | NA | 51.43 | 13.47 | NA | 37.96 | NA | NA |
| MW-5 | 09/30/1999 | 484 | NA | 1.93 | 0.511 | <0.500 | <0.500 | 159 | NA | 51.43 | 14.41 | NA | 37.02 | NA | NA |
| MW-5 | 12/23/1999 | 944 | NA | 4.59 | 17.7 | 3.79 | 16.7 | 214 | NA | 51.43 | 14.07 | NA | 37.36 | NA | NA |
| MW-5 | 03/22/2000 | 8,770 | NA | 197 | 96.5 | <50.0 | 188 | 2,450 | NA | 51.43 | 7.31 | NA | 44.12 | NA | NA |
| MW-5 | 06/01/2000 | 227 | NA | 0.565 | <0.500 | <0.500 | <0.500 | 35.9 | NA | 51.43 | 12.15 | NA | 39.28 | NA | NA |
| MW-5 | 09/08/2000 | 159 | NA | 0.606 | <0.500 | <0.500 | 1.74 | 1,000 | NA | 51.43 | 13.30 | NA | 38.13 | NA | NA |
| MW-5 | 12/04/2000 | 1,510 | NA | 19.2 | <10.0 | <10.0 | 134 | 1,360 | NA | 51.43 | 12.19 | NA | 39.24 | NA | NA |
| MW-5 | 03/09/2001 | 3,460 | NA | 37.9 | 121 | 40.6 | 208 | 235 | NA | 51.43 | 7.79 | NA | 43.64 | NA | NA |
| MW-5 | 06/27/2001 | 310 | NA | 0.97 | <0.50 | <0.50 | <0.50 | 14 | NA | 51.43 | 13.89 | NA | 37.54 | NA | NA |
| MW-5 | 09/20/2001 | 310 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 21 | 51.43 | 13.95 | NA | 37.48 | NA | NA |
| MW-5 | 12/05/2001 | 8,800 | NA | 14 | 2.9 | 33 | 410 | NA | 2,300 | 51.43 | 8.89 | NA | 42.54 | NA | 0.6 |
| MW-5 | 02/26/2002 | NA | NA | NA | NA | NA | NA | NA | NA | 51.43 | 9.87 | NA | NA | b | NA |
| MW-5 | 03/12/2002 | NA | NA | NA | NA | NA | NA | NA | NA | 51.43 | 8.84 | 8.64 | 42.75 | 0.20 | NA |
| **MW-5** | **06/06/2002** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **51.43** | **12.59** | **12.54** | **38.88** | **0.05** | **NA** |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6 | 12/17/1998 | 940 | NA | 27 | 0.32 | 2.4 | 2.3 | 3.0 | 3.2 | 51.88 | 11.37 | NA | 40.51 | NA | NA |
| MW-6 | 03/09/1999 | 336 | NA | 7.78 | 1.60 | 2.40 | 6.36 | <10.0 | NA | 51.88 | 8.10 | NA | 43.78 | NA | NA |
| MW-6 | 06/16/1999 | 308 | NA | 2.45 | <0.500 | <0.500 | <0.500 | 7.39 | NA | 51.88 | 14.49 | NA | 37.39 | NA | NA |
| MW-6 | 09/30/1999 | 80.2 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 24.8 | NA | 51.88 | 15.30 | NA | 36.58 | NA | NA |
| MW-6 | 12/23/1999 | 149 | NA | 0.518 | <0.500 | <0.500 | <0.500 | 6.43 | NA | 51.88 | 13.19 | NA | 38.69 | NA | NA |
| MW-6 | 03/22/2000 | 382 | NA | 3.31 | 2.18 | 0.619 | 2.35 | 5.61 | NA | 51.88 | 8.27 | NA | 43.61 | NA | NA |
| MW-6 | 06/01/2000 | 158 | NA | 0.830 | <0.500 | <0.500 | 1.10 | 10.9 | NA | 51.88 | 11.13 | NA | 40.75 | NA | NA |
| MW-6 | 09/08/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 51.88 | 14.28 | NA | 37.60 | NA | NA |
| MW-6 | 12/04/2000 | 231 | NA | 4.93 | <0.500 | <0.500 | <0.500 | 4.57 | NA | 51.88 | 12.62 | NA | 39.26 | NA | NA |
| MW-6 | 03/09/2001 | 789 | NA | 11.6 | 2.72 | <2.00 | <2.00 | 28.0 | NA | 51.88 | 8.65 | NA | 43.23 | NA | NA |
| MW-6 | 06/27/2001 | 140 | NA | <0.50 | 1.1 | <0.50 | <0.50 | <2.5 | NA | 51.88 | 14.95 | NA | 36.93 | NA | NA |
| MW-6 | 09/20/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 51.88 | 14.70 | NA | 37.18 | NA | NA |
| MW-6 | 12/05/2001 | NA | NA | NA | NA | NA | NA | NA | NA | 51.88 | 9.62 | NA | 42.26 | NA | 1.8 |
| MW-6 | 02/26/2002 | 130 | NA | <0.50 | 2.6 | 0.69 | 4.1 | NA | 6.4 | 51.88 | 10.14 | NA | 41.74 | NA | NA |
| **MW-6** | **06/06/2002** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **51.88** | **13.52** | **NA** | **38.36** | **NA** | **NA** |

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 8930 Bancroft Avenue
## Oakland, CA
## Wic #204-5508-1305

| 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) | TOC (MSL) | Depth to Water (ft.) | Depth to SPH (ft.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to September 20, 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 September 20, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

SPH = Separate-phase hydrocarbons

GW = Groundwater

ug/L = Parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

NA = Not applicable

DO = Dissolved oxygen

mg/L = Parts per million

Notes:

a = This sample analyzed outside of EPA recommended holding time.

b = SPH detected in well, but exact thickness could not be measured.

When separate-phase hydrocarbons are present, groundwater elevation is adjusted using the relation:

Groundwater Elevation = Top-of-Casing Elevation - Depth to Water + (0.8 x Hydrocarbon Thickness).

KIFF ANALYTICAL LLC

Report Number : 26781
Date : 6/13/02

Leon Gearhart
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 1 Water Sample
Project Name : 8930 Bancroft Avenue, Oakland
Project Number : 020606-MM1
P.O. Number : 98995742

Dear Mr. Gearhart,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 26781
Date : 6/13/02

Project Name : **8930 Bancroft Avenue, Oakland**
Project Number : **020606-MM1**

Sample : **MW-4** Matrix : Water Lab Number : 26781-01
Sample Date :6/6/02

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 6/11/02 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 6/11/02 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 6/11/02 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 6/11/02 |
| **Methyl-t-butyl ether (MTBE)** | **160** | 5.0 | ug/L | EPA 8260B | 6/11/02 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 6/11/02 |
| Toluene - d8 (Surr) | 97.6 | | % Recovery | EPA 8260B | 6/11/02 |
| 4-Bromofluorobenzene (Surr) | 92.1 | | % Recovery | EPA 8260B | 6/11/02 |

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 26781

Date : 6/13/02

**QC Report : Method Blank Data**

Project Name : **8930 Bancroft Avenue, Oakland**

Project Number : **020606-MM1**

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/10/02 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/10/02 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/10/02 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 6/10/02 |
| Methyl-t-butyl ether (MTBE) | < 5.0 | 5.0 | ug/L | EPA 8260B | 6/10/02 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 6/10/02 |
| Toluene - d8 (Surr) | 99.6 | | % | EPA 8260B | 6/10/02 |
| 4-Bromofluorobenzene (Surr) | 96.3 | | % | EPA 8260B | 6/10/02 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 26781

Date : 6/13/02

**QC Report : Matrix Spike/ Matrix Spike Duplicate**

Project Name : **8930 Bancroft Avenue,**

Project Number : **020606-MM1**

| Parameter | Spiked Sample | Sample Value | Spike Level | Spike Dup. Level | Spiked Sample Value | Duplicate Spiked Sample Value | Units | Analysis Method | Date Analyzed | Spiked Sample Percent Recov. | Duplicate Spiked Sample Percent Recov. | Relative Percent Diff. | Spiked Sample Percent Recov. Limit | Relative Percent Diff. Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 26803-01 | <0.50 | 40.0 | 40.0 | 41.5 | 40.1 | ug/L | EPA 8260B | 6/10/02 | 104 | 100 | 3.43 | 70-130 | 25 |
| Toluene | 26803-01 | <0.50 | 40.0 | 40.0 | 38.9 | 38.2 | ug/L | EPA 8260B | 6/10/02 | 97.4 | 95.5 | 1.94 | 70-130 | 25 |
| Tert-Butanol | 26803-01 | <5.0 | 200 | 200 | 202 | 205 | ug/L | EPA 8260B | 6/10/02 | 101 | 102 | 1.13 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 26803-01 | <0.50 | 40.0 | 40.0 | 40.1 | 40.2 | ug/L | EPA 8260B | 6/10/02 | 100 | 101 | 0.398 | 70-130 | 25 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 26781

**QC Report : Laboratory Control Sample (LCS)**

Date : 6/13/02

Project Name : **8930 Bancroft Avenue,**

Project Number : **020606-MM1**

| Parameter | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|---|---|---|---|---|---|---|
| Benzene | 40.0 | ug/L | EPA 8260B | 6/10/02 | 98.7 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 6/10/02 | 92.8 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 6/10/02 | 101 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 6/10/02 | 98.7 | 70-130 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

LAB: KIFT

# SHELL Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

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

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

26781

INCIDENT NUMBER (S&E ONLY): 98995742

SAP or CRMT NUMBER (TS/CRMT):

DATE: 6/6/02

PAGE: 1 of 1

| | | | |
|---|---|---|---|
| SAMPLING COMPANY: Blaine Tech Services | LOG CODE: BTSS | SITE ADDRESS (Street and City): 8930 Bancroft Avenue, Oakland | GLOBAL ID NO.: |
| 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.: BTS # 020606-MA1 |
| TELEPHONE: 408-573-0555 | FAX: 408-573-7771 | E-MAIL: lgearhart@blainetech.com | SAMPLER NAME(S) (PRINT): Matthew Miller |

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

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

LAB USE ONLY

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-~~ MW-4 | 6/6 | 955 | W | 3 | X | X | X | | | | | | | | -01 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

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

| | | | |
|---|---|---|---|
| Relinquished by: (Signature) | Received by: (Signature) | Date: 6/7/02 | Time: 11:23 |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| Relinquished by: (Signature) | Received by: (Signature) John Cuttle / Kiff Analytical | Date: 060702 | Time: 1123 |

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

10/16/00 Revision

QAQ Graphic (714) 898-9702

# WELL GAUGING DATA

Project # 020606-MM1 Date 6/6/02 Client Shell

Site 8930 Bancroft Oakland

| 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) | Pre Purge D.O. |
|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 3 | | | | | 14.13 | 16.88 | | |
| MW-2 | 3 | | | | | 13.83 | 19.20 | | |
| MW-3 | 3 | | | | | 12.13 | 19.66 | | 0.8 |
| MW-4 | 3 | gauged w/ Stinger-Well | | | | 11.97 | 19.57 | | |
| MW-5 | 3 | | 12.54 | 0.05 | | 12.59 | 19.63 | | 0.6 Post purge |
| MW-6 | 3 | | | | | 13.52 | 19.70 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020606-MM1 | Site: 8930 Bancroft |
| Sampler: MTM | Date: 6/6/02 |
| Well I.D.: MW-4 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth: 19.57 | Depth to Water: 11.97 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other_____

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

2.8 (Gals.) X 3 = 8.4 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 948 | 70.9 | 6.18 | 442 | >200 | 3 | odor/clear/slt brown |
| 949 | 69.5 | 6.29 | 419 | >200 | 6 | " |
| 950 | 69.3 | 6.40 | 411 | | 8.4 | " |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 8.4

Sampling Time: 955 Sampling Date: 6/6/02

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

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

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: | 0.6 mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

BLAINE TECH SERVICES 1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0555 • FAX (408) 573-7771 • CONTRACTOR'S LICENSE #746684

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020606-MM1 | Site: 8930 Bancroft |
| Sampler: MJM | Date: 6/6/02 |
| Well I.D.: MW-5 | Well Diameter: 2 (3) 4 6 8 ____ |
| Total Well Depth: 19.63 | Depth to Water: 12.59 |
| Depth to Free Product: 12.54 | Thickness of Free Product (feet): 0.05 |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

_____(Gals.) X 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | baled ~1 | 75 mL product + | | |
| | | | ~1C | H2O | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 1C

Sampling Time: 1015 Sampling Date: 6/6/02

Sample I.D.: MW-5 Laboratory: (Kiff) Sequoia Other_____

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

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

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

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

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020606-MM1 | Site: 8930 Bancroft |
| Sampler: MTM | Date: 6/6/02 |
| Well I.D.: ~~4"W~~ REGULAR 87 OCTANE | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth: | Depth to Water: |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other ____

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

| 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 |

____ (Gals.) X 3 = ____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | Sampled gas pump #1 | | | | for Regular 87 octane | |
| | | | | ~.50 gal | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: — Sampling Date: 6/6/02

Sample I.D.: MW- — Laboratory: (Kiff) Sequoia Other ____

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

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

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

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

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020606-MM1 | Site: 8930 Bancroft |
| Sampler: MTM | Date: 6/6/02 |
| Well I.D.: MW1 Plus 89 octane | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth: | Depth to Water: |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

Purge Method: Bailer; Disposable Bailer; Middleburg; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

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

_____(Gals.) X 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | Sampled gas pump | | | | ~ .4987 gal | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: — Sampling Date: 6/6/02

Sample I.D.: MW- — Laboratory: (Kiff) Sequoia Other_____

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

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

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

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

# EQUIVA WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 020606-MM1 | Site: 8930 Bancroft |
| Sampler: MTM | Date: 6/6/02 |
| Well I.D.: MW- Premium Gasoline | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth: | Depth to Water: |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

Purge Method: Bailer, Disposable Bailer, Middleburg, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other ____

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

____ (Gals.) X 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. | Turbidity | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | sampled gas pump ~ 4.95 gal | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: — Sampling Date: 6/6/02

Sample I.D.: MW- — Laboratory: (Kiff) Sequoia Other ____

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

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

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

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

BLAINE TECH SERVICES 1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0555 • FAX (408) 573-7771 • CONTRACTOR'S LICENSE #746884

# WELLHEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client SHELL Inspection Date 6-13-02

Site Address 9930 BANCROFT, OAKLAND Inspected By MIKE N.

| | | | |
|---|---|---|---|
| 1. Lid on box? | 6. Casing secure? | 12. Water standing in wellbox? | 15. Well cap functional? |
| 2. Lid broken? | 7. Casing cut level? | 12a. Standing above the top of casing? | 16. Can cap be pulled loose? |
| 3. Lid bolts missing? | 8. Debris in wellbox? | 12b. Standing below the top of casing? | 17. Can cap seal out water? |
| 4. Lid bolts stripped? | 9. Wellbox is too far above grade? | 12c. Water even with the top of casing? | 18. Padlock present? |
| 5. Lid seal intact? | 10. Wellbox is too far below grade? | 13. Well cap present? | 19. Padlock functional? |
| | 11. Wellbox is crushed/damaged? | 14. Well cap found secure? | |

☐ Check box if no deficiencies were found. Note below deficiencies you were able to correct.

| Well I.D. | Deficiency | Corrective Action Taken |
|---|---|---|
| MW-4 | OLD ORC's | REPLACED ORC's |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Note below all deficiencies that could not be corrected and still need to be corrected.

| Well I.D. | Persisting Deficiency | BTS Office assigns or defers Correction to: | Date assigned | Date corrected |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

# ATTACHMENT C

## Laboratory Analytical Reports for SPH Sampling

X-Sender: jjones@mail.cambria-env.com
X-Mailer: QUALCOMM Windows Eudora Pro Version 3.0.3 (32)
Date: Wed, 07 Aug 2002 14:42:28 -0700
To: jjones@cambria-env.com
From: Jacquelyn Jones <jjones@cambria-env.com>
Subject: FW: 8930 Bancroft Ave., Oakland, CA

-----Original Message-----
From: Milazzo, Julie JA OGUS-OGCH
Sent: Tuesday, July 16, 2002 12:18 PM
To: Petryna, Karen E Alliance
Subject: 8930 Bancroft Ave., Oakland, CA

A sample of phase separated hydrocarbons (MW-4) and three reference samples (Premium, Plus and Regular) were collected from a retail facility located at 8930 Bancroft Ave., Oakland, CA and were received at Shell's Westhollow Technology Center (WTC) from Blaine Tech Services on 6/13/02.

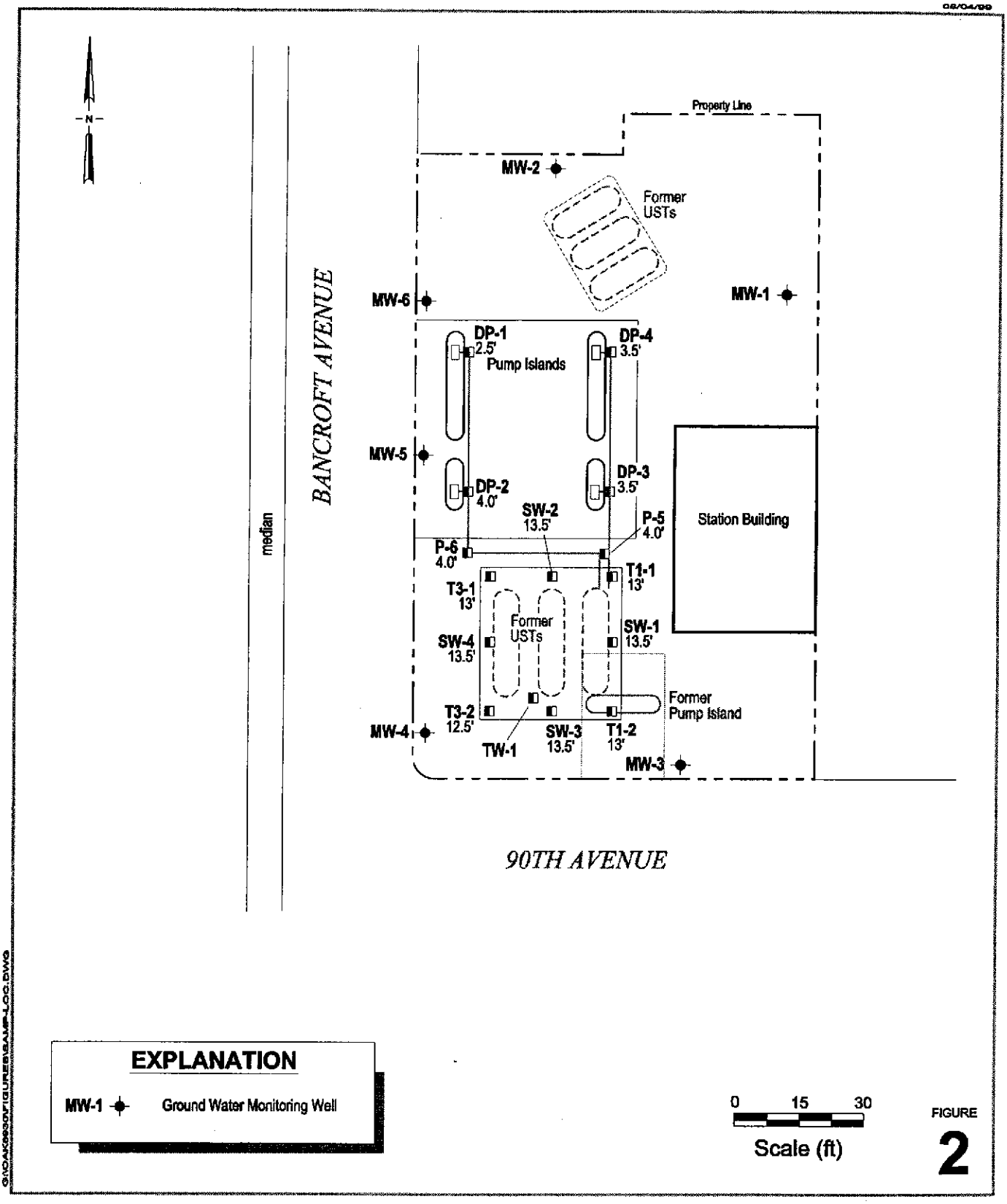
The samples were analyzed at WTC to determine product type using gas chromatography with flame ionization detection (GC-FID). Total lead was determined using x-ray fluorescence. Speciation of organic lead and determination of MTBE were done using gas chromatography with mass selective detection (GC/MS).

The product sample from MW-4 contains unleaded, weathered gasoline. There are significant losses of volatile components most likely due to evaporation (isopentane is not detected and there is <1% n-pentane). MTBE was not detected (<0.01%) and sulfur is present at 40ppm. Based on the sulfur concentration, this material was most likely produced after 1996. In 1996 California lowered the maximum sulfur concentration in gasoline to 80ppm sulfur. This is likely a regular grade product. The material in MW-4 is different from the reference materials.

Shell Global Solutions (US) Inc.
Westhollow Technology Center, 3333 Highway 6 South, Houston, TX 77082-3101, USA

# ATTACHMENT D

## Previous Soil Sampling Results




**Shell-branded Service Station**
8930 Bancroft Avenue
Oakland, California
Incident #98995742

CAMBRIA

**UST Removal Sample Locations**

**Table 1. Soil Analytical Data - Former Shell-branded Service Station, Incident #98995742, 8930 Bancroft Avenue, Oakland, California**

| Sample ID | Depth (ft) | Date Sampled | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | Lead |
|---|---|---|---|---|---|---|---|---|---|
| | | | (Concentrations reported in milligrams/kilogram) | | | | | | |
| T1-1-13' | 13 | 7/8/99 | <1.0 | 6.6 (6.100) | <0.005 | <0.005 | <0.005 | <0.005 | 8.9 |
| T1-2-13' | 13 | 7/8/99 | 3.2 | 0.67 (0.370) | <0.005 | <0.005 | <0.005 | <0.005 | 9.1 |
| T3-1-13' | 11 | 7/8/99 | <1.0 | 5.7 (6.200) | <0.005 | <0.005 | <0.005 | <0.005 | 9.9 |
| T3-2-12.5' | 12.5 | 7/8/99 | <1.0 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 | 9.7 |
| D/P-1-2.5' | 2.5 | 7/8/99 | <1.0 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 | 10 |
| D/P-2-4' | 4 | 7/8/99 | <1.0 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 | 11 |
| D/P-3-3.5' | 3.5 | 7/8/99 | <1.0 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 | 9.5 |
| D/P-4-3.5' | 3.5 | 7/8/99 | <1.0 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 | 11 |
| P-5-4' | 4 | 7/8/99 | 12 | 0.92 (0.770) | <0.005 | 0.18 | 0.01 | 0.37 | 60 |
| P-6-4' | 4 | 7/8/99 | <1.0 | <0.05 | <0.005 | <0.005 | <0.005 | <0.005 | 9.4 |
| SW-1-13.5' | 13.5 | 7/15/99 | <1.0 | 1.1 (1.400) | <0.005 | <0.005 | <0.005 | <0.005 | 12 |
| SW-2-13.5' | 13.5 | 7/15/99 | <1.0 | 1.2 (1.500) | <0.005 | <0.005 | <0.005 | <0.005 | 11 |
| SW-3-13.5' | 13.5 | 7/15/99 | <1.0 | 0.06 (0.071) | <0.005 | <0.005 | <0.005 | <0.005 | 13 |
| SW-4-13.5 | 13.5 | 7/15/99 | <1.0 | 0.19 (0.240) | <0.005 | <0.005 | <0.005 | <0.005 | 10 |

**Notes and Abbreviations:**

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
MTBE = Methyl tert-butyl ether by EPA Method 8020.
(n) = MTBE by EPA method 8260 (converted from µg/kg to mg/kg)
Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020
<n = Below detection limit of n mg/kg
NT = Not Tested

**Table 2. Groundwater Analytical Data** - Former Shell-branded Service Station, Incident #98995742, 8930 Bancroft Avenue, Oakland, California

| Sample ID | Date Sampled | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | Lead |
|---|---|---|---|---|---|---|---|---|
| | | ← (Concentrations reported in micrograms/kilogram) → | | | | | | |
| TW-1 | 7/8/99 | 7,100 | 2,000 (2,900) | 8.9 | 8.2 | 25 | 17 | 7.8 |

Notes and Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
MTBE = Methyl ter-butyl ether by EPA method 8260
(n) = MTBE by EPA method 8260
BTEX = benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020
<n = Below detection limit of n mg/kg