CAMBRIA

#229

May 15, 1999

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway #250
Alameda, California 94502

Re: **Quarterly Monitoring Report - First Quarter 1999**
Former Shell Service Station
2101 Park Boulevard
Oakland, California
WIC #204-5508-1206

Dear Mr. Chan:

This Quarterly Monitoring Report describes the recently completed activities associated with ground water monitoring and sampling at the referenced site (Plates 1 and 2). This report was prepared to meet quarterly reporting guidelines issued by the Regional Water Quality Control Board, San Francisco Bay Region and the Alameda County Health Care Services Agency (ACHCSA).

## Quarterly Monitoring & Sampling Summary

Ground water monitoring and sampling for the first quarter of 1999 are summarized below:

- Blaine Tech Services Inc. (Blaine), of San Jose, California measured ground water levels in Wells S-1, S-2, and S-3 and collected ground water samples from Well S-3 on March 29, 1999. The samples were transported to Sequoia Analytical of Redwood City, California for chemical analysis.

- Ground water level measurement data were evaluated and used to prepare a ground water contour map (Plate 2). The ground water flow direction is to the south at an approximate hydraulic gradient of 0.036.

- The ground water sample from Well S-3 contained 5,400 ppb TPPH, 530 ppb benzene, and 45 ppb MTBE

## Quarterly Sampling

Monitoring Well S-3 was sampled and analyzed for Total Purgeable Petroleum Hydrocarbons as gasoline (TPPH) by EPA Method 8015 (Modified), benzene, toluene, ethylbenzene,

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

2170 Perkins Street
P.O. Box 259
Sonoma, CA 95476
Tel (707)935-4850
Fax (707)935-6649

xylenes (BTEX), methyl-tertiary-butyl-ether (MTBE) by EPA Method 8020, total dissolved solids by EPA Method 160.1, nitrates and sulfates by EPA Method 300.0.

Field monitoring data and chemical analytical data are presented in a summary table in Blaine's ground water monitoring report (Appendix A). A ground water contour/chemical concentration map is presented as Plate 2.

Quarterly monitoring, sampling, and reporting will continue on the established schedule for this site.

If you have any questions regarding the contents of this document, please call Joe Neely at 707-935-4854.

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

Aubrey K Cool
FOR:
Wayne Chiu
Staff Engineer

Diane M. Lundquist, P.E.
Principal Engineer
C46725

REGISTERED PROFESSIONAL ENGINEER
DIANE M. LUNDQUIST
No. C45725
CIVIL
STATE OF CALIFORNIA

Attachments

Plate 1. Vicinity Map
Plate 2. Ground Water Contour/Chemical Concentration Map

Appendix A

Blaine Tech Services Inc. - Ground Water Monitoring Report

cc Mr. Frank J. Schlessinger, Schlessinger & Associates (property owner)
Mr. Steve Makara, Goodyear Tire & Rubber Company (tenant)
Ms. Karen Petryna, Equiva Services LLC

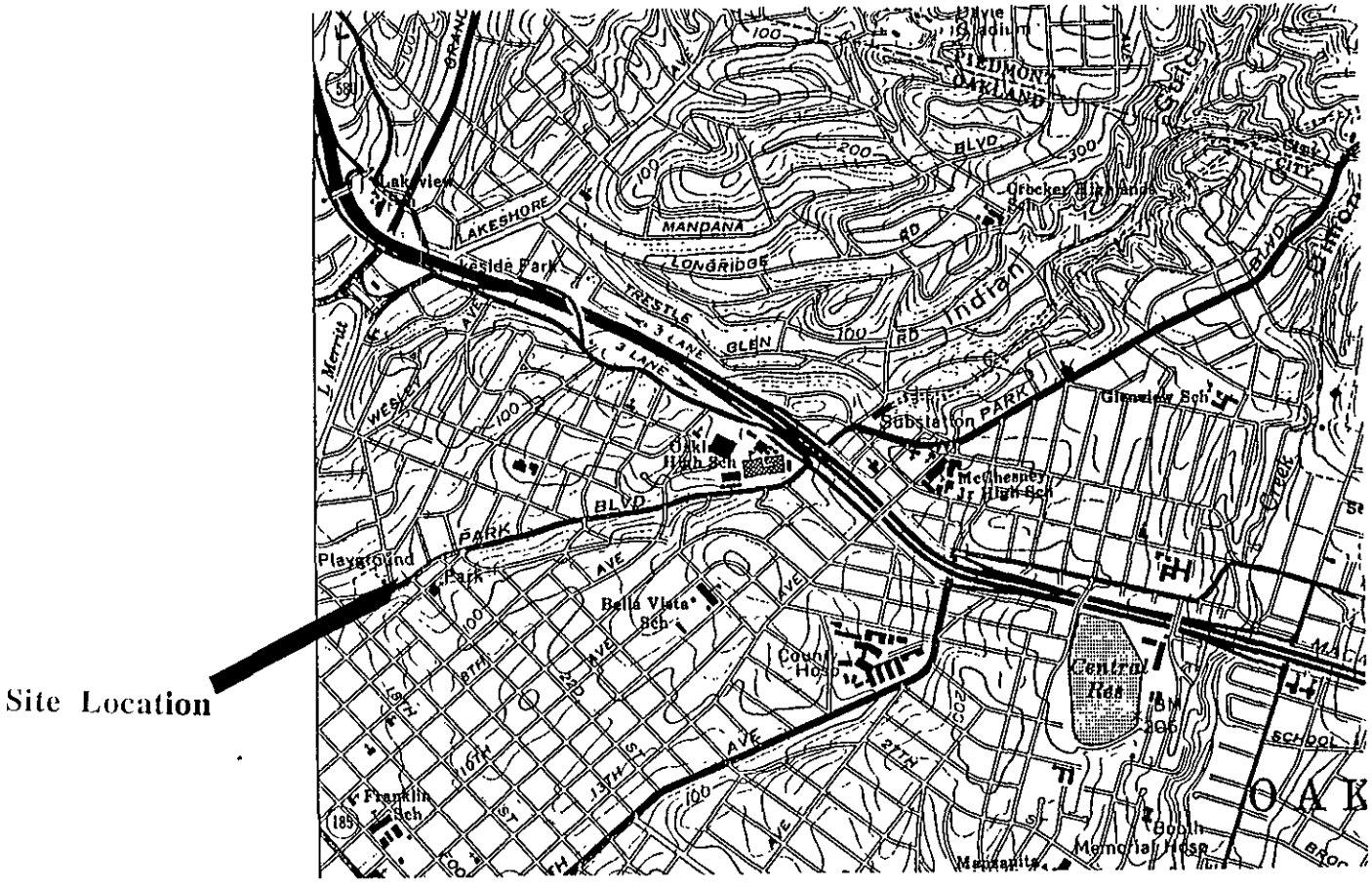


PLATE
**1**

**VICINITY MAP**
Former Shell Service Station
2101 Park Boulevard
Oakland, California

CAMBRIA
240-0865

Drawn By: GLV

Date: 2-24-95

Approved By: AKC

Date: 5-21-99

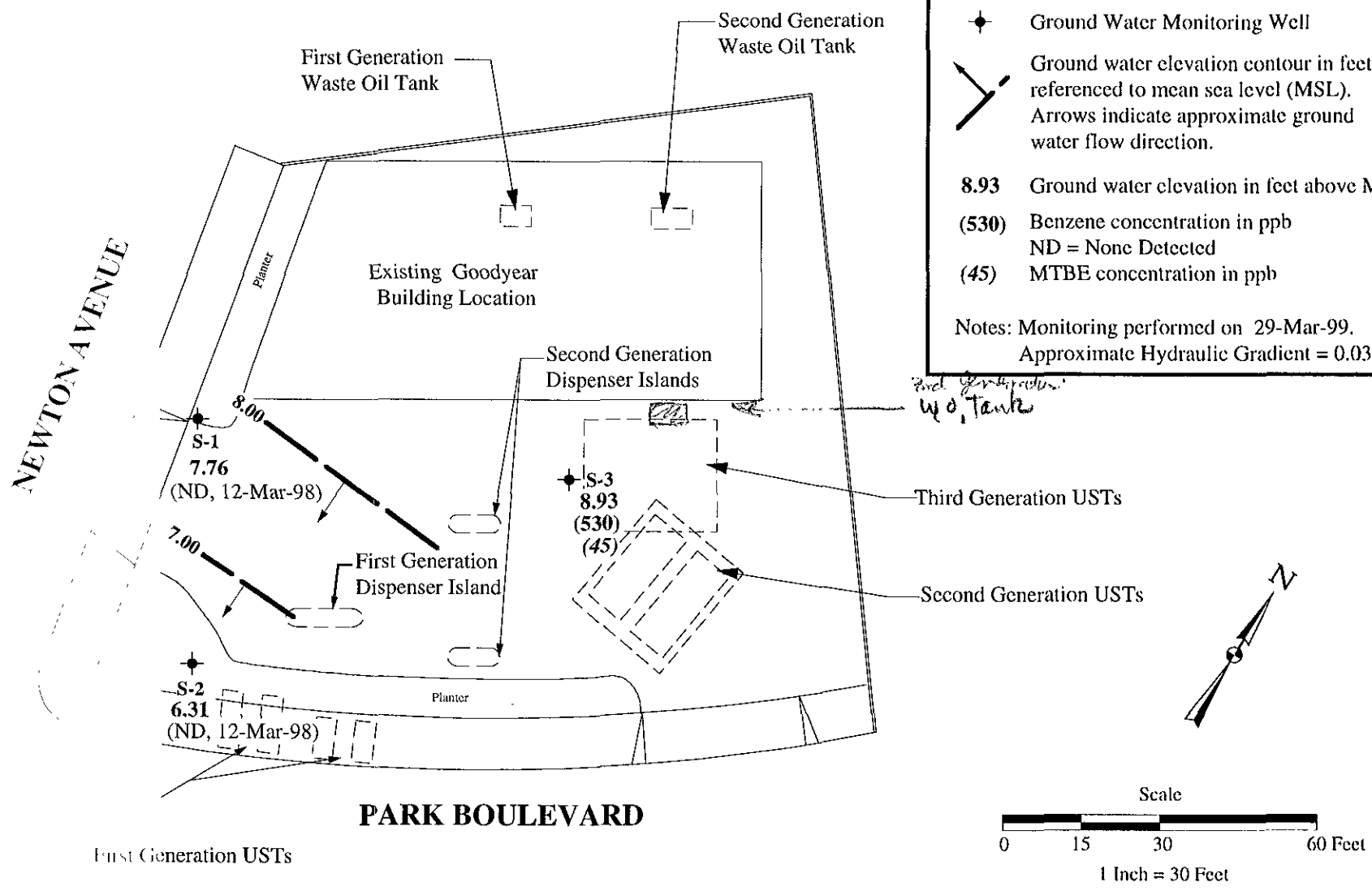


PLATE
**2**

**GROUND WATER CONTOUR/CHEMICAL CONCENTRATION MAP**
Former Shell Service Station
2101 Park Boulevard
Oakland, California

CAMBRIA
240-0865

Drawn By: WC

Date: 10-May-99

Approved By: AKC Date: 5-21-99

**Appendix A**

**Blaine Tech Services Inc.**
**Ground Water Monitoring Report**

BLAINE
TECH SERVICES INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE

April 26, 1999



Karen Petryna
Equiva Services LLC
P.O. Box 6249
Carson, CA 90749-6249

First Quarter 1999 Groundwater Monitoring at
Shell -branded Service Station
2101 Park Blvd.
Oakland, CA

Monitoring performed on March 29, 1999

Groundwater Monitoring Report **990329-P-2**

This report covers the routine monitoring of groundwater wells at this Shell -branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, apprioriate 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

# WELL CONCENTRATIONS
## Shell-branded Service Station
## 2101 Park Avenue
## Oakland, CA
## Wic #204-5508-1206

| 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.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-1 | 06/20/1995 | 160 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 11.93 | 4.67 | 7.26 | NA | NA |
| S-1 | 09/12/1995 | <50 | 250 | 3.0 | <0.5 | <0.5 | <0.5 | NA | NA | 11.93 | 4.19 | 7.74 | NA | NA |
| S-1 | 12/28/1995 | 70 | 160 | 1.1 | <0.5 | <0.5 | 1.3 | NA | NA | 11.93 | 5.30 | 6.63 | NA | NA |
| S-1 | 03/25/1996 | 70 | 220 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 | NA | 11.93 | 3.44 | 8.49 | NA | NA |
| S-1 | 06/27/1996 | <50 | 140 | 0.59 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 11.93 | 3.15 | 8.78 | NA | NA |
| S-1 | 09/26/1996 | <50 | 190 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 11.93 | 3.90 | 8.03 | NA | NA |
| S-1 | 12/10/1996 | <50 | 84 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 11.93 | 2.46 | 9.47 | NA | NA |
| S-1 | 03/10/1997 | <50 | 200 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 11.93 | 2.93 | 9.00 | NA | NA |
| S-1 | 06/26/1997 | <50 | 99 | <0.50 | <0.50 | <0 50 | <0.50 | <2.5 | NA | 11.93 | 3.91 | 8.02 | NA | NA |
| S-1 | 09/30/1997 | <50 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2 5 | NA | 11.93 | 4.00 | 7.93 | NA | NA |
| S-1 | 12/15/1997 | <50 | 99 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 11.93 | 2.83 | 9.10 | NA | NA |
| S-1 | 03/12/1998 | <50 | 100 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 11.93 | 1.73 | 10.20 | NA | 2.7 |
| S-1 | 06/08/1998 | NA | NA | NA | NA | NA | NA | NA | NA | 11.93 | 6.05 | 5.88 | NA | 0.8 |
| S-1 | 08/26/1998 | NA | NA | NA | NA | NA | NA | NA | NA | 11.93 | 3.61 | 8.32 | NA | 1.0 |
| S-1 | 12/24/1998 | NA | NA | NA | NA | NA | NA | NA | NA | 11.93 | 4.45 | 7.48 | NA | 1.0 |
| S-1 | 03/29/1999 | NA | NA | NA | NA | NA | NA | NA | NA | 11.93 | 4.17 | 7.76 | NA | 1.2 |
| S-2 | 06/20/1995 | 180 | NA | 1.1 | <0.5 | <0.5 | 0.6 | NA | NA | 12.06 | 5.80 | 6.26 | NA | NA |
| S-2 | 09/12/1995 | 190 | NA | 18 | <0.5 | 1.2 | 0.6 | NA | NA | 12.06 | 5.78 | 6.28 | NA | NA |
| S-2 | 12/28/1995 | 200 | NA | 11 | 1.0 | 1.0 | 4.0 | NA | NA | 12.06 | 4.02 | 8.04 | NA | NA |
| S-2 | 03/25/1996 | 180 | NA | 12 | 0.8 | 1.4 | 1.0 | <2.0 | NA | 12.06 | 5.56 | 6.50 | NA | NA |
| S-2 | 06/27/1996 | 150 | NA | 7.7 | 0.79 | 0.93 | 0.5 | <2.5 | NA | 12.06 | 6.00 | 6.06 | NA | NA |
| S-2 | 09/26/1996 | 83 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12.06 | 5.73 | 6.33 | NA | NA |
| S-2 | 12/10/1996 | 78 | NA | 1.4 | <0.50 | 0 57 | <0.50 | <2.5 | NA | 12.06 | 4.57 | 7.49 | NA | NA |
| S-2 | 03/10/1997 | 61 | NA | 1.6 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12 06 | 5.38 | 6.68 | NA | NA |
| S-2 | 06/26/1997 | 90 | NA | 1.5 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12.06 | 5.68 | 6.38 | NA | NA |
| S-2 | 09/30/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12.06 | 5.75 | 6.31 | NA | NA |
| S-2 | 12/15/1997 | <50 | NA | 4.1 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12 06 | 5.35 | 6.71 | NA | NA |
| S-2 | 03/12/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12.06 | 4.71 | 7.35 | NA | 4.3 |
| S-2 | 06/08/1998 | NA | NA | NA | NA | NA | NA | NA | NA | 12.06 | 8.41 | 3.65 | NA | 2.2 |
| S-2 | 08/26/1998 | NA | NA | NA | NA | NA | NA | NA | NA | 12.06 | 5.23 | 6.83 | NA | 1.8 |
| S-2 | 12/24/1998 | NA | NA | NA | NA | NA | NA | NA | NA | 12.06 | 5.94 | 6.12 | NA | 1.4 |
| S-2 | 03/29/1999 | NA | NA | NA | NA | NA | NA | NA | NA | 12.06 | 5.75 | 6.31 | NA | 1.8 |

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

Deidre Kerwin
Operations Manager

DK/mt

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

cc: Joe Neely
Cambria Environmental Technology, Inc.
270 Perkins Street
Sonoma, CA 95476-0259

**WELL CONCENTRATIONS**
**Shell-branded Service Station**
**2101 Park Avenue**
**Oakland, CA**
**Wic #204-5508-1206**

| 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.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-2 (D) | 03/10/1997 | 77 | NA | 2.0 | <0.50 | 0.69 | <0.50 | <2.5 | NA | 12.06 | NA | NA | NA | NA |
| S-2 (D) | 06/26/1997 | <50 | 99 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12.06 | 3.91 | 8.02 | NA | NA |
| S-2 (D) | 09/30/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 12.06 | 5.75 | 6.31 | NA | NA |
| S-3 | 06/20/1995 | 5500 | NA | 240 | 34 | 120 | 840 | NA | NA | 13.54 | 4.90 | 8.64 | NA | NA |
| S-3 | 09/12/1995 | 5200 | NA | 690 | 14 | 290 | 280 | NA | NA | 13.54 | 5.37 | 8.17 | NA | NA |
| S-3 | 12/28/1995 | 13000 | NA | 670 | 34 | 960 | 1400 | NA | NA | 13.54 | 3.90 | 9.64 | NA | NA |
| S-3 | 03/25/1996 | 7300 | NA | 560 | 65 | 540 | 820 | <200 | NA | 13.54 | 4.30 | 9.24 | NA | NA |
| S-3 | 06/27/1996 | 17000 | NA | 1100 | 83 | 1200 | 2700 | <250 | NA | 13.54 | 5.00 | 8.54 | NA | NA |
| S-3 | 09/26/1996 | 8900 | NA | 920 | 43 | 400 | 1100 | <125 | NA | 13.54 | 5.23 | 8.31 | NA | NA |
| S-3 | 12/10/1996 | 6100 | NA | 470 | 25 | 290 | 640 | <100 | NA | 13.54 | 3.88 | 9.66 | NA | NA |
| S-3 | 03/10/1997 | 7000 | NA | 720 | 29 | 340 | 620 | 110 | NA | 13.54 | 4.10 | 9.44 | NA | NA |
| S-3 | 06/26/1997 | 11000 | NA | 1100 | 63 | 470 | 1300 | 150 | NA | 13.54 | 5.23 | 8.31 | NA | NA |
| S-3 | 09/30/1997 | 25000 | NA | 970 | 170 | 1200 | 4600 | <50 | NA | 13.54 | 5.36 | 8.18 | NA | NA |
| S-3 | 09/30/1997 | 25000 | NA | 970 | 170 | 1200 | 4600 | <50 | NA | 13.54 | 5.36 | 8.18 | NA | NA |
| S-3 | 12/15/1997 | 9800 | NA | 840 | 55 | 420 | 1100 | 350 | NA | 13.54 | 3.81 | 9.73 | NA | NA |
| S-3 | 03/12/1998 | 2800 | NA | 260 | 21 | 140 | 600 | <12 | NA | 13.54 | 4.79 | 8.75 | NA | 4.8 |
| S-3 | 06/08/1998 | 2500 | 420 | 220 | 23 | 170 | 600 | <20 | NA | 13.54 | 5.60 | 7.94 | NA | NA |
| S-3 | 06/17/1998 | NA | NA | NA | NA | NA | NA | NA | NA | 13.54 | 3.49 | 10.05 | NA | NA |
| S-3 | 08/26/1998 | 4000 | 600 | 520 | 56 | 270 | 910 | <50 | NA | 13.54 | 4.89 | 8.65 | NA | 1.9 |
| S-3 | 12/24/1998 | 3700 | 590 | 320 | 32 | 210 | 650 | 55 | NA | 13.54 | 4.93 | 8.61 | NA | 1.2 |
| S-3 | 03/29/1999 | 5400 | NA | 530 | 62 | 400 | 1100 | 45 | NA | 13.54 | 4.61 | 8.93 | NA | 1.5 |
| S-3 (D) | 06/20/1995 | 6300 | NA | 270 | 37 | 120 | 1100 | NA | NA | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 09/12/1995 | 4700 | NA | 620 | 13 | 260 | 240 | NA | NA | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 12/28/1995 | 13000 | NA | 800 | 34 | 1000 | 1600 | NA | NA | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 03/25/1996 | 7400 | NA | 580 | 19 | 620 | 670 | <20 | NA | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 06/27/1996 | 1903 | NA | 13 | 1.0 | 14 | 34 | 7.2 | NA | 13 54 | NA | NA | NA | NA |
| S-3 (D) | 09/26/1996 | 9800 | NA | 960 | 41 | 450 | 1300 | 120 | <16 a | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 12/10/1996 | 7700 | NA | 550 | 33 | 380 | 880 | 120 | NA | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 06/26/1997 | 12000 | NA | 1100 | 62 | 480 | 1400 | <100 | NA | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 12/15/1997 | 9800 | NA | 850 | 56 | 420 | 1100 | 360 | <20 | 13.54 | NA | NA | NA | NA |
| S-3 (D) | 03/12/1998 | 2100 | NA | 200 | 15 | 110 | 450 | <12 | NA | 13 54 | NA | NA | NA | NA |
| S-3 (D) | 06/08/1998 | 3200 | NA | 270 | 30 | 220 | 740 | 76 | NA | 13.54 | NA | NA | NA | NA |

## WELL CONCENTRATIONS
## Shell-branded Service Station
## 2101 Park Avenue
## Oakland, CA
## Wic #204-5508-1206

| 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.) | GW Elevation (MSL) | SPH Thickness (ft.) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-3 (D) | 08/26/1998 | 4100 | 500 | 550 | 65 | 320 | 1100 | <2.5 | NA | 13.54 | NA | NA | NA | NA |

Abbreviations

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
BTEX – benzene, toluene, ethylbenzene, xylenes by EPA Method 8020
MTBE = methyl-tertiary-butyl ether
TOC - Top of Casing Elevation
SPH – Separate-Phase Hydrocarbons
GW = Groundwater
DO - Dissolved Oxygen
ug/L = parts per billion
msl – Mean sea level
ft = Feet
<n = Below detection limit
D – Duplicate sample

Note

(a) - The MTBE was analyzed by EPA method 8260 one day past hold time. The MTBE value did not confirm therefore, all MTBE results at this site should be considered estimated.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112
Attention: Fran Thie

Client Proj. ID: Shell 2101 Park Blvd Oakland
Lab Proj. ID: 9903E49

Received: 03/30/99
Reported: 04/13/99

## LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 2 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Shell 2101 Park Blvd Oakland | Sampled: 03/29/99 |
| 1680 Rogers Avenue | Sample Descript: S-3 | Received: 03/30/99 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: 8015Mod/8020 | Analyzed: 04/06/99 |
| Attention: Fran Thie | Lab Number: 9903E49-01 | Reported: 04/13/99 |

QC Batch Number: GC040699BTEX30A
Instrument ID: GCHP30

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| *Analyte* | *Detection Limit* ug/L | *Sample Results* ug/L |
|---|---|---|
| TPPH as Gas | 500 | 5400 |
| Methyl t-Butyl Ether | 25 | 45 |
| Benzene | 5.0 | 530 |
| Toluene | 5.0 | 62 |
| Ethyl Benzene | 5.0 | 400 |
| Xylenes (Total) | 5.0 | 1100 |
| Chromatogram Pattern: | | C6-C12 |

| *Surrogates* | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 109 |

Analytes reported as N.D. were not present above the stated limit of detection

SEQUOIA ANALYTICAL - ELAP #1210

Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Shell 2101 Park Blvd Oakland

Lab Proj. ID: 9903E49-01
Sample Descript: LIQUID,S-3

Sampled: 03/29/99
Received: 03/30/99
Analyzed: see below

Reported: 04/13/99

## LABORATORY ANALYSIS

| Analyte | Units | Detection Limit | Method | Analyst | Date Analyzed | Sample Results |
|---|---|---|---|---|---|---|
| Nitrate as Nitrate | mg/L | 1.0 | EPA 300.0 | BE | 03/31/99 | N.D. |
| **Sulfate** | **mg/L** | **1.0** | **EPA 300.0** | **BE** | **03/31/99** | **6.8** |
| **Total Dissolved Solids** | **mg/L** | **10** | **EPA 160.1** | **K.** | **04/05/99** | **980** |

[illegible] reported as N.D. were not present above the stated limit of detection

SEQUOIA ANALYTICAL - ELAP #1210

Please Note
This sample was preserved in accordance with EPA approved preservation methods

Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell 2101 Park Blvd Oakland

QC Sample Group: 9903E49-01

Reported: Apr 20, 1999

## QUALITY CONTROL DATA REPORT

**Matrix:** Liquid
**Method:** EPA 300.0
**Analyst:** B. Entemon

| ANALYTE | Fluoride | Chloride | Nitrite | Bromide | Nitrate | Phosphate | Sulfate |
|---|---|---|---|---|---|---|---|
| **QC Batch #:** | IN0331993000ACA | | | | | | |
| **Sample No.:** | W/MW-2 | | | | | | |
| **Date Prepared:** | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 |
| **Date Analyzed:** | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 |
| **Instrument I.D.#:** | INACA | INACA | INACA | INACA | INACA | INACA | INACA |
| **Sample Conc., mg/L:** | N.D. | 105 | N.D. | 7 | 200 | N D | 1000 |
| **Conc. Spiked, mg/L:** | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Matrix Spike, mg/L:** | 100 | 210 | 96 | 94 | 310 | 52 | 1200 |
| **% Recovery:** | 103 | 105 | 96 | 88 | 112 | 52 | 160 |
| **Matrix Spike Duplicate, mg/L:** | 100 | 210 | 96 | 95 | 310 | 56 | 1200 |
| **% Recovery:** | 103 | 104 | 96 | 88 | 112 | 56 | 160 |
| **Relative % Difference:** | 0.0 | 0.96 | 0.0 | 0.0 | 0.0 | 7 4 | 0.0 |
| **RPD Control Limits:** | 0-20 | 0-20 | 0-20 | 0-20 | 0-20 | 0-20 | 0-20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LCS Batch#:** | LCS033199ACA | | | | | | |
| **Date Prepared:** | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 |
| **Date Analyzed:** | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 | 3/31/99 |
| **Instrument I.D.#:** | INACA | INACA | INACA | INACA | INACA | INACA | INACA |
| **Conc. Spiked, mg/L:** | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| **LCS Recovery, mg/L:** | 10 | 9.2 | 9.7 | 9.3 | 9.5 | 8.7 | 9 6 |
| LCS % Recovery: | 104 | 92 | 97 | 93 | 95 | 87 | 96 |

Percent Recovery Control Limits:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MS MSD | 75-125 | 75-125 | 75-125 | 75-125 | 75-125 | 75-125 | 75-125 |
| LCS | 90-110 | 90-110 | 90-110 | 90-110 | 90-110 | 90-110 | 90-110 |

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Kayvan Kimyai
Project Manager

Please Note:
The LCS is a control sample of known interference free matrix that is analyzed using the same reagents preparation and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell 2101 Park Blvd Oakland

QC Sample Group: 9903E49-01

Reported: Apr 20, 1999

## QUALITY CONTROL DATA REPORT

**Matrix:** Liquid
**Method:** EPA 160.2
**Analyst:** K. Ceasar

**ANALYTE** Total Suspended Solids

**QC Batch #:** IN040599160200A

**Sample No.:** 9903E43-5
**Date Prepared:** 4/5/99
**Date Analyzed:** 4/5/99
**Instrument I.D.#:** Manual

| | |
|---|---|
| **Sample Concentration, mg/L:** | < 1.0 |
| **Duplicate Concentration, mg/L:** | < 1.0 |
| **elative % Difference:** | N/A |
| **RPD Control Limits:** | 0-20 |

Percent Recovery Control Limits.

| | |
|---|---|
| LCS | 80-120 |

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Kayvan Kimvai
Project Manager

Please Note:
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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell 2101 Park Blvd Oakland

QC Sample Group: 9903E49-01

Reported: Apr 14, 1999

## QUALITY CONTROL DATA REPORT

| | |
|---|---|
| **Matrix:** | Liquid |
| **Method:** | EPA 8015 |
| **Analyst:** | MM |
| **ANALYTE** | Gasoline |

**QC Batch #:** GC040699BTEX30A

| | |
|---|---|
| **Sample No.:** | 9904043-13 |
| **Date Prepared:** | 4/7/99 |
| **Date Analyzed:** | 4/7/99 |
| **Instrument I.D.#:** | GCHP30 |
| **Sample Conc., ug/L:** | N.D. |
| **Conc. Spiked, ug/L:** | 250 |
| **Matrix Spike, ug/L:** | 220 |
| **% Recovery:** | 88 |
| **Matrix Spike Duplicate, ug/L:** | 220 |
| **% Recovery:** | 88 |
| **Relative % Difference:** | 0.0 |
| **RPD Control Limits:** | 0-25 |

**LCS Batch#:** GC040699BTEX30A

| | |
|---|---|
| **Date Prepared:** | 4/6/99 |
| **Date Analyzed:** | 4/6/99 |
| **Instrument I.D.#:** | GCHP30 |
| **Conc. Spiked, ug/L:** | 250 |
| **LCS Recovery, ug/L:** | 230 |
| **LCS % Recovery:** | 92 |

Percent Recovery Control Limits

| | |
|---|---|
| MS MSD | 60-140 |
| LCS | 70-130 |

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met

SEQUOIA ANALYTICAL

Kavvan Kimyai
Project Manager

Please Note

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# SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

## CHAIN OF CUSTODY RECORD
Serial No: 990329-P2

Date: 3/29/99
Page 1 of 1

Site Address: 2101 Park Blvd., Oakland, CA

WIC#: 204-5508-1206

Shell Engineer: Alex Perez
Phone No.: (510) 675-6168
Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services, Inc, 1680 Rogers AVe., San Jose, CA 95112

Consultant Contact: Fran Thie
Phone No.: (408) 573-0555
Fax #: 573-7771

Comments: 9903E49

Sampled by:

Printed Name: Paul Sanna

LAB: Sequoia

| Sample ID | Date | Sludge | Soil | Water | Air | No. of conts. | TPH (EPA 8015 Mod. Gas) | TPH (EPA 8015 Mod. Diesel) | BTEX (EPA 8020/602) | Volatile Organics (EPA 8240) | Test for Disposal | Combination TPH 8015 & BTEX 8020 / MTBE | Nitrate, Sulfate, TDS | Asbestos | Container Size | Preparation Used | Composite Y/N | MATERIAL DESCRIPTION | SAMPLE CONDITION/ COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-3 | 3/29 | | | X | | 6 | | | | | | X | X | | | | | 01 | |

Analysis Required

| CHECK ONE (1) BOX ONLY | CT/DT |
|---|---|
| G.W. Monitoring | [X] 4461 |
| Site Investigation | [ ] 4441 |
| Soil Classify/Disposal | [ ] 4442 |
| Water Classify/Disposal | [ ] 4443 |
| Soil/Air Rem. or Sys. O & M | [ ] 4452 |
| Water Rem. or Sys. O & M | [ ] 4453 |
| Other | [ ] |

TURN AROUND TIME
- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (Normal)
- Other [ ] ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ____

| | Printed Name: | Date: | Time: | Received (signature): | Printed Name: | Date: | Time: |
|---|---|---|---|---|---|---|---|
| Relinquished By (signature): | Paul Sanna | 3/30/99 | 1124 | | Fulcher | 3/30/99 | 1124 |
| Relinquished By (signature): | | 3/30/99 | | | | | |
| Relinquished By (signature): | | | | | | 3-30-99 | 1251 |

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Chain Of Cust. of Custody