

C A M B R I A

ENVIRONMENTAL
PROTECTION

September 27, 1999

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

99 SEP 31 PM 2: 56

Re: **First Quarter 1999 Monitoring Report**
Shell-branded Service Station
540 Hegenberger Road
Oakland, California
Incident #98995752
Cambria Project #241-0414-002



Dear Mr. Chan:

On behalf of Equiva Services LLC (Equiva), Cambria Environmental Technology, Inc. (Cambria) is submitting this ground water monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

FIRST QUARTER 1999 ACTIVITIES

Ground Water Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California collected dissolved oxygen (DO) measurements, gauged water levels, and sampled all wells using the non-purging method. Blaine calculated ground water elevations and compiled the analytical data. Cambria prepared an Area Well Survey map (Figure 1), and a ground water elevation contour map (Figure 2). The Blaine report, presenting the laboratory report and including supporting field documents, is included as Attachment A.

Alameda County Health Care Services Agency (ACHCSA) Letter Response: Cambria submitted a *Subsurface Investigation Work Plan* dated February 25, 1999 in response to the ACHCSA letter to Equiva dated January 4, 1999. The work plan was subsequently approved by the ACHCSA in a March 2, 1999 letter.

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

**Cambria
Environmental
Technology, Inc.**

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

ANTICIPATED FUTURE 1999 ACTIVITIES

Ground Water Monitoring: Blaine will collect DO measurements, gauge water levels, sample all wells using the non-purging method, and tabulate the data. Cambria will prepare a monitoring report.

Conduit Study, Receptor Survey and Monitoring Well Installation: Cambria is in the process of conducting an evaluation of preferential pathways prior to installing the downgradient monitoring well proposed in Cambria's work plan. Cambria conducted a sensitive receptor survey. Results of the receptor survey are tabulated in Table I. Well locations and surface bodies of water are shown on Figure 1. The results of the conduit study and monitoring well installation details will be presented in a forthcoming report.

Interim Remedial Action: Due to the elevated concentrations of MTBE in site wells, Cambria has initiated weekly high vacuum ground water extraction from the four tank back fill wells (A through D), and monitoring wells MW-1 and MW-3. Approximately 5,000 gallons of ground water has been extracted from site wells each week beginning July 29, 1999 as a means of hydrocarbon source removal and plume containment.



CLOSING

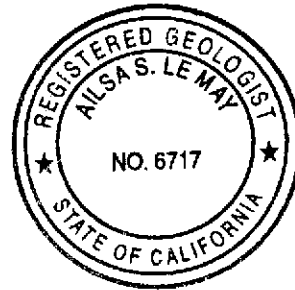
We appreciate the opportunity to work with you on this project. Please call Darryk Ataide at (510) 420-3339 if you have any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc



Darryk Ataide, REA I
Project Manager



Ailsa S. Le May, R.G.
Senior Geologist

Figure: 1 - Area Well Survey

2 - Ground Water Elevation Contour Map

Table: 1 - Well Survey Data

Attachment: A - Blaine Ground Water Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 6249, Carson, California 90749-6249

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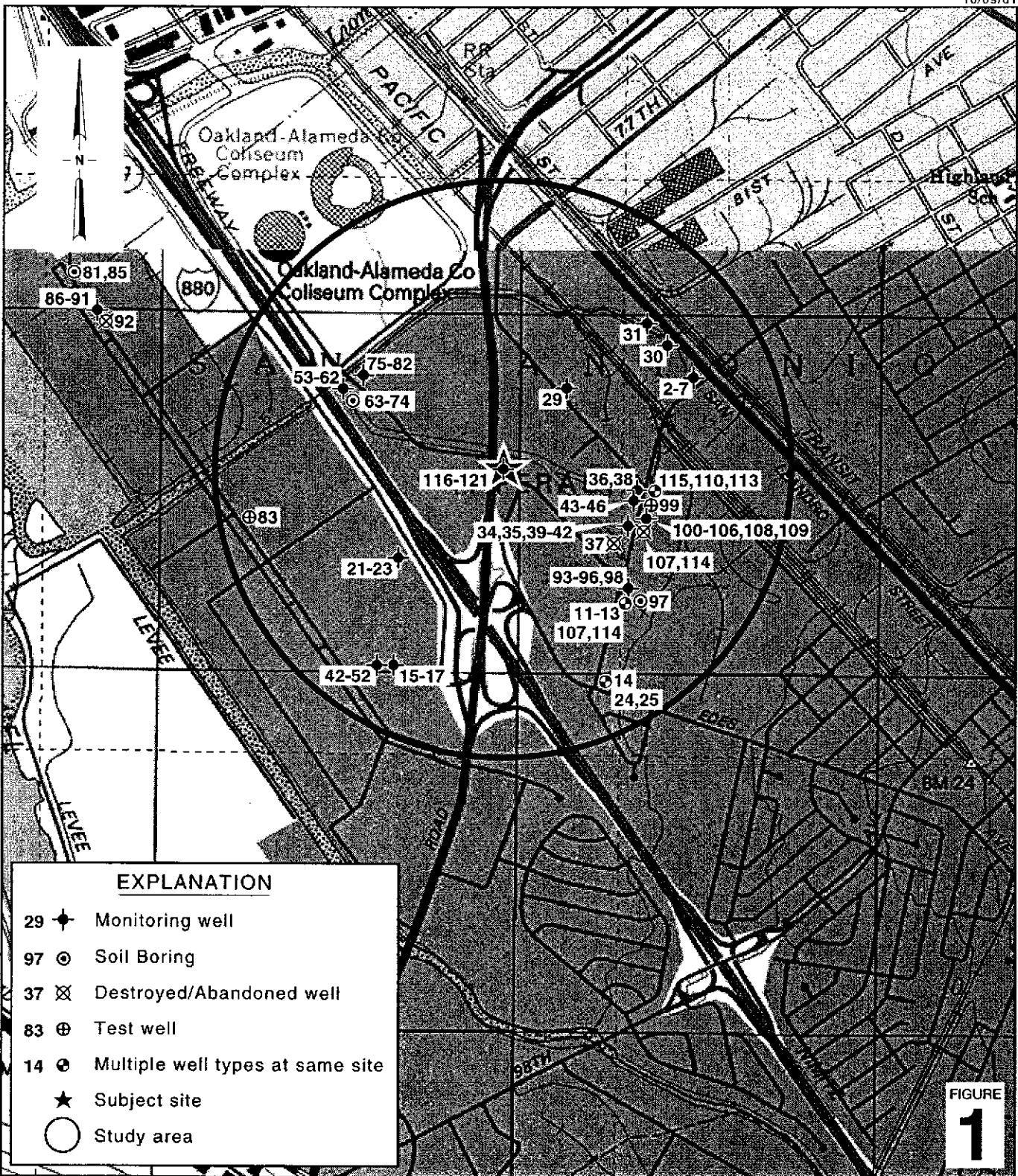


FIGURE 1

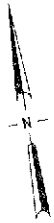
0 1/8 1/4 1/2 1
SCALE 1:1/4 MILES

Shell-branded Service Station
540 Hegenberger Road
Oakland, California
Incident #98995752



C A M B R I A

Vicinity / Area Well Survey Map
(1/2-Mile Radius)



EXPLANATION

- MW-1 ● Monitoring Well
- SB-D ● Soil Boring Location
- A ● Tank Backfill Well
- X.XX Groundwater elevation contour, feet above mean sea level (msl) approximately located; dashed where inferred
- X.XX Groundwater flow direction and gradient
- Well
- ELEV Ground water elevation (msl)
- Benzene Benzene and MTBE concentrations are in parts per billion (ppb)
- MTBE

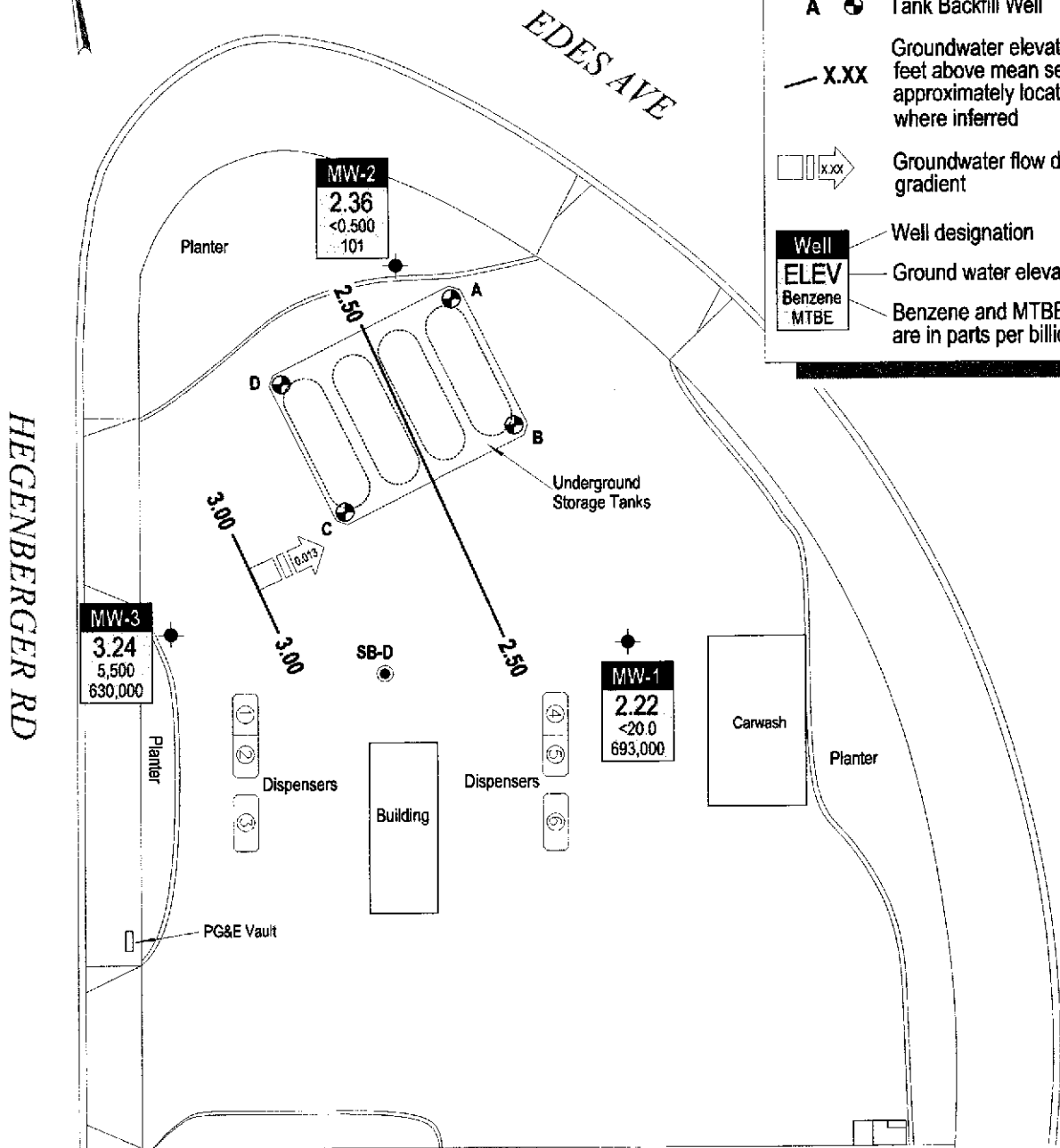


FIGURE
2

Base Map by R.H. Lee & Assoc.

Shell-branded Service Station
 540 Hegenberger Road
 Oakland, California
 Incident #98995752



C A M B R I A

**Ground Water Elevation
 Contour Map**

March 29, 1999

010AK6401.FIGURES\10M99-MF.DWG

CAMBRIA

Table 1. Well Survey - Shell-branded Service Station - Incident# 98995752, 540 Hegenberger Road, Oakland, California

| Well # | Well ID (Soil Boring ID) | Installation Date | Owner | Use | Completed Depth (feet) | Screened Interval | Sealed Interval |
|--------|-----------------------------|-------------------|----------------------------|-------|---------------------------|----------------------|--------------------|
| 1 | 2S/3W 22N | 02/06/91 | Edes Avenue Senior Housing | UNK | 15 | N/A | N/A |
| 2 | 2S/3W 22E7 | 12/14/89 | Carolyn Ratcliff | MONIT | 15 | 5- 14.5 | 0- 4 |
| 3 | 2S/3W 22E7 | 12/13/89 | Carolyn Ratcliff | MONIT | 20 | 10- 19.5 | 0- 8 |
| 4 | 2S/3W 22E7 | 12/15/89 | Carolyn Ratcliff | MONIT | 18 | 8- 17.5 | 0- 6 |
| 5 | 2S/3W 22E7 | 12/14/89 | Carolyn Ratcliff | MONIT | 18 | 8- 17.5 | 0- 6 |
| 6 | 2S/3W 22E7 | 12/13/89 | Carolyn Ratcliff | MONIT | 19.5 | 10- 19 | 0- 8 |
| 7 | 2S/3W 22E7 | 12/14/89 | Carolyn Ratcliff | MONIT | 19.5 | 10- 19 | 0- 8 |
| 8 | 2S/3W 21Q08 | 09/13/92 | Union Bank | MONIT | 20 | 4- 19 | 0- 4 |
| 9 | 2S/3W 21Q09 | 09/13/92 | Union Bank | MONIT | 16.5 | 4- 14 | 0- 4 |
| 10 | 2S/3W 21Q10 | 09/13/92 | Union Bank | MONIT | 20 | 5- 20 | 0- 4 |
| 11 | 2S/3W 21R2 | 04/25/88 | IMO Delaval, Inc. | MONIT | 28 | 12-26.5 | 0- 10 |
| 21 | 2S/3W 21R16 | 03/11/89 | IMO Delaval, Inc. | MONIT | 26.5 | 15-25 | 0.5-15 |
| 13 | 2S/3W 21R17 | 03/12/89 | IMO Delaval, Inc. | MONIT | 27 | 15-25 | 0.5-15 |
| 14 | 2S/3W21 | 10/29/52 | General Metals Corporation | IND | 600 | 200-584 | N/A |
| 15 | 2S/3W21L05 | 09/10/92 | Ryder Truck Rental Inc. | MONIT | 13.5 | 3.5-13.0 | 0-3.5 |
| 16 | 2S/3W21L06 | 09/10/92 | Ryder Truck Rental Inc. | MONIT | 13.5 | 3.5-13.0 | 0-3.5 |
| 17 | 2S/3W21L07 | 09/14/92 | Ryder Truck Rental Inc. | MONIT | 13.5 | 3.5-13.0 | 0-3.5 |
| 18 | 2S/3W21M1 | 07/06/91 | BOC Group | MONIT | 21 | 7-17 | 0-7 |
| 19 | 2S/3W21K1 | 04/25/90 | Motel 6 | MONIT | 30 | 5-30 | 0-5 |
| 20 | 2S/3W21L1 | 01/17/91 | IMO Delaval, Inc. | N/A | 32 | 2-30 | 0-20 |
| 21 | 2S/3W21L2 | 11/09/92 | Superior Tile Company | MONIT | 19 | 4-19 | 0.5-4 |
| 22 | 2S/3W21L3 | 11/09/92 | Superior Tile Company | MONIT | 15 | 4-14 | 0.5-4 |
| 23 | 2S/3W21L4 | 11/09/92 | Superior Tile Company | MONIT | 14 | 4-14 | 0.5-4 |
| 24 | 2S/3W21L4 | 11/09/92 | Motel 6 | MONIT | 11.5 | N/A | 0-11.5 |
| 25 | 2S/3W21L4 | 11/09/92 | Motel 6 | MONIT | 21.5 | N/A | 0-21.5 |

Table 1. Well Survey - Shell-branded Service Station - Incident# 98995752, 540 Hegenberger Road, Oakland, California

| Well # | Well ID (Soil Boring ID) | Installation Date | Owner | Use | Completed Depth (feet) | Screened Interval | Sealed Interval |
|--------|-----------------------------|-------------------|-------------------------|-------|---------------------------|----------------------|--------------------|
| 26 | 2S/3W21D1 | 08/16/90 | Port of Oakland | MONIT | 16 | 4-15 | 0-4 |
| 27 | 2S/3W21E1 | 08/16/90 | Port of Oakland | MONIT | 16 | 4-15 | 0-4 |
| 28 | 2S/3W21E2 | 08/16/90 | Port of Oakland | MONIT | 16 | 4-15 | 0-4 |
| 29 | 2S/3W21B1 | 09/30/93 | Morris Properties | MONIT | 20 | 5-20 | 0-5 |
| 30 | 2S/3W21A1 | 09/19/89 | Monterey Mechanical | MONIT | 25 | 9-25 | 0-9 |
| 31 | 2S/3W21A2 | 06/24/93 | Mr. Nissan Saidan | MONIT | 15 | 3-15 | 0-3 |
| 32 | 2S/3W21R | N/A | Stonehurst Nursery | REM | 17 | 7-17 | 0-7 |
| 33 | 2S/3W21H11 | 02/19/92 | Stephen Block | MONIT | 17 | 7-17 | 0-7 |
| 34 | 2S/3W21H9 | 04/25/91 | West Coast Wire Rope | MONIT | 17.5 | 3-17.5 | 0-3 |
| 35 | 2S/3W21H10 | 04/25/91 | West Coast Wire Rope | MONIT | 20 | 3-20 | 0-3 |
| 36 | 2S/3W21H7 | 07/07/89 | Ran Rob, Inc. | MONIT | 16.5 | 5-16 | 0-5 |
| 37 | 2S/3W21H5 | 07/07/89* | Ran Rob, Inc. | DEST | 36 | N/A | N/A |
| 38 | 2S/3W21H6 | 07/17/89 | Ran Rob, Inc. | MONIT | 36 | 26-36 | 0-26 |
| 39 | 2S/3W21G17 | 07/09/92 | ARCO Products Company | MONIT | 16.5 | 8-16.5 | 0-8 |
| 40 | 2S/3W21G15 | 07/10/92 | ARCO Products Company | MONIT | 15 | 9-15 | 0-9 |
| 41 | 2S/3W21G1 | 10/30/89 | ARCO Products Company | MONIT | 23 | 13-23 | 0-13 |
| 42 | 2S/3W21G2 | 06/07/89 | ARCO Products Company | MONIT | 21.5 | 14-18 | 0-14 |
| 43 | 2S/3W21H1 | 07/22/88 | Lincoln Property co. | MONIT | 16 | 6-16 | 0-6 |
| 44 | 2S/3W21H2 | 07/22/88 | Lincoln Property co. | MONIT | 13 | 5-10.5 | 0-4 & 10.5-13 |
| 45 | 2S/3W21H3 | 07/22/88 | Lincoln Property co. | MONIT | 16 | 6-16 | 0-5 |
| 46 | 2S/3W21H5 | 07/22/88 | Lincoln Property co. | MONIT | 18 | 8-18 | 0-6 |
| 47 | 2S/3W21D2 | 03/12/92 | Ryder Truck Rental Inc. | MONIT | 15 | 5-15 | 0-5 |
| 48 | 2S/3W21D3 | 03/13/92 | Ryder Truck Rental Inc. | MONIT | 14 | 4.5-14 | 0-4.5 |
| 49 | 2S/3W21D4 | 03/13/92 | Ryder Truck Rental Inc. | MONIT | 14.5 | 4.5-14.5 | 0-4.5 |
| 50 | 2S/3W21D5 | 04/28/92 | Ryder Truck Rental Inc. | MONIT | 15 | 5-15 | 0-5 |

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Table 1. Well Survey - Shell-branded Service Station - Incident# 98995752, 540 Hegenberger Road, Oakland, California

| Well # | Well ID (Soil Boring ID) | Installation Date | Owner | Use | Completed Depth (feet) | Screened Interval | Sealed Interval |
|--------|-----------------------------|-------------------|-------------------------|-------|---------------------------|----------------------|--------------------|
| 51 | 2S/3W21D6 | 04/28/92 | Ryder Truck Rental Inc. | MONIT | 15 | 5-15 | 0-5 |
| 52 | 2S/3W21D7 | 04/28/92 | Ryder Truck Rental Inc. | MONIT | 15 | 5-15 | 0-5 |
| 53 | 2S/3W21C2 | 09/21/89 | Malibu Fun Center | MONIT | 20 | 4-15 | 0-4 |
| 54 | 2S/3W21C4 | 09/20/89 | Malibu Fun Center | MONIT | 15 | 4-19 | 0-4 |
| 55 | 2S/3W21C3 | 09/20/89 | Malibu Fun Center | MONIT | 17 | 5-15 | 0-5 & 15-17 |
| 56 | 2S/3W21C1 | 09/20/89 | Malibu Fun Center | MONIT | 10.5 | 5-10.5 | 0-5 |
| 57 | 2S/3W21C5 | 06/12/90 | Malibu Fun Center | MONIT | 19.5 | 5-19.5 | 0-5 |
| 58 | 2S/3W21C6 | 06/12/90 | Malibu Fun Center | MONIT | 19 | 4-19 | 0-4 |
| 59 | 2S/3W21C7 | 06/12/90 | Malibu Fun Center | MONIT | 19.5 | 4.5-19.5 | 0-4.5 |
| 60 | 2S/3W21C8 | 06/13/90 | Malibu Fun Center | MONIT | 19.5 | 4.5-19.5 | 0-4.5 |
| 61 | 2S/3W21C9 | 06/13/90 | Malibu Fun Center | MONIT | 10 | 4.5-10 | 0-4.5 |
| 62 | 2S/3W21C10 | 06/13/90 | Malibu Fun Center | MONIT | 19 | 4-19 | 0-4 |
| 63 | 2S/3W21C (B6) | 06/12/90 | Malibu Fun Center | SB | 10 | N/A | 0-10 |
| 64 | 2S/3W21C (B7) | 06/12/90 | Malibu Fun Center | SB | 10 | N/A | 0-10 |
| 65 | 2S/3W21C (B8) | 06/12/90 | Malibu Fun Center | SB | 10 | N/A | 0-10 |
| 66 | 2S/3W21C (B9) | 06/12/90 | Malibu Fun Center | SB | 10 | N/A | 0-10 |
| 67 | 2S/3W21C (B10) | 06/13/90 | Malibu Fun Center | SB | 5 | N/A | 0-7 |
| 68 | 2S/3W21C (B11) | 06/13/90 | Malibu Fun Center | SB | 7 | N/A | 0-7 |
| 69 | 2S/3W21C (B12) | 06/13/90 | Malibu Fun Center | SB | 7 | N/A | 0-7 |
| 70 | 2S/3W21C (B13) | 06/13/90 | Malibu Fun Center | SB | 7 | N/A | 0-7 |
| 71 | 2S/3W21C (B14) | 06/13/90 | Malibu Fun Center | SB | 7 | N/A | 0-7 |
| 72 | 2S/3W21C (B15) | 06/13/90 | Malibu Fun Center | SB | 7 | N/A | 0-7 |
| 73 | 2S/3W21C (B16) | 06/13/90 | Malibu Fun Center | SB | 7 | N/A | 0-7 |
| 74 | 2S/3W21C (B17) | 06/13/90 | Malibu Fun Center | SB | 7 | N/A | 0-7 |
| 75 | 2S/3W21C11 | 08/28/91 | Malibu Fun Center | MONIT | 14 | 3.5-14 | 0-3.5 |

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| Well # | Well ID (Soil Boring ID) | Installation Date | Owner | Use | Completed Depth (feet) | Screened Interval | Sealed Interval |
|--------|-----------------------------|-------------------|--------------------------------|-------|---------------------------|----------------------|--------------------|
| 76 | 2S/3W21C12 | 08/28/91 | Malibu Fun Center | MONIT | 21.5 | 4.5-20 | 0-4.5 & 20-21.5 |
| 77 | 2S/3W21C13 | 08/28/91 | Malibu Fun Center | MONIT | 20 | 5-20 | 0-5 |
| 78 | 2S/3W21C14 | 08/27/91 | Malibu Fun Center | MONIT | 20 | 4-20 | 0-4 |
| 79 | 2S/3W21C15 | 08/29/91 | Malibu Fun Center | MONIT | 19 | 4-19 | 0-4 |
| 80 | 2S/3W21C16 | 08/29/91 | Malibu Fun Center | MONIT | 18.5 | 3.5-18.5 | 0-3.5 |
| 81 | 2S/3W21C17 | 08/30/91 | Malibu Fun Center | MONIT | 18.5 | 3.5-18.5 | 0-3.5 |
| 82 | 2S/3W21C18 | 08/29/91 | Malibu Fun Center | MONIT | 21 | 6-21 | 0-6 |
| 83 | 2S/3W21E3 | 04/02/91 | Travelers Companies | TEST | 12.5 | 4-12.5 | 0-4 |
| 84 | 2S/3W21E (B1) | N/A | City of Oakland | SB | 36.5 | N/A | N/A |
| 85 | 2S/3W21E (B2) | N/A | City of Oakland | SB | 32.5 | N/A | N/A |
| 86 | 2S/3W21D9 | 02/12/92 | Grand Auto Distribution Center | MONIT | 18.5 | 4-18 | 0-4 |
| 87 | 2S/3W21D10 | 02/12/92 | Grand Auto Distribution Center | MONIT | 18.5 | 4-18 | 0-4 |
| 88 | 2S/3W21D11 | 02/13/92 | Grand Auto Distribution Center | MONIT | 19.5 | 5-19 | 0-5 |
| 89 | 2S/3W21D12 | 02/11/92 | Grand Auto Distribution Center | MONIT | 20 | 5.5-19.5 | 0-5.5 |
| 90 | 2S/3W21D13 | 02/14/92 | Grand Auto Distribution Center | MONIT | 34.5 | 20-34 | 0-20 |
| 91 | 2S/3W21D14 | 02/11/92 | Grand Auto Distribution Center | MONIT | 18.5 | 4-18 | 0-4 |
| 92 | 2S/3W21D8 | 02/13/92* | Grand Auto Distribution Center | DEST | N/A | N/A | N/A |
| 93 | 2S/3W21J3 | 01/27/88 | IMO Delaval | MONIT | 23 | 8-23 | 0-8 |
| 94 | 2S/3W21J4 | 01/26/88 | IMO Delaval | MONIT | 30 | 15-30 | 0-15 |
| 95 | 2S/3W21J5 | 01/25/88 | IMO Delaval | MONIT | 36 | 26-36 | 0-26 |
| 96 | 2S/3W21J6 | 01/25/88 | IMO Delaval | MONIT | 30 | 20-30 | 0-20 |
| 97 | 2S/3W21J (SB1a) | N/A | IMO Delaval | SB | 26.5 | N/A | 0-26.5 |
| 98 | 2S/3W21J35 | 11/19/89 | IMO Delaval | MONIT | 55 | 45-55 | 0-45 |
| 99 | 2S/3W21J20 | 04/21/89 | IMO Delaval | TEST | 27.5 | 22.5-27.5 | 0-22.5 |
| 100 | 2S/3W21J21 | 04/21/89 | IMO Delaval | MONIT | 39 | 14-39 | 0-14 |

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| Well # | Well ID (Soil Boring ID) | Installation Date | Owner | Use | Completed Depth (feet) | Screened Interval | Sealed Interval |
|--------|-----------------------------|-------------------|-----------------------|-------|---------------------------|----------------------|----------------------|
| 101 | 2S/3W21J22 | 04/22/89 | IMO Delaval | MONIT | 23 | 13-23 | 0-13 |
| 102 | 2S/3W21J16 | 04/17/89 | IMO Delaval | MONIT | 22 | 12-22 | 0-12 |
| 103 | 2S/3W21J17 | 04/17/89 | IMO Delaval | MONIT | 24 | 14-24 | 14-Mar |
| 104 | 2S/3W21J18 | 04/18/89 | IMO Delaval | MONIT | 32 | 12-32 | 12-Mar |
| 105 | 2S/3W21J19 | 04/18/89 | IMO Delaval | MONIT | 21.5 | 12.5-17.5 | 2.5-12.5 & 17.5-21.5 |
| 106 | 2S/3W21J7 | 04/20/89 | IMO Delaval | MONIT | 30.5 | 15-30.5 | 0-15 |
| 107 | 2S/3W21J8 | 04/21/89* | IMO Delaval | DEST | 34 | N/A | N/A |
| 108 | 2S/3W21J9 | 04/21/89 | IMO Delaval | MONIT | 32 | 17-32 | 0-17 |
| 109 | 2S/3W21J10 | 04/25/89 | IMO Delaval | MONIT | 34 | 19-34 | 0-19 |
| 110 | 2S/3W21N1 | 11/16/89 | IMO Delaval | N/A | 30 | 20-30 | 0-20 |
| 111 | 2S/3W21P2 | 11/16/89 | IMO Delaval | N/A | 29.5 | 19.5-29.5 | 19.5 |
| 112 | 2S/3W21Q1 | 11/20/89 | IMO Delaval | N/A | 46.5 | 43.5-46.5 | 0-43.5 |
| 113 | 2S/3W21H8 | 04/18/91 | IMO Delaval | N/A | 20 | 3-20 | 0-3 |
| 114 | 2S/3W21J1 | 08/14/79* | IMO Delaval | DEST | 250 | N/A | N/A |
| 115 | 2S/3W21J2 | 06/16/76 | Delaval Tirbine, Inc. | IND | 430 | 130-240 | 0-130 & 240-430 |
| 116 | 2S/3W21Q2 | 02/05/91 | Unocal Corporation | MONIT | 13 | 2-13 | 0-2 |
| 117 | 2S/3W21Q3 | 02/05/91 | Unocal Corporation | MONIT | 15 | 3-15 | 0-3 |
| 118 | 2S/3W21Q4 | 02/05/91 | Unocal Corporation | MONIT | 14 | 2-14 | 0-2 |
| 119 | 2S/3W21Q5 | 08/21/92 | Unocal Corporation | MONIT | 13.5 | 2.5-13.5 | 0-2.5 |
| 120 | 2S/3W21Q6 | 08/21/92 | Unocal Corporation | MONIT | 13.5 | 2.5-13.5 | 0-2.5 |
| 121 | 2S/3W21Q7 | 08/21/92 | Unocal Corporation | MONIT | 13.5 | 2.5-13.5 | 0-2.5 |

Table 1. Well Survey - Shell-branded Service Station - Incident# 98995752, 540 Hegenberger Road, Oakland, California

| Well # | Well ID (Soil Boring ID) | Installation Date | Owner | Use | Completed Depth (feet) | Screened Interval | Sealed Interval |
|--------|-----------------------------|-------------------|-------|-----|---------------------------|----------------------|--------------------|
|--------|-----------------------------|-------------------|-------|-----|---------------------------|----------------------|--------------------|

Abbreviations:

UNK = Unknown
 MONIT = Monitoring Well
 IND = Industrial well
 REM = Remediation
 DEST = Destroyed well
 SB = Soil Borings
 DOM = Domestic well
 IRR = Irrigation well
 TEST = Test well
 MUNI = Municipal supply well
 * = Well destruction date
 N/A = Not available

Notes:

All well data was supplied by the California Department of Water Resources
 Wells 26, 27, and 28 are not located on the half-mile well vicinity map
 Wells 1 & 32: addresses unknown

C A M B R I A



ATTACHMENT A

Blaine Ground Water Monitoring Report
and Field Notes



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

May 3, 1999

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

First Quarter 1999 Groundwater Monitoring at
Shell-branded Service Station
540 Hegenberger Road
Oakland, CA

Monitoring performed on March 29, 1999

Groundwater Monitoring Report 990329-P-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, appropriate calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

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

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

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. 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,

A handwritten signature in black ink, appearing to read "Deidre Kerwin", with a long horizontal flourish extending to the right.

Deidre Kerwin
Operations Manager

DK/ld

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

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

WELL CONCENTRATIONS
Shell-branded Service Station
540 Hegenberger Road
Oakland, CA
WIC #204-5508-5900

| Well ID | Date | TPPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|-------------|------------|----------------|-------------|-------------|-------------|-------------|------------------------|------------------------|--------------|----------------------------|--------------------------|------------------------|
| MW-1 (a) | 08/26/1998 | 2700 | 28 | 55 | 59 | 39 | 33,000 | NA | 10.54 | 7.91 | 2.63 | 1.8 |
| MW-1 (b) | 08/26/1998 | <1000 | 22 | <10 | <10 | <10 | 17,000 | NA | 10.54 | 7.91 | 2.63 | 2.2 |
| MW-1 | 12/28/1998 | <5000 | <50.0 | <50.0 | <50.0 | <50.0 | 153,000 | 33000 | 10.54 | 8.75 | 1.79 | 1.9 |
| MW-1 | 03/29/1999 | <2000 | <20.0 | <20.0 | <20.0 | <20.0 | 693,000 | NA | 10.54 | 8.32 | 2.22 | 2.0 |
| MW-2 (a) | 08/26/1998 | <250 | 3.2 | <2.5 | <2.5 | <2.5 | 4000 | NA | 9.21 | 7.18 | 2.03 | 2.4 |
| MW-2 (b) | 08/26/1998 | <250 | 3.1 | <2.5 | <2.5 | <2.5 | 4800 | NA | 9.21 | 7.18 | 2.03 | 2.7 |
| MW-2 (D)(b) | 08/26/1998 | <250 | 4.8 | <2.5 | <2.5 | 6.0 | 3300 | NA | 9.21 | 7.18 | 2.03 | 2.7 |
| MW-2 | 12/28/1998 | <50.0 | <0.500 | <0.500 | <0.500 | <0.500 | 28.8 | NA | 9.21 | 7.34 | 1.87 | 2.1 |
| MW-2 | 03/29/1999 | 235 | <0.500 | <0.500 | <0.500 | 3.40 | 101 | NA | 9.21 | 6.85 | 2.36 | 2.0 |
| MW-3 (a) | 08/26/1998 | 2300 | 180 | 330 | <0.50 | 420 | 44,000 | NA | 9.45 | 6.52 | 2.93 | 1.8 |
| MW-3 (b) | 08/26/1998 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 52,000 | 75000 | 9.45 | 6.52 | 2.93 | 2.3 |
| MW-3 | 12/28/1998 | <5000 | 139 | <50.0 | <50.0 | <50.0 | 15,100 | NA | 9.45 | 6.73 | 2.72 | 1.7 |
| MW-3 | 03/29/1999 | 52500 | 5500 | 6900 | 1360 | 6250 | 508,000 | 630000 (c) | 9.45 | 6.21 | 3.24 | 2.1 |

Abbreviations:

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

Notes:

a = pre-purge
 b = post purge
 c = Lab confirmed MTBE by mistake.
 MTBE value at MW-1 should have been confirmed instead.



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April 16, 1999

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

RE: Shell(2)/L904014

Dear Fran Thie:

Enclosed are the results of analyses for sample(s) received by the laboratory on March 30, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Gregory
Project Manager D.M.





**Sequoia
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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Project: Shell(2)
Project Number: Shell 540 Hegenberger, Oakland
Project Manager: Fran Thie

Sampled: 3/29/99
Received: 3/30/99
Reported: 4/16/99

ANALYTICAL REPORT FOR L904014

| Sample Description | Laboratory Sample Number | Sample Matrix | Date Sampled |
|--------------------|--------------------------|---------------|--------------|
| MW-1 | L904014-01 | Water | 3/29/99 |
| MW-2 | L904014-02 | Water | 3/29/99 |
| MW-3 | L904014-03 | Water | 3/29/99 |





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| | | |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Project: Shell(2) Project Number: Shell 540 Hegenberger, Oakland Project Manager: Fran Thie | Sampled: 3/29/99 Received: 3/30/99 Reported: 4/16/99 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|

Sample Description: MW-1
Laboratory Sample Number: L904014-01

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method/ Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---------|--------------|---------------|---------------|--------------------------------------|-----------------|--------|-------|--------|
|---------|--------------|---------------|---------------|--------------------------------------|-----------------|--------|-------|--------|

Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

| | | | | | | | | |
|------------------------------------------|---------|---------|---------|----------|-------|---------------|------|--|
| Purgeable Hydrocarbons as Gasoline | 9040042 | 4/8/99 | 4/8/99 | | 2000 | ND | ug/l | |
| Benzene | " | " | " | | 20.0 | ND | " | |
| Toluene | " | " | " | | 20.0 | ND | " | |
| Ethylbenzene | " | " | " | | 20.0 | ND | " | |
| Xylenes (total) | " | " | " | | 20.0 | ND | " | |
| Methyl tert-butyl ether | 9040056 | 4/12/99 | 4/12/99 | | 10000 | 693000 | " | |
| <i>Surrogate: a,a,a-Trifluorotoluene</i> | 9040042 | 4/8/99 | 4/8/99 | 70.0-130 | | 92.4 | % | |





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| | | |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Project: Shell(2) Project Number: Shell 540 Hegenberger, Oakland Project Manager: Fran Thie | Sampled: 3/29/99 Received: 3/30/99 Reported: 4/16/99 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|

Sample Description: MW-2
Laboratory Sample Number: L904014-02

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method/ Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---------|--------------|---------------|---------------|--------------------------------------|-----------------|--------|-------|--------|
|---------|--------------|---------------|---------------|--------------------------------------|-----------------|--------|-------|--------|

Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

| | | | | | | | | |
|-------------------------------------------|---------|---------|---------|----------|-------|------|------|---|
| Purgeable Hydrocarbons as Gasoline | 9040056 | 4/12/99 | 4/12/99 | | 50.0 | 235 | ug/l | 1 |
| Benzene | " | " | " | | 0.500 | ND | " | |
| Toluene | " | " | " | | 0.500 | ND | " | |
| Ethylbenzene | " | " | " | | 0.500 | ND | " | |
| Xylenes (total) | " | " | " | | 0.500 | 3.40 | " | |
| Methyl tert-butyl ether | " | " | " | | 5.00 | 101 | " | |
| Surrogate: a,a,a-Trifluorotoluene | " | " | " | 70.0-130 | | 113 | % | |





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| | | |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Project: Shell(2) Project Number: Shell 540 Hegenberger, Oakland Project Manager: Fran Thie | Sampled: 3/29/99 Received: 3/30/99 Reported: 4/16/99 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|

Sample Description: MW-3
Laboratory Sample Number: L904014-03

| Analyte | Batch Number | Date Prepared | Date Analyzed | Specific Method/ Surrogate Limits | Reporting Limit | Result | Units | Notes* |
|---------|--------------|---------------|---------------|--------------------------------------|-----------------|--------|-------|--------|
|---------|--------------|---------------|---------------|--------------------------------------|-----------------|--------|-------|--------|

Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

| | | | | | | | | |
|------------------------------------|---------|---------|---------|----------|-------|--------|------|---|
| Purgeable Hydrocarbons as Gasoline | 9040048 | 4/9/99 | 4/9/99 | | 25000 | 52500 | ug/l | 1 |
| Benzene | " | " | " | | 250 | 5500 | " | |
| Toluene | " | " | " | | 250 | 6900 | " | |
| Ethylbenzene | " | " | " | | 250 | 1360 | " | |
| Xylenes (total) | " | " | " | | 250 | 6250 | " | |
| Methyl tert-butyl ether | 9040056 | 4/12/99 | 4/12/99 | | 10000 | 508000 | " | |
| Surrogate: a,a,a-Trifluorotoluene | 9040048 | 4/9/99 | 4/9/99 | 70.0-130 | | 94.2 | % | |

MTBE Confirmation by EPA Method 8260A

| | | | | | | | | |
|----------------------------------|---------|---------|---------|----------|-------|--------|------|--|
| Methyl tert-butyl ether | 9040076 | 4/15/99 | 4/15/99 | | 10000 | 630000 | ug/l | |
| Surrogate: 1,2-Dichloroethane-d4 | " | " | " | 76.0-114 | | 105 | % | |



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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Project: Shell(2)
Project Number: Shell 540 Hegenberger, Oakland
Project Manager: Fran Thie

Sampled: 3/29/99
Received: 3/30/99
Reported: 4/16/99

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - San Carlos

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|------------------------------------|---------------|-------------|------------------------------|-----------|-------------------|--------------------------------------------|----------|-----------|-------|--------|
| Batch: 9040042 | | | Date Prepared: 4/8/99 | | | Extraction Method: EPA 5030B [P/T] | | | | |
| Blank | | | 9040042-BLK1 | | | | | | | |
| Purgeable Hydrocarbons as Gasoline | 4/8/99 | | | ND | ug/l | 50.0 | | | | |
| Benzene | " | | | ND | " | 0.500 | | | | |
| Toluene | " | | | ND | " | 0.500 | | | | |
| Ethylbenzene | " | | | ND | " | 0.500 | | | | |
| Xylenes (total) | " | | | ND | " | 0.500 | | | | |
| Methyl tert-butyl ether | " | | | ND | " | 5.00 | | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 10.4 | " | 70.0-130 | 104 | | | |
| LCS | | | 9040042-BS1 | | | | | | | |
| Purgeable Hydrocarbons as Gasoline | 4/8/99 | 250 | | 263 | ug/l | 70.0-130 | 105 | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 9.34 | " | 70.0-130 | 93.4 | | | |
| Matrix Spike | | | 9040042-MS1 | | L904008-02 | | | | | |
| Purgeable Hydrocarbons as Gasoline | 4/8/99 | 250 | ND | 279 | ug/l | 60.0-140 | 112 | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 9.88 | " | 70.0-130 | 98.8 | | | |
| Matrix Spike Dup | | | 9040042-MSD1 | | L904008-02 | | | | | |
| Purgeable Hydrocarbons as Gasoline | 4/8/99 | 250 | ND | 267 | ug/l | 60.0-140 | 107 | 25.0 | 4.57 | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 9.27 | " | 70.0-130 | 92.7 | | | |
| Batch: 9040048 | | | Date Prepared: 4/9/99 | | | Extraction Method: EPA 5030B [MeOH] | | | | |
| Blank | | | 9040048-BLK1 | | | | | | | |
| Purgeable Hydrocarbons as Gasoline | 4/9/99 | | | ND | ug/l | 50.0 | | | | |
| Benzene | " | | | ND | " | 0.500 | | | | |
| Toluene | " | | | ND | " | 0.500 | | | | |
| Ethylbenzene | " | | | ND | " | 0.500 | | | | |
| Xylenes (total) | " | | | ND | " | 0.500 | | | | |
| Methyl tert-butyl ether | " | | | ND | " | 5.00 | | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 10.2 | " | 70.0-130 | 102 | | | |
| LCS | | | 9040048-BS1 | | | | | | | |
| Benzene | 4/9/99 | 10.0 | | 8.82 | ug/l | 70.0-130 | 88.2 | | | |
| Toluene | " | 10.0 | | 8.97 | " | 70.0-130 | 89.7 | | | |
| Ethylbenzene | " | 10.0 | | 9.05 | " | 70.0-130 | 90.5 | | | |
| Xylenes (total) | " | 30.0 | | 27.1 | " | 70.0-130 | 90.3 | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 10.2 | " | 70.0-130 | 102 | | | |
| Matrix Spike | | | 9040048-MS1 | | L904017-05 | | | | | |
| Benzene | 4/9/99 | 10.0 | ND | 9.08 | ug/l | 60.0-140 | 90.8 | | | |
| Toluene | " | 10.0 | ND | 9.44 | " | 60.0-140 | 94.4 | | | |





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| | | |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Project: Shell(2) Project Number: Shell 540 Hegenberger, Oakland Project Manager: Fran Thie | Sampled: 3/29/99 Received: 3/30/99 Reported: 4/16/99 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - San Carlos

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|------------------------------------|-------------------------------|---------------------|-------------------|-------------------------------------------|-------|-------------------------------|----------|-----------|-------|--------|
| Matrix Spike (continued) | | 9040048-MS1 | L904017-05 | | | | | | | |
| Ethylbenzene | 4/9/99 | 10.0 | ND | 9.42 | ug/l | 60.0-140 | 94.2 | | | |
| Xylenes (total) | " | 30.0 | ND | 28.4 | " | 60.0-140 | 94.7 | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 9.31 | " | 70.0-130 | 93.1 | | | |
| Matrix Spike Dup | | 9040048-MSD1 | L904017-05 | | | | | | | |
| Benzene | 4/9/99 | 10.0 | ND | 8.90 | ug/l | 60.0-140 | 89.0 | 25.0 | 2.00 | |
| Toluene | " | 10.0 | ND | 9.14 | " | 60.0-140 | 91.4 | 25.0 | 3.23 | |
| Ethylbenzene | " | 10.0 | ND | 9.15 | " | 60.0-140 | 91.5 | 25.0 | 2.91 | |
| Xylenes (total) | " | 30.0 | ND | 27.4 | " | 60.0-140 | 91.3 | 25.0 | 3.66 | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 8.63 | " | 70.0-130 | 86.3 | | | |
| Batch: 9040056 | Date Prepared: 4/12/99 | | | Extraction Method: EPA 5030B [P/T] | | | | | | |
| Blank | 9040056-BLK1 | | | | | | | | | |
| Purgeable Hydrocarbons as Gasoline | 4/12/99 | | | ND | ug/l | | 50.0 | | | |
| Benzene | " | | | ND | " | | 0.500 | | | |
| Toluene | " | | | ND | " | | 0.500 | | | |
| Ethylbenzene | " | | | ND | " | | 0.500 | | | |
| Xylenes (total) | " | | | ND | " | | 0.500 | | | |
| Methyl tert-butyl ether | " | | | ND | " | | 5.00 | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 11.7 | " | 70.0-130 | 117 | | | |
| LCS | 9040056-BS1 | | | | | | | | | |
| Benzene | 4/12/99 | 10.0 | | 10.3 | ug/l | 70.0-130 | 103 | | | |
| Toluene | " | 10.0 | | 10.0 | " | 70.0-130 | 100 | | | |
| Ethylbenzene | " | 10.0 | | 10.6 | " | 70.0-130 | 106 | | | |
| Xylenes (total) | " | 30.0 | | 30.4 | " | 70.0-130 | 101 | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 10.7 | " | 70.0-130 | 107 | | | |
| Matrix Spike | 9040056-MS1 | L904026-01 | | | | | | | | |
| Benzene | 4/12/99 | 10.0 | 0.677 | 10.6 | ug/l | 60.0-140 | 99.2 | | | |
| Toluene | " | 10.0 | ND | 10.1 | " | 60.0-140 | 101 | | | |
| Ethylbenzene | " | 10.0 | ND | 10.6 | " | 60.0-140 | 106 | | | |
| Xylenes (total) | " | 30.0 | ND | 30.7 | " | 60.0-140 | 102 | | | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 9.44 | " | 70.0-130 | 94.4 | | | |
| Matrix Spike Dup | 9040056-MSD1 | L904026-01 | | | | | | | | |
| Benzene | 4/12/99 | 10.0 | 0.677 | 11.1 | ug/l | 60.0-140 | 104 | 25.0 | 4.72 | |
| Toluene | " | 10.0 | ND | 10.1 | " | 60.0-140 | 101 | 25.0 | 0 | |
| Ethylbenzene | " | 10.0 | ND | 10.2 | " | 60.0-140 | 102 | 25.0 | 3.85 | |
| Xylenes (total) | " | 30.0 | ND | 29.9 | " | 60.0-140 | 99.7 | 25.0 | 2.28 | |
| Surrogate: a,a,a-Trifluorotoluene | " | 10.0 | | 9.92 | " | 70.0-130 | 99.2 | | | |





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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Project: Shell(2)
Project Number: Shell 540 Hegenberger, Oakland
Project Manager: Fran Thie

Sampled: 3/29/99
Received: 3/30/99
Reported: 4/16/99

MTBE Confirmation by EPA Method 8260A/Quality Control Sequoia Analytical - San Carlos

| Analyte | Date Analyzed | Spike Level | Sample Result | QC Result | Units | Reporting Limit Recov. Limits | Recov. % | RPD Limit | RPD % | Notes* |
|----------------------------------|---------------|-------------|--------------------------------|-----------|-------|-------------------------------------------|----------|-----------|-------|--------|
| Batch: 9040076 | | | Date Prepared: 4/14/99 | | | Extraction Method: EPA 5030B [P/T] | | | | |
| Blank | | | 9040076-BLK1 | | | | | | | |
| Methyl tert-butyl ether | 4/14/99 | | | ND | ug/l | 2.00 | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | " | 50.0 | | 52.4 | " | 76.0-114 | 105 | | | |
| Blank | | | 9040076-BLK2 | | | | | | | |
| Methyl tert-butyl ether | 4/15/99 | | | ND | ug/l | 2.00 | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | " | 50.0 | | 53.2 | " | 76.0-114 | 106 | | | |
| LCS | | | 9040076-BS1 | | | | | | | |
| Methyl tert-butyl ether | 4/14/99 | 50.0 | | 56.5 | ug/l | 70.0-130 | 113 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | " | 50.0 | | 53.7 | " | 76.0-114 | 107 | | | |
| LCS | | | 9040076-BS2 | | | | | | | |
| Methyl tert-butyl ether | 4/15/99 | 50.0 | | 50.8 | ug/l | 70.0-130 | 102 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | " | 50.0 | | 54.2 | " | 76.0-114 | 108 | | | |
| Matrix Spike | | | 9040076-MS1 L904116-01 | | | | | | | |
| Methyl tert-butyl ether | 4/15/99 | 50.0 | 2.38 | 48.4 | ug/l | 60.0-140 | 92.0 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | " | 50.0 | | 48.3 | " | 76.0-114 | 96.6 | | | |
| Matrix Spike Dup | | | 9040076-MSD1 L904116-01 | | | | | | | |
| Methyl tert-butyl ether | 4/15/99 | 50.0 | 2.38 | 50.7 | ug/l | 60.0-140 | 96.6 | 25.0 | 4.88 | |
| Surrogate: 1,2-Dichloroethane-d4 | " | 50.0 | | 51.3 | " | 76.0-114 | 103 | | | |



| | | |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Project: Shell(2) Project Number: Shell 540 Hegenberger, Oakland Project Manager: Fran Thie | Sampled: 3/29/99 Received: 3/30/99 Reported: 4/16/99 |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|

Notes and Definitions

| # | Note |
|---|------|
|---|------|

- I Chromatogram Pattern: Gasoline C6-C12
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference





SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 990329-P3

Date: 3/29/99
 Page 1 of 1

Site Address: 540 Heegenberger, Oakland, CA
 VIC#: 204-5588-5900
 Shell Engineer: Karen Petryna Phone No.: (510) 236-9139
 Fax #: 237-7821
 Consultant Name & Address: Blaine Tech Services, Inc.
1680 Rogers Ave., San Jose, Ca 95112
 Consultant Contact: Francis Thie Phone No.: (408) 573-0553
 Fax #: 573-7771

Analysis Required

LAB: Sequoia

| CHECK ONE (1) BOX ONLY | CI/DI | TURN AROUND TIME |
|------------------------------------------------------|-------|-------------------------------------------|
| G.W. Monitoring <input type="checkbox"/> | 4461 | 24 hours <input type="checkbox"/> |
| Site Investigation <input type="checkbox"/> | 4441 | 48 hours <input type="checkbox"/> |
| Soil Classify/Disposal <input type="checkbox"/> | 4442 | 18 days <input type="checkbox"/> (Normal) |
| Water Classify/Disposal <input type="checkbox"/> | 4443 | Other <input type="checkbox"/> |
| Soil/Air Rem. of Sys. O & M <input type="checkbox"/> | 4452 | |
| Water Rem. of Sys. O & M <input type="checkbox"/> | 4453 | |
| Other <input type="checkbox"/> | | |

NOTE: Holly lab as soon as possible of 24/48 hrs. TAT.

Comments: L904014

Sampled by: [Signature]
 Printed Name: Paul Samra

| 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 / <u>MTBE</u> | Asbestos | Container Size | Preparation Used | Composite Y/N | |
|-----------|------|--------|------|-------|-----|---------------|-------------------------|----------------------------|---------------------|------------------------------|-------------------|------------------------------------------------|----------|----------------|------------------|---------------|--|
| MW-1 | 3/29 | | | X | | 3 | | | | | | X | | | | | |
| MW-2 | ↓ | | | ↓ | | ↓ | | | | | | ↓ | | | | | |
| MW-3 | ↓ | | | ↓ | | ↓ | | | | | | ↓ | | | | | |

UST AGENCY: _____

| MATERIAL DESCRIPTION | SAMPLE CONDITION/ COMMENTS |
|----------------------|----------------------------|
| | <u>Confirm</u> |
| | <u>Highest</u> |
| | <u>MTBE by</u> |
| | <u>8260</u> |
| | <u> </u> |

| | | | | | | | |
|-------------------------------------------------|---------------------------------|----------------------|--------------------|------------------------------------------|-------------------------------|----------------------|--------------------|
| Relinquished By (Signature): <u>[Signature]</u> | Printed Name: <u>Paul Samra</u> | Date: <u>3/30/99</u> | Time: <u>11:15</u> | Received (Signature): <u>[Signature]</u> | Printed Name: <u>Fletcher</u> | Date: <u>3/30/99</u> | Time: <u>11:25</u> |
| Relinquished By (Signature): <u>[Signature]</u> | Printed Name: | Date: <u>3/30/99</u> | Time: | Received (Signature): | Printed Name: | Date: | Time: |
| Relinquished By (Signature): | Printed Name: | Date: | Time: | Received (Signature): | Printed Name: | Date: | Time: |

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

Received by Craig M. 3/30/99 15:45

EQUIVA WELL MONITORING DATA SHEET

| | |
|---------------------------------|-----------------------------------|
| Project #: 990329-P3 | Job # 20A-5508-5900 |
| Sampler: PAUL | Date: 3-29-99 |
| Well I.D.: MW-2 | Well Diameter: (2) 3 4 6 8 |
| Total Well Depth: 19.50 | Depth to Water: 6.85 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---------------|------------|---------------|-----------------------------|
| 2" | 0.16 | 5" | 1.02 |
| 3" | 0.37 | 6" | 1.47 |
| 4" | 0.65 | Other | radius ² * 0.163 |

Purge Method: Bailer Middleburg Electric Submersible Extraction Pump
 Other: _____

Sampling Method: Bailer Extraction Port
 Other: **Dis/Bailer**

| |
|-------------------------------------------------------------------------------------------------------------------------------|
| $\frac{1 \text{ Case Volume (Gals.)} \times \text{No. of Purges}}{\text{Specified Volumes}} = \text{Calculated Volume Gals.}$ |
|-------------------------------------------------------------------------------------------------------------------------------|

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|-------|-----------|-----|-------|-----------|---------------|--------------|
| 12:19 | 69.2 | 7.6 | 975 | 7200 | / | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes **No** Gallons actually evacuated: _____

Sampling Time: **12:25** Sampling Date: **3-29-99**

Sample I.D.: **MW-2** Laboratory: **Sequoia** BC Other _____

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

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

EQUIVA WELL MONITORING DATA SHEET

| | |
|-----------------------------------|-----------------------------------|
| Project #: <u>990329-P3</u> | Job # <u>204-5508-5900</u> |
| Sampler: <u>PAV</u> | Date: <u>3-29-99</u> |
| Well I.D.: <u>MW-3</u> | Well Diameter: <u>(2)</u> 3 4 6 8 |
| Total Well Depth: <u>19.41</u> | Depth to Water: <u>6.21</u> |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: <u>(PVC)</u> Grade | D.O. Meter (if req'd): YSI HACH |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---------------|------------|---------------|-----------------------------|
| 2" | 0.16 | 5" | 1.02 |
| 3" | 0.37 | 6" | 1.47 |
| 4" | 0.65 | Other | radius ² * 0.163 |

Purge Method: Bailer Sampling Method: Bailer
Middleburg Extraction Port
Electric Submersible X Other: Dis/Bailer
Extraction Pump
 Other: _____

| | | | |
|--------------------------|--------------------------|--------------------------|-------|
| <u>No</u> x <u>Purge</u> | <u>Specified Volumes</u> | <u>Calculated Volume</u> | Gals. |
| 1 Case Volume (Gals.) | | | |

| Time | Temp (°F) | pH | Cond. | Turbidity | Gals. Removed | Observations |
|--------------|-------------|------------|-------------|------------|---------------|--------------|
| <u>12:35</u> | <u>69.8</u> | <u>6.9</u> | <u>8345</u> | <u>129</u> | <u>—</u> | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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

Sampling Time: 12:40 Sampling Date: 3-29-99

Sample I.D.: MW-3 Laboratory: (Siquola) BC Other _____

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

| | | | |
|--------------------|----------------------------|-------------|------|
| D.O. (if req'd): | Pre-purge: <u>2.1</u> mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | Post-purge: | mV |