Chevron

January 18, 1999

#4249

**Chevron Products Company**
6001 Bollinger Canyon Road
Building L, Room 1110
PO Box 6004
San Ramon, CA 94583-0904

**Philip R. Briggs**
Project Manager
Site Assessment & Remediation
Phone 925 842-9136
Fax 925 842-8370

Mr. Barney Chan
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Re: Former Chevron Service Station # 9-4612**
**3616 San Leandro Street**
**Oakland, California**

if they show stable TPH/BTEX/MTBE no gw VEP in down stir problem probably can close

Dear Mr. Chan:

Enclosed is the Fourth Quarter Groundwater Monitoring report for 1998 that was prepared by Blaine Tech Services, Inc. for the above noted site. The groundwater samples were analyzed for TPH-g, BTEX and MtBE constituents, with monitoring well MW-3 also analyzed for the TPH-d constituent.

In accordance with your letter of May 4, 1998, ORC was added to wells VH-1, MW-2 and MW-3 on July 25 with sampling of the wells on July 29. The addition of the ORC is expected to increase the availability of oxygen in the soil and groundwater thereby providing an agent for biological reaction and the breakdown of hydrocarbon compounds to natural by products. A period of at least six months will be required to see the effect of adding ORC.

The pre-purge dissolved oxygen (DO) readings in wells VH-1, MW-2 and MW-3 were 2.0, 0.8, 1.0 mg/l respectively. These concentrations are low so it will be necessary to install additional ORC into these wells to increase the availability of oxygen for biological reaction. I have requested Chevron's consultant to increase the ORC and would expect to see an increase in the DO concentration in the next sampling event.

The benzene constituent declined in monitoring wells MW-3 and MW-4 while increasing in wells VH-1 and MW-2 from the previous sampling event. The concentration of the BTEX and MtBE constituents in well MW-4 were below method detection levels. The MtBE constituent was again confirmed and detected in three on-site wells by using EPA

Method 8260. There is no explanation for the detection of MtBE at the site, as Chevron did not use this oxygenate in gasoline until 1991, while the tanks were removed in 1983.

The analysis for the TPH-d constituent in well MW-3 detected the presence of an unidentified hydrocarbon by its chromatogram pattern.

Depth to ground water varied from 10.59 feet to 11.62 feet below grade with the direction of flow southerly.

For your information, the Limited Soil Vapor Survey is expected to be conducted within the next 30-45 days.

Chevron will continue to monitor the site quarterly. If you have any questions or comments call me at (925) 842-9136.

Sincerely,
**CHEVRON PRODUCTS COMPANY**

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Mr. Jack Ratto
PO Box 6032
Oakland, CA. 94603

Mr. Terry McIlraith
407 Castello Road
Lafayette, CA 94549

Ms. Bette Owen, Chevron

BLAINE
TECH SERVICES INC.

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

January 14, 1999

Phil Briggs
Chevron U.S.A. Products Company
P.O. Box 6004
San Ramon, CA 94583-0904

**4th Quarter 1998 Monitoring at 9-4612**

Fourth Quarter 1998 Groundwater Monitoring at
Former Chevron Service Station Number 9-4612
3616 San Leandro Street
Oakland, CA

Monitoring Performed on November 6, 1998

Groundwater Sampling Report **981106-L-2**

This report covers the routine monitoring of groundwater wells at this Chevron facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling 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 volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to McKittrick Waste Treatment Site for disposal.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix**.

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon 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.

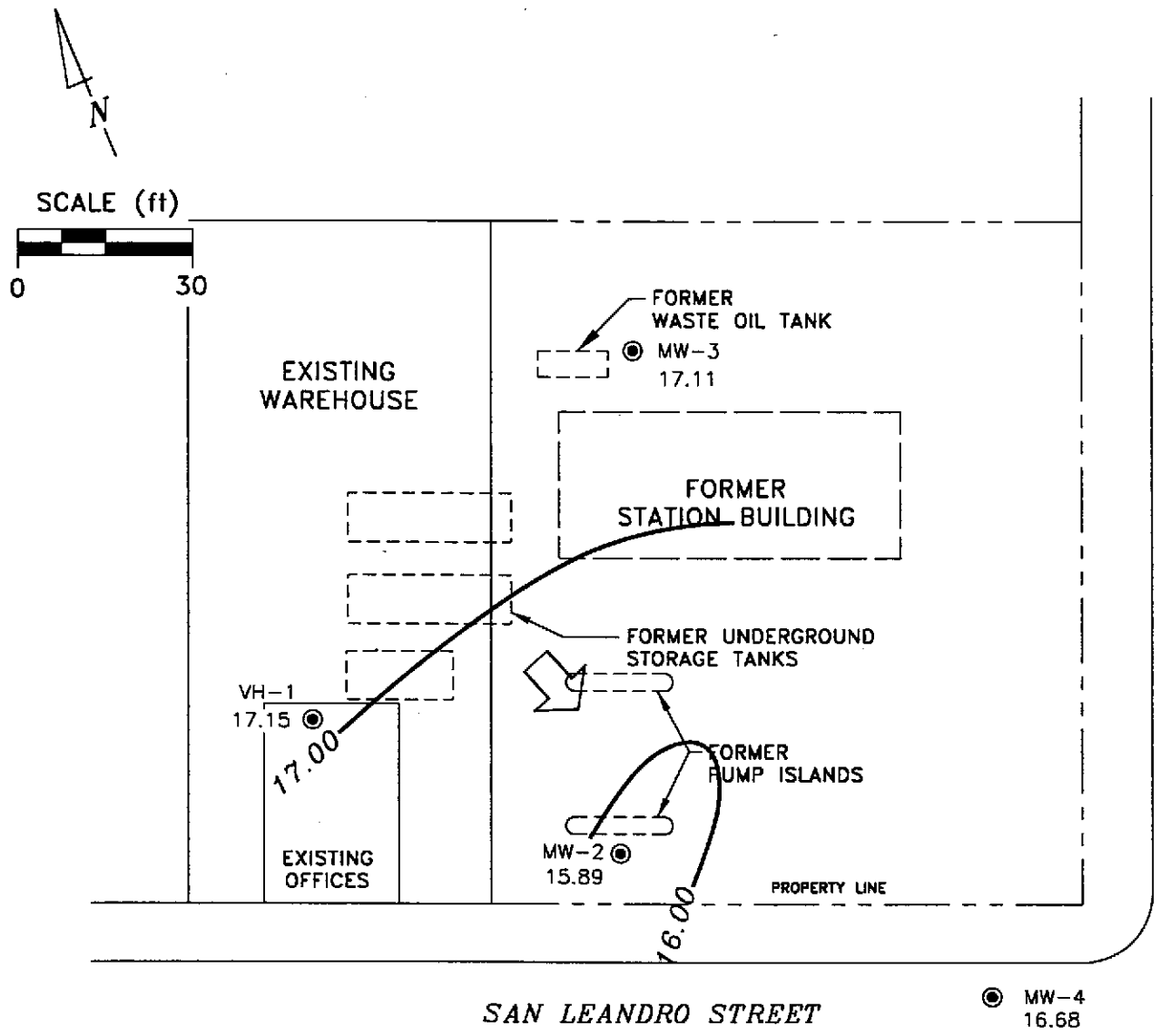
Yours truly,

Francis Thie
Vice President

FPT/ap

attachments: Professional Engineering Appendix
Cumulative Table of Well Data and Analytical Results
Analytical Appendix
Field Data Sheets

# Professional Engineering Appendix




EXPLANATION

- ◉ MONITORING WELL
- 16.69 GROUNDWATER ELEVATION (FT. MSL)
- 16.00 — GROUNDWATER ELEVATION CONTOUR (FT. MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION; APPROXIMATE GRADIENT = 0.01

REGISTERED GEOLOGIST
STEVEN E. KRCIK
No. 4976
STATE OF CALIFORNIA

Basemap from Cambria Environmental Technology, Inc.

PREPARED BY
RRM
engineering contracting firm

**Chevron Station 9-4612**
3616 San Leandro Street
Oakland, California

**GROUNDWATER ELEVATION CONTOUR MAP, NOVEMBER 6, 1998**

FIGURE: 1
PROJECT: DAC04

# Table of
# Well Data and
# Analytical Results

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

| DATE | Well Head Elev. | Ground Water Elev. | Depth To Water | Notes | TPH-Gasoline | Benzene | Toluene | Ethyl-Benzene | Xylene | TPH-Diesel | TOG | HVOC | MTBE | MTBE by 8260 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VH-1** | | | | | | | | | | | | | | |
| 08/10/88 | -- | -- | 13.00 | -- | 11,000 | 3300 | 200 | 520 | 540 | -- | -- | -- | -- | -- |
| 06/01/89 | -- | -- | 10.32 | -- | 15,000 | 2200 | 120 | 540 | 310 | -- | -- | -- | -- | -- |
| 09/15/89 | -- | -- | 15.69 | -- | 5600 | 1900 | 90 | 350 | 160 | -- | -- | -- | -- | -- |
| 12/08/89 | -- | -- | 14.77 | -- | 11,000 | 1900 | 69 | 270 | 99 | -- | -- | -- | -- | -- |
| 03/07/91 | -- | -- | 11.26 | -- | 4500 | 820 | 39 | 120 | 77 | -- | -- | -- | -- | -- |
| 09/24/91 | -- | -- | 12.98 | -- | 3300 | 520 | 19 | 39 | 27 | -- | -- | -- | -- | -- |
| 01/08/92 | -- | -- | 13.77 | -- | 5000 | 600 | 34 | 81 | 76 | -- | -- | -- | -- | -- |
| 04/20/92 | -- | -- | 8.18 | -- | 7400 | 670 | 60 | 110 | 140 | -- | -- | -- | -- | -- |
| 03/26/93 | 27.85 | 21.14 | 6.71 | -- | 4900 | 600 | 40 | 72 | 94 | -- | -- | -- | -- | -- |
| 05/27/93 | 27.85 | 19.27 | 8.58 | -- | 13,000 | 1600 | 120 | 230 | 220 | -- | -- | -- | -- | -- |
| 08/18/93 | 27.85 | 17.39 | 10.46 | -- | 2700 | 210 | 10 | 8.1 | 18 | -- | -- | -- | -- | -- |
| 11/03/93 | 27.85 | 15.28 | 12.57 | -- | 4600 | 680 | 42 | 35 | 68 | -- | -- | -- | -- | -- |
| 02/10/94 | 27.85 | 18.77 | 9.08 | -- | 1900 | 260 | 19 | 22 | 29 | -- | -- | -- | -- | -- |
| 05/12/94 | 27.85 | 19.76 | 8.09 | -- | 2000 | 390 | 28 | 3.9 | 29 | -- | -- | -- | -- | -- |
| 08/26/94 | 27.85 | 17.10 | 10.75 | -- | 4900 | 500 | <5.0 | 23 | 31 | -- | -- | -- | -- | -- |
| 11/14/94 | 27.85 | 18.40 | 9.45 | -- | 760 | 69 | <2.0 | <2.0 | 2.2 | 300 | -- | -- | -- | -- |
| 02/01/95 | 27.85 | 21.88 | 5.97 | -- | 1300 | 120 | 5.9 | <0.5 | 13 | -- | -- | -- | -- | -- |
| 05/12/95 | 27.85 | 20.14 | 7.71 | -- | 4400 | 460 | 31 | 45 | 49 | -- | -- | -- | -- | -- |
| 08/22/95 | 27.85 | 18.59 | 9.26 | -- | 2900 | 310 | 15 | 28 | 32 | -- | -- | -- | -- | -- |
| 12/19/95 | 27.85 | 19.05 | 8.80 | -- | 930 | 53 | <2.5 | <2.5 | <2.5 | -- | -- | -- | 39 | -- |
| 01/31/96 | 27.85 | 22.35 | 5.50 | -- | 3700 | 320 | <10 | 41 | 40 | -- | -- | -- | 180 | -- |
| 04/30/96 | 27.85 | 19.81 | 8.04 | -- | 3900 | 270 | <20 | <20 | <20 | -- | -- | -- | 120 | -- |
| 08/01/96 | 27.85 | 18.67 | 9.18 | -- | 2700 | 140 | 11 | 18 | 28 | -- | -- | -- | 200 | -- |
| 10/30/96 | 27.85 | 18.67 | 10.76 | -- | 2700 | 140 | <12 | <12 | <12 | -- | -- | -- | 280 | -- |
| 02/07/97 | 27.85 | 19.75 | 8.10 | -- | 220 | 13 | 0.6 | <0.5 | 1.6 | -- | -- | -- | 15 | -- |
| 05/07/97 | 27.85 | 18.33 | 9.52 | -- | 5200 | 33 | 12 | 21 | 26 | -- | -- | -- | 330 | -- |
| 07/22/97 | 27.85 | 17.43 | 10.42 | -- | 4200 | 80 | <10 | 16 | 24 | -- | -- | -- | 400 | -- |
| 11/03/97 | 27.85 | 16.85 | 11.00 | -- | 2400 | 150 | 6.8 | 6.5 | 9.5 | -- | -- | -- | 510 | -- |
| 01/28/98 | 27.85 | 20.75 | 7.10 | -- | 850 | 69 | 4.8 | 5.0 | 11 | -- | -- | -- | 38 | 48 |
| 05/08/98 | 27.85 | 20.14 | 7.71 | -- | 4200 | 200 | 30 | 40 | 42 | -- | -- | -- | 310 | 200 |
| 07/29/98 | 27.85 | 18.40 | 9.45 | -- | 3800 | 54 | 10 | 27 | 30 | -- | -- | -- | 35 | 290 |
| 11/06/98 | 27.85 | 17.15 | 10.70 | -- | 4800 | 100 | 20 | 12 | 23 | -- | -- | -- | 360 | 210 |

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

| DATE | Well Head Elev. | Ground Water Elev. | Depth To Water | Notes | TPH-Gasoline | Benzene | Toluene | Ethyl-Benzene | Xylene | TPH-Diesel | TOG | HVOC | MTBE | MTBE by 8260 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-2** | | | | | | | | | | | | | | |
| 02/16/93 | 27.51 | -- | -- | -- | 9200 | 720 | 110 | 250 | 170 | -- | -- | -- | -- | -- |
| 03/26/93 | 27.51 | 19.89 | 7.62 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05/27/93 | 27.51 | 18.04 | 9.47 | -- | 360 | 5.3 | 2.1 | 1.8 | 2.5 | -- | -- | -- | -- | -- |
| 08/18/93 | 27.51 | 16.46 | 11.05 | -- | 9400 | 1100 | 76 | 110 | 100 | -- | -- | -- | -- | -- |
| 11/03/93 | 27.51 | 14.56 | 12.95 | -- | 8600 | 390 | 20 | 2.7 | 120 | -- | -- | -- | -- | -- |
| 02/10/94 | 27.51 | 17.72 | 9.79 | -- | 2700 | 370 | 38 | 44 | 41 | -- | -- | -- | -- | -- |
| 05/12/94 | 27.51 | 18.59 | 8.92 | -- | 3800 | 650 | 76 | 15 | 62 | -- | -- | -- | -- | -- |
| 08/26/94 | 27.51 | 16.14 | 11.37 | -- | 16,000 | 1300 | 270 | 28 | 120 | -- | -- | -- | -- | -- |
| 11/14/94 | 27.51 | 17.48 | 10.03 | -- | 5100 | 390 | 10 | 43 | 27 | -- | -- | -- | -- | -- |
| 02/01/95 | 27.51 | 20.47 | 7.04 | -- | 6900 | 520 | 82 | 170 | 110 | -- | -- | -- | -- | -- |
| 05/12/95 | 27.51 | 18.76 | 8.75 | -- | 7700 | 510 | 83 | 110 | 100 | -- | -- | -- | -- | -- |
| 08/22/95 | 27.51 | 17.35 | 10.16 | -- | 4500 | 220 | 16 | 61 | 47 | -- | -- | -- | -- | -- |
| 12/19/95 | 27.51 | 18.05 | 9.46 | -- | 2900 | 240 | <10 | 19 | 18 | -- | -- | -- | 220 | -- |
| 01/31/96 | 27.51 | 21.91 | 5.60 | -- | 3900 | 320 | 18 | 72 | 39 | -- | -- | -- | <25 | -- |
| 04/30/96 | 27.51 | 18.68 | 8.83 | -- | 5600 | 200 | 36 | 55 | 47 | -- | -- | -- | 170 | -- |
| 08/01/96 | 27.51 | 17.25 | 10.26 | -- | 6200 | 190 | 15 | 62 | 59 | -- | -- | -- | 220 | -- |
| 10/30/96 | 27.51 | 17.25 | 11.48 | -- | 5700 | 190 | <25 | 67 | 36 | -- | -- | -- | 260 | -- |
| 02/07/97 | 27.51 | 18.11 | 9.40 | -- | 8300 | 210 | 34 | 70 | 59 | -- | -- | -- | 330 | -- |
| 05/07/97 | 27.51 | 17.57 | 9.94 | -- | 6900 | 190 | 12 | 38 | 37 | -- | -- | -- | 530 | -- |
| 07/22/97 | 27.51 | 16.36 | 11.15 | -- | 10,000 | 18 | 25 | 62 | 41 | -- | -- | -- | 630 | -- |
| 11/03/97 | 27.51 | 15.93 | 11.58 | -- | 6500 | 260 | 8.5 | 26 | 14 | -- | -- | -- | 590 | -- |
| 11/03/97 | 27.51 | 15.93 | 11.58 | Confirmation run | -- | -- | -- | -- | -- | -- | -- | -- | -- | 96 |
| 01/28/98 | 27.51 | 19.38 | 8.13 | -- | 6700 | 65 | 13 | 67 | 54 | -- | -- | -- | 280 | 94 |
| 05/08/98 | 27.51 | 18.89 | 8.62 | -- | 5500 | 91 | 38 | 43 | 61 | -- | -- | -- | 220 | 62 |
| 07/29/98 | 27.51 | 17.06 | 10.45 | -- | 3600 | 41 | 8.9 | 3.6 | 14 | -- | -- | -- | 16 | 94 |
| 11/06/98 | 27.51 | 15.89 | 11.62 | -- | 6900 | 77 | <5.0 | 14 | 17 | -- | -- | -- | 290 | 110 |

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

| DATE | Well Head Elev. | Ground Water Elev. | Depth To Water | Notes | TPH-Gasoline | Benzene | Toluene | Ethyl-Benzene | Xylene | TPH-Diesel | TOG | HVOC | MTBE | MTBE by 8260 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-3** | | | | | | | | | | | | | | |
| 02/16/93 | 28.50 | -- | -- | -- | 3500 | <0.5 | 8.1 | 4.6 | 7.7 | -- | -- | -- | -- | -- |
| 03/26/93 | 28.50 | 21.32 | 7.18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05/27/93 | 28.50 | 19.17 | 9.33 | -- | 4200 | 580 | 84 | 150 | 100 | -- | -- | -- | -- | -- |
| 08/18/93 | 28.50 | 16.50 | 12.00 | -- | 910 | 12 | 3.7 | 6.2 | 3.8 | 1400 | <5000 | ND | -- | -- |
| 11/03/93 | 28.50 | 15.21 | 13.29 | -- | 5300 | 29 | 1.9 | 0.6 | 27 | -- | -- | -- | -- | -- |
| 02/10/94 | 28.50 | 18.87 | 9.63 | -- | 63 | <0.5 | 0.7 | <0.5 | <0.5 | <50 | -- | -- | -- | -- |
| 05/12/94 | 28.50 | 19.73 | 8.77 | -- | <50 | <0.5 | 0.5 | <0.5 | <0.5 | 84 | -- | -- | -- | -- |
| 08/26/94 | 28.50 | 17.08 | 11.42 | -- | 2100 | 12 | <0.5 | 5.0 | 0.5 | -- | -- | -- | -- | -- |
| 11/14/94 | 28.50 | 18.43 | 10.07 | -- | 140 | 0.78 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 02/01/95 | 28.50 | 22.21 | 6.29 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | -- | -- | -- | -- |
| 05/12/95 | 28.50 | 20.43 | 8.07 | -- | 330 | 13 | 1.1 | 1.9 | 0.69 | 540* | -- | -- | -- | -- |
| 08/22/95 | 28.50 | 18.55 | 9.95 | -- | 980 | 32 | <1.0 | <1.0 | <1.0 | 550* | -- | -- | -- | -- |
| 12/19/95 | 28.50 | 19.10 | 9.40 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | -- | -- | <2.5 | -- |
| 01/31/96 | 28.50 | 23.45 | 5.05 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | -- | -- | <2.5 | -- |
| 04/30/96 | 28.50 | 20.10 | 8.40 | -- | 320 | 2.4 | <0.5 | 0.75 | <0.5 | 240* | -- | -- | 7.8 | -- |
| 08/01/96 | 28.50 | 18.70 | 9.80 | -- | 980 | 9.6 | <0.5 | 0.98 | 2.2 | 470* | -- | -- | 54 | -- |
| 10/30/96 | 28.50 | 18.70 | 11.48 | -- | 2000 | 14 | <10 | <10 | <10 | 760* | -- | -- | 140 | -- |
| 02/07/97 | 28.50 | 19.90 | 8.60 | -- | 200* | <0.5 | <0.5 | <0.5 | <0.5 | 61* | -- | -- | 8.9 | -- |
| 05/07/97 | 28.50 | 19.49 | 9.01 | -- | 3500 | 14 | 3.9 | 3.6 | 8.0 | 550* | -- | -- | 160 | -- |
| 07/22/97 | 28.50 | 17.38 | 11.12 | -- | 3500 | 55 | <10 | <10 | <10 | 800* | -- | -- | 150 | -- |
| 11/03/97 | 28.50 | 16.99 | 11.51 | -- | 4100 | 140 | <5.0 | <5.0 | <5.0 | 910* | -- | -- | 380 | -- |
| 01/28/98 | 28.50 | 21.16 | 7.34 | -- | 1100 | 24 | <1.2 | <1.2 | 2.8 | -- | -- | -- | 33 | 6.1 |
| 05/08/98 | 28.50 | 20.44 | 8.06 | -- | 990 | 3.6 | 7.7 | 0.70 | 2.2 | 250* | -- | -- | 37 | 7.5 |
| 07/29/98 | 28.50 | 18.25 | 10.25 | -- | 1200 | 13 | <0.5 | <0.5 | 1.4 | 290* | -- | -- | 11 | 28 |
| 11/06/98 | 28.50 | 17.11 | 11.39 | -- | 2600 | 5.3 | <2.5 | <2.5 | 3.0 | 390* | -- | -- | 91 | 41 |

* Chromatogram pattern indicates an unidentified hydrocarbon.

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

| DATE | Well Head Elev. | Ground Water Elev. | Depth To Water | Notes | TPH-Gasoline | Benzene | Toluene | Ethyl-Benzene | Xylene | TPH-Diesel | TOG | HVOC | MTBE | MTBE by 8260 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4** | | | | | | | | | | | | | | |
| 08/22/95 | 27.27 | 18.16 | 9.11 | -- | 9600 | 100 | <10 | <10 | <10 | -- | -- | -- | -- | -- |
| 12/19/95 | 27.27 | 18.97 | 8.30 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 01/31/96 | 27.27 | 21.67 | 5.60 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 04/30/96 | 27.27 | 20.27 | 7.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 08/01/96 | 27.27 | 18.12 | 9.15 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 10/30/96 | 27.27 | 18.12 | 10.74 | -- | 110 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 02/07/97 | 27.27 | 19.47 | 7.80 | -- | 80 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | 4.1 | -- |
| 05/07/97 | 27.27 | 21.42 | 5.85 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 07/22/97 | 27.27 | 17.22 | 10.05 | -- | 150 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 11/03/97 | 27.27 | 16.55 | 10.72 | -- | 52 | 0.90 | <0.5 | <0.5 | <0.5 | -- | -- | -- | * | -- |
| 01/28/98 | 27.27 | 20.76 | 6.51 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | <2.0 |
| 05/08/98 | 27.27 | 20.25 | 7.02 | -- | 56 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | <2.0 |
| 07/29/98 | 27.27 | 18.32 | 8.95 | -- | <50 | 0.90 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | <2.0 |
| 11/06/98 | 27.27 | 16.68 | 10.59 | -- | 72 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | <2.0 |

* No value for MTBE could be determined; see lab report for analyses.

# Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet. Analytical results are in parts per billion (ppb)

| DATE | Well Head Elev. | Ground Water Elev. | Depth To Water | Notes | TPH-Gasoline | Benzene | Toluene | Ethyl-Benzene | Xylene | TPH-Diesel | TOG | HVOC | MTBE | MTBE by 8260 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TRIP BLANK** | | | | | | | | | | | | | | |
| 05/27/93 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | -- | -- | -- | -- | -- |
| 08/18/93 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <1.5 | 1400 | <5000 | ND | -- | -- |
| 11/03/93 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 02/10/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | -- | -- | -- | -- |
| 05/12/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 84 | -- | -- | -- | -- |
| 08/26/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 11/14/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 02/01/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 05/12/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 08/22/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- |
| 12/19/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 01/31/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 04/30/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 08/01/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 10/30/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 02/07/97 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 05/07/97 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 07/22/97 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |
| 01/28/98 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | <2.0 |
| 05/08/98 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <2.0 |
| 07/29/98 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | <2.0 |
| 11/06/98 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <2.5 | -- |

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on November 1, 1994.
Earlier field data and analytical results are drawn from the September 27, 1994 Groundwater Technology, Inc. report.

ABBREVIATIONS:
TPH = Total Petroleum Hydrocarbons
TOG = Total Oil & Grease
HVOC = Halogenated Volatile Organic Compounds
MTBE = Methyl t-Butyl Ether

# Analytical Appendix

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: VH-1 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: EPA 8260 | Analyzed: 11/13/98 |
| Attention: Christine Lillie | Lab Number: 9811540-01 | Reported: 11/23/98 |

QC Batch Number: MS111298MTBEH6A
Instrument ID: H6

## Methyl t-Butyl Ether (MTBE)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **Methyl t-Butyl Ether** | 10 | **210** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 76 | 114 | 88 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: VH-1 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: 8015Mod/8020 | Analyzed: 11/14/98 |
| Attention: Christine Lillie | Lab Number: 9811540-01 | Reported: 11/23/98 |

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

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **TPPH as Gas** | **500** | **4800** |
| **Methyl t-Butyl Ether** | **25** | **360** |
| **Benzene** | **5.0** | **100** |
| **Toluene** | **5.0** | **20** |
| **Ethyl Benzene** | **5.0** | **12** |
| **Xylenes (Total)** | **5.0** | **23** |
| **Chromatogram Pattern:** | | **GAS** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 107 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: MW-2 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: EPA 8260 | Analyzed: 11/13/98 |
| Attention: Christine Lillie | Lab Number: 9811540-02 | Reported: 11/23/98 |

QC Batch Number: MS111298MTBEH6A
Instrument ID: H6

## Methyl t-Butyl Ether (MTBE)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **Methyl t-Butyl Ether** | 100 | 110 |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 76 | 114 | 91 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: MW-2 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: 8015Mod/8020 | Analyzed: 11/14/98 |
| Attention: Christine Lillie | Lab Number: 9811540-02 | Reported: 11/23/98 |

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

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **TPPH as Gas** | **500** | **6900** |
| **Methyl t-Butyl Ether** | **25** | **290** |
| **Benzene** | **5.0** | **77** |
| Toluene | 5.0 | N.D. |
| **Ethyl Benzene** | **5.0** | **14** |
| **Xylenes (Total)** | **5.0** | **17** |
| **Chromatogram Pattern:** | | **GAS** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 106 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: MW-3 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: EPA 8260 | Analyzed: 11/13/98 |
| Attention: Christine Lillie | Lab Number: 9811540-03 | Reported: 11/23/98 |

QC Batch Number: MS111298MTBEH6A
Instrument ID: H6

## Methyl t-Butyl Ether (MTBE)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **Methyl t-Butyl Ether** | 6.6 | 41 |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 76 | 114 | 92 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: MW-3 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: 8015Mod/8020 | Analyzed: 11/14/98 |
| Attention: Christine Lillie | Lab Number: 9811540-03 | Reported: 11/23/98 |

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

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **TPPH as Gas** | **250** | **2600** |
| **Methyl t-Butyl Ether** | **12** | **91** |
| **Benzene** | **2.5** | **5.3** |
| Toluene | 2.5 | N.D. |
| Ethyl Benzene | 2.5 | N.D. |
| **Xylenes (Total)** | **2.5** | **3.0** |
| **Chromatogram Pattern:** | | **GAS** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 110 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: MW-3 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | Extracted: 11/18/98 |
| | Analysis Method: EPA 8015 Mod | Analyzed: 11/20/98 |
| Attention: Christine Lillie | Lab Number: 9811540-03 | Reported: 11/23/98 |

QC Batch Number: GC1118980HBPEXB
Instrument ID: GCHP5B

## Total Extractable Petroleum Hydrocarbons (TEPH)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **TEPH as Diesel** | **50** | **390** |
| **Chromatogram Pattern:** | **C9-C24** | **UNID.-HC** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| n-Pentacosane (C25) | 50 | 150 | 104 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: MW-4 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: EPA 8260 | Analyzed: 11/13/98 |
| Attention: Christine Lillie | Lab Number: 9811540-04 | Reported: 11/23/98 |

QC Batch Number: MS111298MTBEH6A
Instrument ID: H6

## Methyl t-Butyl Ether (MTBE)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| Methyl t-Butyl Ether | 2.0 | N.D. |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 76 | 114 | 95 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: MW-4 | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: 8015Mod/8020 | Analyzed: 11/14/98 |
| Attention: Christine Lillie | Lab Number: 9811540-04 | Reported: 11/23/98 |

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

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| **TPPH as Gas** | **50** | **72** |
| Methyl t-Butyl Ether | 2.5 | N.D. |
| Benzene | 0.50 | N.D. |
| Toluene | 0.50 | N.D. |
| Ethyl Benzene | 0.50 | N.D. |
| Xylenes (Total) | 0.50 | N.D. |
| **Chromatogram Pattern:** | | **GAS** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 107 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

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| | | |
|---|---|---|
| Blaine Tech Services | Client Proj. ID: Chevron 9-4612/981106-L2 | Sampled: 11/06/98 |
| 1680 Rogers Avenue | Sample Descript: TB | Received: 11/09/98 |
| San Jose, CA 95112 | Matrix: LIQUID | |
| | Analysis Method: 8015Mod/8020 | Analyzed: 11/14/98 |
| Attention: Christine Lillie | Lab Number: 9811540-05 | Reported: 11/23/98 |

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

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|---|
| TPPH as Gas | 50 | N.D. |
| Methyl t-Butyl Ether | 2.5 | N.D. |
| Benzene | 0.50 | N.D. |
| Toluene | 0.50 | N.D. |
| Ethyl Benzene | 0.50 | N.D. |
| Xylenes (Total) | 0.50 | N.D. |
| Chromatogram Pattern: | | |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 108 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Mike Gregory
Project Manager

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| | | |
|---|---|---|
| Blaine Tech Services<br>1680 Rogers Avenue<br>San Jose, CA 95112<br>Attention: Christine Lillie | Client Proj. ID: Chevron 9-4612/981106-L2<br><br>Lab Proj. ID: 9811540 | Received: 11/09/98<br><br>Reported: 11/23/98 |

## LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 16 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

MTBE6W Note:
Samples 9811540-01, 02, 03 were diluted 5, 50, 3.3 times, respectively, due to high hydrocarbons.

TPH-GAS/BTEX:
Sample 9811540-01 was diluted 10-fold.
Sample 9811540-02 was diluted 10-fold.
Sample 9811540-03 was diluted 5-fold.

**SEQUOIA ANALYTICAL**

Mike Gregory
Project Manager

Sequoia Analytical

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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112
Attention: Christine Lillie

Client Project ID: Chevron 9-4612/981106-L2

QC Sample Group: 9811540-03

Reported: Nov 23, 1998

## QUALITY CONTROL DATA REPORT

| | |
|---|---|
| **Matrix:** | Liquid |
| **Method:** | EPA 8015A |
| **Analyst:** | G.WARDLE |
| **ANALYTE** | Diesel |

**QC Batch #:** GC1118980HBPEXB

**LCS ID:** BLK111898BS
**Date Prepared:** 11/18/98
**Date Analyzed:** 11/19/98
**Instrument I.D.#:** GCHP4A

**Conc. Spiked, ug/L:** 1000

**Blank Spike, ug/L:** 770
**% Recovery:** 77

**Blank Spike Duplicate, ug/L:** 730
**% Recovery:** 73

**Relative % Difference:** 5.3

**% Recovery Control Limits:** 50-150

**RPD Control Limits:** 0-50

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

**SEQUOIA ANALYTICAL**

Mike Gregory
Project Manager

Please Note:
The LCS is a control sample of known, interferent 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

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| | | | |
|---|---|---|---|
| Blaine Tech Services, Inc. | Client Project ID: | Chevron 9-4612/981106-L2 | |
| 1680 Rogers Ave. | Matrix: | Liquid | |
| San Jose, CA 95112 | | | |
| Attention: Christine Lillie | Work Order #: | 9811540 -01-05 | Reported: Nov 30, 1998 |

# QUALITY CONTROL DATA REPORT

| | |
|---|---|
| **Analyte:** | Gasoline |
| **QC Batch#:** | 8110236 |
| **Analy. Method:** | EPA 8015M/8020M |
| **Prep. Method:** | EPA 5030 |

| | |
|---|---|
| **Analyst:** | - |
| **MS/MSD #:** | P811136-01 |
| **Sample Conc.:** | N.D. |
| **Prepared Date:** | 11/14/98 |
| **Analyzed Date:** | 11/14/98 |
| **Instrument I.D.#:** | - |
| **Conc. Spiked:** | 1000 µg/L |
| **Result:** | 1580 |
| **MS % Recovery:** | 96.4 |
| **Dup. Result:** | 1560 |
| **MSD % Recov.:** | 94.4 |
| **RPD:** | 1.27 |
| **RPD Limit:** | 0-12 |

| | |
|---|---|
| **LCS #:** | LCS111498 |
| **Prepared Date:** | 11/14/98 |
| **Analyzed Date:** | 11/14/98 |
| **Instrument I.D.#:** | - |
| **Conc. Spiked:** | 1000 µg/L |
| **LCS Result:** | 1010 |
| **LCS % Recov.:** | 101 |

| | |
|---|---|
| **MS/MSD** | 53-146 |
| **LCS** | 79-127 |
| **Control Limits** | |

**SEQUOIA ANALYTICAL**
**Elap #2245**

Mike Gregory
Project Manager

Please Note:
The LCS is a control sample of known, interferent-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.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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| | | | |
|---|---|---|---|
| Blaine Tech Services, Inc. | Client Project ID: | Chevron 9-4612/981106-L2 | |
| 1680 Rogers Ave. | Matrix: | Liquid | |
| San Jose, CA 95112 | | | |
| Attention: Christine Lillie | Work Order #: | 9811540-01 | Reported: Nov 30, 1998 |

# QUALITY CONTROL DATA REPORT

| | |
|---|---|
| **Analyte:** | MTBE |
| **QC Batch#:** | MS111298MTBEH6A |
| **Analy. Method:** | EPA 8260 |
| **Prep. Method:** | N.A. |
| **Analyst:** | T. Costello |
| **MS/MSD #:** | 981159802 |
| **Sample Conc.:** | 6.1 |
| **Prepared Date:** | 11/12/98 |
| **Analyzed Date:** | 11/12/98 |
| **Instrument I.D.#:** | H6 |
| **Conc. Spiked:** | 50 µg/L |
| **Result:** | 50 |
| **MS % Recovery:** | 88 |
| **Dup. Result:** | 50 |
| **MSD % Recov.:** | 88 |
| **RPD:** | 0.0 |
| **RPD Limit:** | 0-25 |

| | |
|---|---|
| **LCS #:** | LCS111298 |
| **Prepared Date:** | 11/12/98 |
| **Analyzed Date:** | 11/12/98 |
| **Instrument I.D.#:** | H6 |
| **Conc. Spiked:** | 50 µg/L |
| **LCS Result:** | 43 |
| **LCS % Recov.:** | 86 |

| | |
|---|---|
| **MS/MSD** | 60-140 |
| **LCS** | 70-130 |
| **Control Limits** | |

**SEQUOIA ANALYTICAL**

Mike Gregory
Project Manager

Please Note:
The LCS is a control sample of known, interferent-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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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

| | | | |
|---|---|---|---|
| Blaine Tech Services, Inc. | Client Project ID: | Chevron 9-4612/981106-L2 | |
| 1680 Rogers Ave. | Matrix: | Liquid | |
| San Jose, CA 95112 | | | |
| Attention: Christine Lillie | Work Order #: | 9811540-02-04 | Reported: Nov 30, 1998 |

# QUALITY CONTROL DATA REPORT

| | |
|---|---|
| **Analyte:** | MTBE |
| **QC Batch#:** | MS111298MTBEH6A |
| **Analy. Method:** | EPA 8260 |
| **Prep. Method:** | N.A. |
| **Analyst:** | T. Costello |
| **MS/MSD #:** | 981159802 |
| **Sample Conc.:** | 6.1 |
| **Prepared Date:** | 11/12/98 |
| **Analyzed Date:** | 11/12/98 |
| **Instrument I.D.#:** | H6 |
| **Conc. Spiked:** | 50 µg/L |
| **Result:** | 50 |
| **MS % Recovery:** | 88 |
| **Dup. Result:** | 50 |
| **MSD % Recov.:** | 88 |
| **RPD:** | 0.0 |
| **RPD Limit:** | 0-25 |

| | |
|---|---|
| **LCS #:** | LCS111398 |
| **Prepared Date:** | 11/13/98 |
| **Analyzed Date:** | 11/13/98 |
| **Instrument I.D.#:** | H6 |
| **Conc. Spiked:** | 50 µg/L |
| **LCS Result:** | 44 |
| **LCS % Recov.:** | 88 |

| | |
|---|---|
| **MS/MSD** | 60-140 |
| **LCS** | 70-130 |
| **Control Limits** | |

**SEQUOIA ANALYTICAL**

Mike Gregory
Project Manager

Please Note:
The LCS is a control sample of known, interferent-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.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No

# Chain-of-Custody-Record

Chevron Products Co.
P.O. BOX 6004
San Ramon, CA 94583
FAX (925)842-8370

Chevron Facility Number: 9-4612
Facility Address: 3616 San Leandro St. Oakland, CA
Consultant Project Number: 981106-L2
Consultant Name: BLAINE TECH SERVICE, INC.
Address: 1680 ROGERS AVE., SAN JOSE
Project Contact (Name): CHRISTINE LILLIE
(Phone) 408-573-0555 (Fax Number) 408-573-7771

Chevron Contact (Name): PHIL BRIGGS
(Phone) (925) 842-9136
Laboratory Name: SEQUOIA
Laboratory Service Order: 9144488 (981540)
Laboratory Service Code: ZZ02800
Samples Collected by (Name): LAD, GILCHRIST
Signature:

State Method: ☐ CA ☐ OR ☐ WA ☐ NW Series ☐ CO ☐ UT

| Sample Number | Number of Containers | Matrix S = Soil A = Air W = Water C = Charcoal | Sample Preservation | Date/Time | BTEX/MTBE+TPH GAS (8020 + 8015) | BTEX + TPH GAS (8020 + 8015) | TPH Diesel (8015) | Oxygenates (8260) | Purgeable Halocarbons (8010) | Purgeable Organics (8260) | Extractable Organics (8270) | Oil and Grease (5520) | Metals (CAP or AA) Cd,Cr,Pb,Zn,Ni | BTEX (8020) | BTEX/MTBE/Naph. (8020) | TPH - HCID | TPH-D Extended | MTBE BY 8010/8260 | | | | | Remarks / Lab Sample No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VH-1 | 5 | W | HCL | 11/6/98/1515 | | X | | | | | | | | | | | | X | | | | | 01 |
| MW-2 | 5 | | | /1450 | | X | | | | | | | | | | | | X | | | | | 02 |
| MW-3 | 7 | | | /1425 | | X | X | | | | | | | | | | | X | | | | | 03 |
| MW-4 | 5 | | | /1410 | | X | | | | | | | | | | | | X | | | | | 04 |
| TB | 2 | | | | | X | | | | | | | | | | | | X | | | | | 05 |

DO NOT BILL FOR TB/LB

| Relinquished By (Signature) | Organization | Date/Time | Received By (Signature) | Organization | Date/Time | Iced Y/N |
|---|---|---|---|---|---|---|
| | | 11/9/98 11:20 | | SEQUOIA | 11-9-98 11:23 | |
| Relinquished By (Signature) | Organization | Date/Time | Received By (Signature) | Organization | Date/Time | Iced Y/N |
| | SEQUOIA | 11-9-98 | | | | |
| Relinquished By (Signature) | Organization | Date/Time | Received For Laboratory By (Signature) | | Date/Time | Iced Y/N |
| | | | | | 11/9 | Y |

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

# Field
# Data
# Sheets

# WELL GAUGING DATA

Project # 981106-L-2 Date 11-6-98 Client CHEN-9-4612

Site 3616 SAN LEANDRO ST, 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 | |
|---|---|---|---|---|---|---|---|---|---|
| VH-1 | 4 | | | | | 10.70 | 28.30 | TOC | |
| MW-2 | 2 | | | | | 11.62 | 19.75 | | |
| MW-3 | 2 | | | | | 11.39 | 19.30 | | |
| MW-4 | 2 | | | | | 10.59 | 19.00 | | |

# CHEVRON WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 981106-L2 | Station #: 9-4612 |
| Sampler: LAD | Date: 11-6-98 |
| Well I.D.: VH-1 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth: 28.30 | Depth to Water: 10.70 |
| 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 | radius² * 0.163 |

Purge Method: Bailer / Disposable Bailer / Middleburg / Electric Submersible X / Extraction Pump / Other: ___

Sampling Method: Bailer / Disposable Bailer X / Extraction Port / Other: ___

11.4 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 34.2 Gals. (Calculated Volume)

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|---|---|---|---|---|---|
| 1508 | 66.2 | 6.5 | 1000. | 12. | |
| 1510 | 66.8 | 6.4 | 1000. | 24. | |
| 1512 | 66.8 | 6.3 | 1000. | 36. | |
| | | | | | |
| | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 36.

Sampling Time: 1515 Sampling Date: 11-6-98

Sample I.D.: VH-1 Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs

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

Duplicate I.D.: 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 |

# CHEVRON WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: ~~980~~ 981106-L2 | Station #: 9-4612 |
| Sampler: LAD | Date: 11-6-98 |
| Well I.D.: MW-2 | Well Diameter: (2) 3 4 6 8 ___ |
| Total Well Depth: 19.75 | Depth to Water: 11.62 |
| 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 / Disposable Bailer (X) / Middleburg / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: Bailer / Disposable Bailer (X) / Extraction Port / Other: _____

1.3 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 3.9 (Calculated Volume) Gals.

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|---|---|---|---|---|---|
| 1441 | 67.8 | 6.5 | 1000. | 2. | |
| 1444 | 68.6 | 6.5 | 980. | 3. | |
| 1447 | 67.8 | 6.4 | 950. | 4. | |
| | | | | | |
| | | | | | |

| | | | |
|---|---|---|---|
| Did well dewater? Yes (No) | | Gallons actually evacuated: 4 | |
| Sampling Time: 1450 | | Sampling Date: 11-6-98 | |
| Sample I.D.: MW-2 | | Laboratory: (Sequoia) CORE N. Creek Assoc. Labs | |
| Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D | | Other: | |
| Duplicate I.D.: | Analyzed for: TPH-G BTEX MTBE TPH-D | Other: | |
| D.O. (if req'd): | Pre-purge: (0.8) mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: mV | Post-purge: | mV |

# CHEVRON WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 981106-L2 | Station #: 9-4612 |
| Sampler: LAD | Date: 11-6-98 |
| Well I.D.: MW-3 | Well Diameter: (2) 3 4 6 8 ____ |
| Total Well Depth: 19.30 | Depth to Water: 11.39 |
| 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 / Disposable Bailer (X) / Middleburg / Electric Submersible / Extraction Pump / Other: ____

Sampling Method: Bailer / Disposable Bailer (X) / Extraction Port / Other: ____

1.3 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 3.9 (Calculated Volume) Gals.

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|---|---|---|---|---|---|
| 1418 | 67.6 | 6.5 | 1000. | 2. | |
| 1421 | 67.6 | 6.4 | 950. | 3. | |
| 1424 | 66.0 | 6.4 | 980. | 4. | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Did well dewater? | Yes | No (X) | Gallons actually evacuated: | 4 | |
| Sampling Time: | 1425 | | Sampling Date: | 11-6-98 | |
| Sample I.D.: | MW-3 | | Laboratory: | (Sequoia) CORE N. Creek Assoc. Labs | |
| Analyzed for: | (TPH-G) (BTEX) (MTBE) (TPH-D) | | Other: | | |
| Duplicate I.D.: | | Analyzed for: | TPH-G BTEX MTBE TPH-D | Other: | |
| D.O. (if req'd): | Pre-purge: | 1.0 mg/L | Post-purge: | mg/L | |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV | |