



Chevron

STID 1143

April 7, 1997

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Ms. Susan Hugo
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Marketing - Sales West
Phone 510 842-9500

**Re: Chevron Service Station #9-0329
340 Highland Avenue
Piedmont, California**

Dear Ms. Hugo:

Enclosed is the First Quarter Groundwater Monitoring report for 1997, prepared by our consultant Blaine Tech Services Inc. for the above noted facility. Ground water samples were analyzed for TPH-g, BTEX, and MtBE. With the additional installation of monitoring wells C-5 and C-6, it was necessary to resurvey all of the wells and therefore, a new benchmark elevation has been established for each well.

The results from sampling monitoring wells C-3, C-4, C-5 and C-6 were below method detection levels for all constituents, except for wells C-3 and C-4 which detected the MtBE constituent in concentrations of 3.2 ppb and 23.0 ppb respectively. The results from well C-6 may be in question, since the wellbox was flooded with the cap off. Well C-2 continues to detect concentrations of all constituents, with MtBE approximately at the same level as previously sampled. Well C-2 was also sampled and analyzed using EPA Method 8260, to confirm the presence of MtBE. The MtBE constituent was confirmed to be present by this method.

The depth to the groundwater varied with well C-6 being flooded to well C-4 at 4.39 feet below grade. The direction of flow is mixed, moving south southeast from well C-3 and easterly from well C-5.

As stated previously, Chevron has no explanation for the high concentration of the MtBE constituent in monitoring well C-2, as Chevron has not owned or operated this station since 1990 and have had no control over its operation or maintenance. Chevron has recently sent a letter to the owner, Mr. Frank Hoffman and the operators Mir Ghafari and Fred Manoucheri, recommending that a work plan, to determine the integrity of the tank and piping systems, be submitted in a timely manner. Chevron believes it is their responsibly to proceed with the submittal of the work plan and the testing of the tank and piping systems, since Chevron has not owned or operated the station since 1990.

Chevron will continue to monitor the site quarterly. If you have any questions or comments call me at (510) 842-9136.

97 APR -9 PM 1:56
ENVIRONMENTAL PROTECTION

April 7, 1997
Ms. Susan Hugo
Chevron Service Station # 9-0329
Page 2

Sincerely,
CHEVRON PRODUCTS COMPANY



Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Ms. Bette Owen, Chevron

Mr. Kevin Graves
RWQCB-San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. Frank Hoffman
Hoffman Investment Company
1760 Willow Road
Hillsborough, CA 94010

Mir Ghafari
Chevron Service Station
340 Highland Avenue
Piedmont, CA 94611

BLAINE
TECH SERVICES INC.



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

March 28, 1997

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

1st Quarter 1997 Monitoring at 9-0329

First Quarter 1997 Groundwater Monitoring at
Chevron Service Station Number 9-0329
340 Highland Avenue
Piedmont, CA

Monitoring Performed on January 23, 1997

Groundwater Sampling Report 970123-J-1

This report covers the routine quarterly 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,

A handwritten signature in black ink, appearing to read "Francis Thie", written in a cursive style.

Francis Thie
Vice President

FPT/cg

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

Professional Engineering Appendix

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 | MTBE |
|------------|-----------------|--------------------|----------------|------------------|--------------|---------|---------|---------------|--------|---------|
| C-2 | | | | | | | | | | |
| 08/07/89 | 94.19 | 91.33 | 2.88 | -- | 34,000 | 580 | 60 | 170 | 270 | -- |
| 11/15/89 | 94.19 | 91.39 | 2.80 | -- | 8100 | 500 | 36 | 420 | 180 | -- |
| 02/01/91 | 94.19 | 90.41 | 3.75 | -- | 6800 | 490 | 21 | 310 | 86 | -- |
| 04/16/91 | 94.19 | 91.64 | 2.55 | -- | 9600 | 810 | 43 | 550 | 270 | -- |
| 10/16/91 | 94.19 | 90.67 | 3.52 | -- | 7100 | 320 | 23 | 200 | 60 | -- |
| 01/08/92 | 94.19 | 90.04 | 4.15 | -- | 2400 | 190 | 9.0 | 83 | 22 | -- |
| 04/10/92 | 94.19 | 91.23 | 2.96 | -- | 6600 | 550 | 33 | 340 | 170 | -- |
| 07/14/92 | 94.19 | 91.36 | 2.83 | -- | 9000 | 680 | 330 | 580 | 690 | -- |
| 10/05/92 | 94.19 | 89.81 | 4.38 | -- | 5500 | 250 | 17 | 130 | 82 | -- |
| 01/06/93 | 94.19 | 90.25 | 3.94 | -- | 5500 | 190 | 32 | 41 | 54 | -- |
| 03/29/93 | 94.19 | 92.10 | 2.09 | -- | 19,000 | 670 | 40 | 180 | 370 | -- |
| 07/02/93 | 94.19 | 92.10 | 2.09 | -- | 8000 | 1100 | 41 | 420 | 500 | -- |
| 10/11/93 | 94.19 | 91.43 | 2.76 | -- | 42,000 | 940 | 34 | 140 | 87 | -- |
| 01/10/94 | 94.19 | 89.37 | 4.82 | -- | 12,000 | 770 | 20 | 220 | 74 | -- |
| 04/06/94 | 94.19 | 91.70 | 2.49 | -- | 40,000 | 820 | 33 | 190 | 110 | -- |
| 07/06/94 | 94.19 | 91.72 | 2.47 | -- | 8800 | 870 | 28 | 140 | 95 | -- |
| 11/11/94 | 94.19 | 91.32 | 2.87 | -- | 8600 | 460 | 81 | 180 | 120 | -- |
| 01/06/95 | 94.19 | 91.64 | 2.55 | -- | 15,000 | 880 | 48 | 270 | 140 | -- |
| 04/13/95 | 94.19 | 92.13 | 2.06 | -- | 56,000 | 2500 | 130 | 730 | 360 | -- |
| 07/25/95 | 94.19 | 92.05 | 2.14 | -- | 11,000 | 1000 | 34 | 540 | 160 | -- |
| 10/05/95 | 94.19 | 91.68 | 2.51 | -- | 13,000 | 1000 | <20 | 160 | 170 | -- |
| 01/02/96 | 94.19 | 91.97 | 2.22 | -- | 9500 | 1300 | <50 | 380 | 87 | 64,000 |
| 04/11/96 | 94.19 | 92.27 | 1.92 | -- | <10,000 | 1300 | <100 | <100 | <100 | 74,000 |
| 07/08/96 | 94.19 | 92.14 | 2.05 | -- | <20,000 | 1200 | <200 | <200 | <200 | 110,000 |
| 10/03/96 | 94.19 | 91.90 | 2.29 | -- | <25,000 | 1200 | <250 | <250 | <250 | 140,000 |
| 01/23/97 | 343.39 | 341.49 | 1.90 | -- | 20,000 | 1100 | <200 | 460 | <200 | 110,000 |
| 02/14/97 | 343.39 | 341.42 | 1.97 | Confirmation run | -- | -- | -- | -- | -- | 150,000 |

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 | MTBE |
|------------|-----------------|--------------------|----------------|-------|--------------|---------|---------|---------------|--------|------|
| C-3 | | | | | | | | | | |
| 08/07/89 | 97.65 | 93.36 | 4.29 | -- | <50 | <0.5 | <1.0 | <1.0 | <3.0 | -- |
| 11/15/89 | 97.65 | 92.48 | 5.17 | -- | <500 | <0.5 | 2.8 | <0.5 | 1.1 | -- |
| 02/01/91 | 97.65 | 91.27 | 6.38 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 04/16/91 | 97.65 | 93.93 | 3.72 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 10/16/91 | 97.65 | 89.45 | 8.20 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/08/92 | 97.65 | 90.97 | 6.68 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 04/10/92 | 97.65 | 93.15 | 4.50 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 07/14/92 | 97.65 | 91.44 | 6.21 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 10/05/92 | 97.65 | 88.34 | 9.31 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/06/93 | 97.65 | 94.24 | 3.41 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 03/29/93 | 97.65 | 97.15 | 0.50 | -- | <50 | <0.5 | <0.5 | <0.5 | 0.8 | -- |
| 07/02/93 | 97.65 | 95.06 | 2.59 | -- | <50 | 4.0 | 3.0 | <0.5 | 3.0 | -- |
| 10/11/93 | 97.65 | 92.75 | 4.90 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/10/94 | 97.65 | 93.26 | 4.39 | -- | <50 | <0.5 | 1.0 | <0.5 | 0.8 | -- |
| 04/06/94 | 97.65 | 94.97 | 2.68 | -- | <50 | <0.5 | 1.0 | 0.7 | 4.5 | -- |
| 07/06/94 | 97.65 | 95.55 | 2.10 | -- | <50 | 2.2 | 4.1 | <0.5 | 2.8 | -- |
| 11/11/94 | 97.65 | 96.42 | 1.23 | -- | <50 | <0.5 | 0.8 | <0.5 | <0.5 | -- |
| 01/06/95 | 97.65 | 97.05 | 0.60 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 04/13/95 | 97.65 | 97.05 | 0.60 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 07/25/95 | 97.65 | 96.00 | 1.65 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 10/05/95 | 97.65 | 94.02 | 3.63 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/02/96 | 97.65 | 94.53 | 3.12 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/11/96 | 97.65 | 96.83 | 0.82 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/08/96 | 97.65 | 96.15 | 1.50 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/03/96 | 97.65 | 95.17 | 2.48 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/23/97 | 347.08 | 346.87 | 0.21 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3.2 |

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 | MTBE |
|------------|-----------------|--------------------|----------------|-------|--------------|---------|---------|---------------|--------|------|
| C-4 | | | | | | | | | | |
| 08/07/89 | 95.60 | -- | -- | Dry | -- | -- | -- | -- | -- | Dry |
| 11/15/89 | 95.60 | 90.65 | 4.95 | -- | 1300 | 2.9 | 310 | 0.5 | 2.9 | -- |
| 02/01/91 | 95.60 | 90.82 | 4.78 | -- | 72 | <0.5 | 9.0 | <0.5 | <0.5 | -- |
| 04/16/91 | 95.60 | 95.60 | 4.83 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 10/16/91 | 95.60 | 91.37 | 4.23 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/08/92 | 95.60 | 90.79 | 4.81 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 04/10/92 | 95.60 | 91.34 | 4.26 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 07/14/92 | 95.60 | 91.32 | 4.28 | -- | <50 | <0.5 | 3.8 | <0.5 | <0.5 | -- |
| 10/05/92 | 95.60 | 91.31 | 4.29 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/06/93 | 95.60 | 91.31 | 4.29 | -- | <50 | 0.7 | <0.5 | <0.5 | <0.5 | -- |
| 03/29/93 | 95.60 | 91.30 | 4.30 | -- | <50 | 0.5 | 1.0 | <0.5 | 2.0 | -- |
| 07/02/93 | 95.60 | 91.38 | 4.22 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 10/11/93 | 95.60 | 91.30 | 4.30 | -- | <50 | 0.6 | <0.5 | <0.5 | <0.5 | -- |
| 01/10/94 | 95.60 | 91.16 | 4.44 | -- | <50 | 0.7 | 3.0 | <0.5 | 1.0 | -- |
| 04/06/94 | 95.60 | 91.36 | 4.24 | -- | 130 | 2.2 | 5.4 | 3.3 | 24 | -- |
| 07/06/94 | 95.60 | 91.36 | 4.24 | -- | 99 | 5.9 | 7.5 | 2.0 | 12 | -- |
| 11/11/94 | 95.60 | 91.39 | 4.21 | -- | <50 | <0.5 | 9.5 | <0.5 | <0.5 | -- |
| 01/06/95 | 95.60 | 91.18 | 4.42 | -- | <50 | 0.7 | 1.0 | <0.5 | 1.1 | -- |
| 04/13/95 | 95.60 | 91.36 | 4.24 | -- | 67 | 0.54 | 7.2 | <0.5 | 1.1 | -- |
| 07/25/95 | 95.60 | 91.36 | 4.24 | -- | 390 | <2.0 | 150 | <2.0 | <2.0 | -- |
| 10/05/95 | 95.60 | 91.22 | 4.38 | -- | 130 | <0.5 | 66 | <0.5 | <0.5 | -- |
| 01/02/96 | 95.60 | 91.34 | 4.26 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 34 |
| 04/11/96 | 95.60 | 91.21 | 4.39 | -- | <50 | <0.5 | 0.93 | <0.5 | <0.5 | 56 |
| 07/08/96 | 95.60 | 91.32 | 4.28 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 21 |
| 10/03/96 | 95.60 | 91.38 | 4.22 | -- | 80 | <0.5 | 31 | <0.5 | <0.5 | 9.9 |
| 01/23/97 | 344.94 | 340.55 | 4.39 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 23 |
| C-5 | | | | | | | | | | |
| 11/25/96 | -- | -- | 3.30 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/23/97 | 345.14 | 343.69 | 1.45 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |

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 | MTBE |
|------------|-----------------|--------------------|----------------|--------------|--------------|---------|---------|---------------|--------|------|
| C-6 | | | | | | | | | | |
| 11/25/96 | -- | -- | 2.13 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 01/23/97 | 338.61 | -- | -- | Well flooded | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |

Backfill Well: A

| | | | | | | | | | | |
|----------|----|----|------|----|--------|------|-----|-----|------|----|
| 08/07/89 | -- | -- | 2.10 | -- | 1000 | 50 | 6.0 | 5.0 | 22 | -- |
| 11/15/89 | -- | -- | 2.04 | -- | 3700 | 98 | 2.1 | 4.3 | 55 | -- |
| 02/01/91 | -- | -- | 3.05 | -- | 36,000 | 1100 | 750 | 130 | 6100 | -- |
| 04/16/91 | -- | -- | 2.01 | -- | 8000 | 370 | 6.0 | 86 | 750 | -- |
| 10/16/91 | -- | -- | 4.15 | -- | -- | -- | -- | -- | -- | -- |

Backfill Well: B

| | | | | | | | | | | |
|----------|----|----|------|----|----|----|----|----|----|----|
| 08/07/89 | -- | -- | 4.12 | -- | -- | -- | -- | -- | -- | -- |
| 11/15/89 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02/01/91 | -- | -- | 5.03 | -- | -- | -- | -- | -- | -- | -- |
| 04/16/91 | -- | -- | 4.00 | -- | -- | -- | -- | -- | -- | -- |
| 10/16/91 | -- | -- | 6.24 | -- | -- | -- | -- | -- | -- | -- |

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 | MTBE |
|-------------------|-----------------|--------------------|----------------|-------|--------------|---------|---------|---------------|--------|------|
| TRIP BLANK | | | | | | | | | | |
| 01/06/93 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 03/29/93 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | 1.0 | -- |
| 07/02/93 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 10/11/93 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/10/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 04/06/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 07/06/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 11/11/94 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/06/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 04/13/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 07/25/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 10/05/95 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/02/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 04/11/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 07/08/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| 10/03/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- |
| 01/23/97 | -- | -- | -- | -- | <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 April 13, 1995.

Earlier field data and analytical results provided by Sierra Environmental.

Survey performed on March 20, 1997 by Ron Archer, Civil Engineer Inc.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl t-butyl ether

Analytical Appendix



| | | |
|--|--|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-0329/970123-J1 Sample Descript: C-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701D15-01 | Sampled: 01/23/97 Received: 01/24/97 Analyzed: 01/28/97 Reported: 02/14/97 |
| Attention: Fran Thie | | |

QC Batch Number: GC012897BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|-----------------------|-------------------------|------------------------|
| TPPH as Gas | 20000 | 20000 |
| Methyl t-Butyl Ether | 1000 | 110000 |
| Benzene | 200 | 1100 |
| Toluene | 200 | N.D. |
| Ethyl Benzene | 200 | 460 |
| Xylenes (Total) | 200 | 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


Peggy Penner
Project Manager





| | | |
|--|--|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-0329/970123-J1 Sample Descript: C-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701D15-02 | Sampled: 01/23/97 Received: 01/24/97 Analyzed: 01/27/97 Reported: 01/30/97 |
| Attention: Fran Thie | | |

QC Batch Number: GC012797BTEX03A
Instrument ID: GCHP03

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 | 3.2 |
| 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 | 104 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





| | | |
|--|--|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-0329/970123-J1 Sample Descript: C-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701D15-03 | Sampled: 01/23/97 Received: 01/24/97 Analyzed: 01/27/97 Reported: 01/30/97 |
| Attention: Fran Thie | | |

QC Batch Number: GC012797BTEX21A
Instrument ID: GCHP21

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 | 23 |
| 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 | 89 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





| | | |
|--|--|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-0329/970123-J1 Sample Descript: C-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701D15-04 | Sampled: 01/23/97 Received: 01/24/97 Analyzed: 01/27/97 Reported: 01/30/97 |
|--|--|---|

QC Batch Number: GC012797BTEX03A
Instrument ID: GCHP03

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 | 94 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Peaner
Project Manager





| | | |
|--|--|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-0329/970123-J1 Sample Descript: C-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701D15-05 | Sampled: 01/23/97 Received: 01/24/97 Analyzed: 01/27/97 Reported: 01/30/97 |
| Attention: Fran Thie | | |

QC Batch Number: GC012797BTEX03A
Instrument ID: GCHP03

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 | 93 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





| | | |
|--|---|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-0329/970123-J1 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9701D15-06 | Sampled: 01/23/97 Received: 01/24/97 Analyzed: 01/27/97 Reported: 01/30/97 |
| Attention: Fran Thie | | |

QC Batch Number: GC012797BTEX17A
Instrument ID: GCHP17

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 | 96 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





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

Client Proj. ID: Chevron 9-0329/970123-J1

Received: 01/24/97

Lab Proj. ID: 9701D15

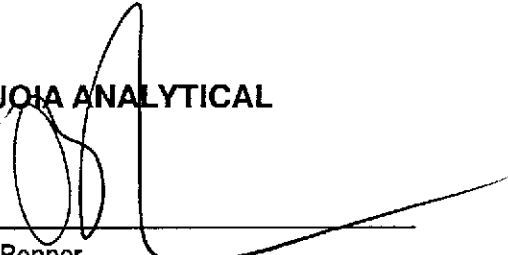
Reported: 01/30/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 11 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH Note: Sample 9701D15-01 was diluted 400-fold.

SEQUOIA ANALYTICAL


Peggy Penner
Project Manager





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

Client Project ID: Chevron 9-0329 / 970123-J1
 Matrix: Liquid

Work Order #: 9701D15 -01

Reported: Jan 31, 1997

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC012897BTEX02A | GC012897BTEX02A | GC012897BTEX02A | GC012897BTEX02A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | |
|-------------------|-------------|-------------|-------------|-------------|
| Analyst: | A. MirafTAB | A. MirafTAB | A. MirafTAB | A. MirafTAB |
| MS/MSD #: | 9701D1204 | 9701D1204 | 9701D1204 | 9701D1204 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 1/28/97 | 1/28/97 | 1/28/97 | 1/28/97 |
| Analyzed Date: | 1/28/97 | 1/28/97 | 1/28/97 | 1/28/97 |
| Instrument I.D.#: | GCHP2 | GCHP2 | GCHP2 | GCHP2 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| Result: | 9.0 | 9.0 | 9.0 | 30 |
| MS % Recovery: | 90 | 90 | 90 | 100 |
| Dup. Result: | 8.5 | 8.5 | 8.6 | 28 |
| MSD % Recov.: | 85 | 85 | 86 | 93 |
| RPD: | 5.7 | 5.7 | 4.5 | 6.9 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK012897 | BLK012897 | BLK012897 | BLK012897 |
|-------------------|-----------|-----------|-----------|-----------|
| Prepared Date: | 1/28/97 | 1/28/97 | 1/28/97 | 1/28/97 |
| Analyzed Date: | 1/28/97 | 1/28/97 | 1/28/97 | 1/28/97 |
| Instrument I.D.#: | GCHP2 | GCHP2 | GCHP2 | GCHP2 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| LCS Result: | 8.0 | 7.9 | 8.0 | 26 |
| LCS % Recov.: | 80 | 79 | 80 | 87 |

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

SEQUOIA ANALYTICAL

Peggy Penner
 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

9701D15.BLA <1>





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
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Redwood City, CA 94063
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(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Client Project ID: Chevron 9-0329 / 970123-J1
Matrix: Liquid

Work Order #: 9701D15-02, 04-05

Reported: Jan 31, 1997

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC012797BTEX03A | GC012797BTEX03A | GC012797BTEX03A | GC012797BTEX03A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | |
|-------------------|-----------|-----------|-----------|-----------|
| Analyst: | D. Jirsa | D. Jirsa | D. Jirsa | D. Jirsa |
| MS/MSD #: | 970191701 | 970191701 | 970191701 | 970191701 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Analyzed Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Instrument I.D.#: | GCHP3 | GCHP3 | GCHP3 | GCHP3 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| Result: | 11 | 10 | 11 | 32 |
| MS % Recovery: | 110 | 100 | 110 | 107 |
| Dup. Result: | 11 | 11 | 11 | 33 |
| MSD % Recov.: | 110 | 110 | 110 | 110 |
| RPD: | 0.0 | 9.5 | 0.0 | 3.1 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK012397 | BLK012397 | BLK012397 | BLK012397 |
|-------------------|-----------|-----------|-----------|-----------|
| Prepared Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Analyzed Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Instrument I.D.#: | GCHP3 | GCHP3 | GCHP3 | GCHP3 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| LCS Result: | 10 | 9.9 | 10 | 31 |
| LCS % Recov.: | 100 | 99 | 100 | 103 |

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

SEQUOIA ANALYTICAL

Peggy Fenner
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

9701D15.BLA <2>





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

Client Project ID: Chevron 9-0329 / 970123-J1
Matrix: Liquid

Work Order #: 9701D15-03

Reported: Jan 31, 1997

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|----------------|-----------------|-----------------|------------------|-----------------|
| QC Batch#: | GC012797BTEX21A | GC012797BTEX21A | GC012797BTEX21A | GC012797BTEX21A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | |
|-------------------|-----------|-----------|-----------|-----------|
| Analyst: | D. Jirsa | D. Jirsa | D. Jirsa | D. Jirsa |
| MS/MSD #: | 970191701 | 970191701 | 970191701 | 970191701 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Analyzed Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Instrument I.D.#: | GCHP21 | GCHP21 | GCHP21 | GCHP21 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| Result: | 11 | 10 | 10 | 31 |
| MS % Recovery: | 110 | 100 | 100 | 103 |
| Dup. Result: | 11 | 10 | 10 | 32 |
| MSD % Recov.: | 110 | 100 | 100 | 107 |
| RPD: | 0.0 | 0.0 | 0.0 | 3.2 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK012397 | BLK012397 | BLK012397 | BLK012397 |
|-------------------|-----------|-----------|-----------|-----------|
| Prepared Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Analyzed Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Instrument I.D.#: | GCHP21 | GCHP21 | GCHP21 | GCHP21 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| LCS Result: | 11 | 10 | 10 | 30 |
| LCS % Recov.: | 110 | 100 | 100 | 100 |

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

SEQUOIA ANALYTICAL

Peggy Penner
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

9701D15.BLA <3>





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

Client Proj. ID: Chevron 9-0329/970123-J1

Received: 01/24/97

Lab Proj. ID: 9701D15

Reported: 02/14/97

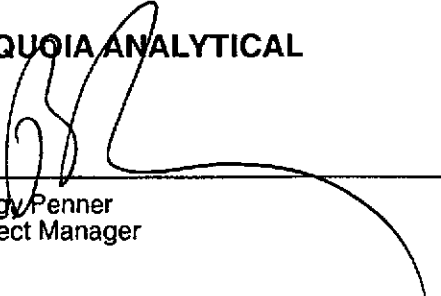
LABORATORY NARRATIVE

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

TPPH Note: Sample 9701D15-01 was diluted 400-fold.

Please note: Report revised 2/14/97.

SEQUOIA ANALYTICAL


Peggy Penner
Project Manager





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

Client Project ID: Chevron 9-0329 / 970123-J1
Matrix: Liquid

Work Order #: 9701D15-06

Reported: Jan 31, 1997

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|----------------|-----------------|-----------------|------------------|-----------------|
| QC Batch#: | GC012797BTEX17A | GC012797BTEX17A | GC012797BTEX17A | GC012797BTEX17A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | |
|-------------------|-------------|-------------|-------------|-------------|
| Analyst: | A. Miraftab | A. Miraftab | A. Miraftab | A. Miraftab |
| MS/MSD #: | 970191703 | 970191703 | 970191703 | 970191703 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Analyzed Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Instrument I.D.#: | GCHP17 | GCHP17 | GCHP17 | GCHP17 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| Result: | 8.7 | 8.3 | 8.4 | 25 |
| MS % Recovery: | 87 | 83 | 84 | 83 |
| Dup. Result: | 7.4 | 7.2 | 7.2 | 22 |
| MSD % Recov.: | 74 | 72 | 72 | 73 |
| RPD: | 16 | 14 | 15 | 13 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK012797 | BLK012797 | BLK012797 | BLK012797 |
|-------------------|-----------|-----------|-----------|-----------|
| Prepared Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Analyzed Date: | 1/27/97 | 1/27/97 | 1/27/97 | 1/27/97 |
| Instrument I.D.#: | GCHP17 | GCHP17 | GCHP17 | GCHP17 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| LCS Result: | 8.2 | 8.0 | 8.0 | 24 |
| LCS % Recov.: | 82 | 80 | 80 | 80 |

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

SEQUIA ANALYTICAL

Peggy Fenner
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

9701D15.BLA <4>



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

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-0329
Facility Address 340 Highland Ave., Piedmont, CA
Consultant Project Number 970123-51
Consultant Name Blaine Tech Services, Inc.
Address 1680 Rogers Ave., San Jose, CA 95112
Project Contact (Name) Fran Thie
(Phone) (408)573-0555 (Fax Number) (408)573-7771

Chevron Contact (Name) Phil Briggs
(Phone) (510)842-9136
Laboratory Name Sequoia
Laboratory Release Number 9034836
Samples Collected by (Name) Mat/Samuel
Collection Date 1/23/97
Signature [Signature]

| Sample Number | Lab Sample Number | Number of Containers | Matrix S = Soil W = Water A = Air C = Charcoal | Type G = Grab C = Composite D = Discrete | Time | Sample Preservation | Iced (Yes or No) | Analyses To Be Performed | | | | | | | | | | Remarks | | | | | |
|---------------|-------------------|----------------------|--|---|------|---------------------|------------------|---|----------------------|--------------------------|---------------------------------|-------------------------------|------------------------------|--------------------------------|--|--|--|---------|--|--|--|--|--|
| | | | | | | | | BTEX + TPH GAS (8020 + 8015) MTBE | TPH Diesel (8015) | Oil and Grease (5520) | Purgeable Halocarbons (8010) | Purgeable Aromatics (8020) | Purgeable Organics (8240) | Extractable Organics (8270) | Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA) | | | | | | | | |
| C-2 | 1 | 3 | W | D | 1000 | HCl | Y | X | | | | | | | | | | | | | | | |
| C-3 | 2 | 3 | | | 905 | | | X | | | | | | | | | | | | | | | |
| C-4 | 3 | 3 | | | 930 | | | X | | | | | | | | | | | | | | | |
| C-5 | 4 | 3 | | | 1030 | | | X | | | | | | | | | | | | | | | |
| C-6 | 5 | 3 | | | 1105 | | | X | | | | | | | | | | | | | | | |
| TB | 6 | 2 | | | - | | | X | | | | | | | | | | | | | | | |

DO NOT BILL FOR TB-LB.
Remarks

| | | | | | |
|---|----------------------------|------------------------------|--|----------------------------|------------------------------|
| Relinquished By (Signature) <u>[Signature]</u> | Organization <u>SEA</u> | Date/Time <u>1/24 115</u> | Received By (Signature) <u>[Signature]</u> | Organization <u>SEA</u> | Date/Time <u>1/24 115</u> |
| Relinquished By (Signature) <u>[Signature]</u> | Organization <u>SEA</u> | Date/Time <u>1/24/97</u> | Received By (Signature) <u>[Signature]</u> | Organization <u>SEA</u> | Date/Time <u>1/24</u> |
| Relinquished By (Signature) <u>[Signature]</u> | Organization <u>SEA</u> | Date/Time <u>1/24/97</u> | Received For Laboratory By (Signature) <u>[Signature]</u> | Organization <u>SEA</u> | Date/Time <u>1/24</u> |

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



| | | |
|--|--|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-0329/970214-S3 Sample Descript: C-2 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9702872-01 | Sampled: 02/14/97 Received: 02/18/97 Analyzed: 02/19/97 Reported: 02/20/97 |
| Attention: Fran Thie | | |

QC Batch Number: MS021897MTBEH6A
Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|-----------------------|-----------------------------|------------------------|
| Methyl t-Butyl Ether | 6600 | 150000 |
| Surrogates | Control Limits % | % Recovery |
| 1,2-Dichloroethane-d4 | 76 114 | 101 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Client Proj. ID: Chevron 9-0329/970214-S3

Received: 02/18/97

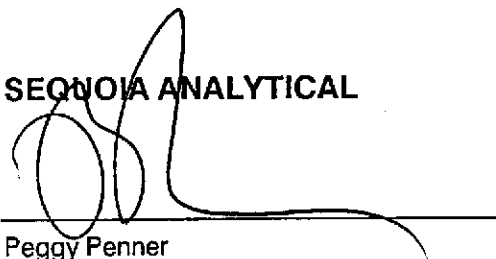
Lab Proj. ID: 9702872

Reported: 02/20/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 3 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL



Peggy Penner
Project Manager





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

Client Project ID: Chevron 9-0329/970214-S3
Matrix: Liquid

Work Order #: 9702872 -01

Reported: Feb 22, 1997

QUALITY CONTROL DATA REPORT

Analyte: MTBE

QC Batch#: MS021897MTBEH6
Analy. Method: EPA 8260
Prep. Method: NA

Analyst: L. Duong
MS/MSD #: 970261901
Sample Conc.: 6.4
Prepared Date: 2/18/97
Analyzed Date: 2/18/97
Instrument I.D.#: H6
Conc. Spiked: 50 µg/L

Result: 58
MS % Recovery: 103

Dup. Result: 62
MSD % Recov.: 111

RPD: 6.7
RPD Limit: 0-25

LCS #: BLK021997

Prepared Date: 2/19/97
Analyzed Date: 2/19/97
Instrument I.D.#: H6
Conc. Spiked: 50 µg/L

LCS Result: 49
LCS % Recov.: 98

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

SEQUOIA ANALYTICAL

Reggy Penner
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

9702872.BLA <1>



**Field
Data
Sheets**

CHEVRON WELL MONITORING DATA SHEET

| | |
|-----------------------------------|-----------------------------------|
| Project #: <u>970123-J</u> | Station #: <u>9-0329</u> |
| Sampler: <u>MS</u> | Date: <u>1/23/97</u> |
| Well I.D.: <u>C-2</u> | Well Diameter: <u>(2)</u> 3 4 6 8 |
| Total Well Depth: <u>15.75</u> | Depth to Water: <u>1.90</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 | Multplier | Well Diameter | Multplier |
|---------------|-----------|---------------|-----------------------------|
| 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 |
| Disposable Bailer <input checked="" type="checkbox"/> | Disposable Bailer <input checked="" type="checkbox"/> |
| Middleburg | Extraction Port |
| Electric Submersible | Other: _____ |
| Extraction Pump | |
| Other: _____ | |

| | | | | | |
|-----------------------|---|-------------------|---|-------------------|-------|
| <u>2.2</u> | x | <u>3</u> | = | <u>6.6</u> | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|------------|-------------|------------|-------------|---------------|--------------------|
| <u>946</u> | <u>62.4</u> | <u>6.9</u> | <u>1000</u> | <u>2.5</u> | <u>Heavy Sheen</u> |
| <u>950</u> | <u>62.8</u> | <u>6.9</u> | <u>920</u> | <u>5</u> | |
| <u>954</u> | <u>63.0</u> | <u>6.9</u> | <u>900</u> | <u>7</u> | |
| | | | | | |
| | | | | | |

| | |
|---|--|
| Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Gallons actually evacuated: <u>7</u> |
| Sampling Time: <u>1000</u> | Sampling Date: <u>1/23</u> |
| Sample I.D.: <u>C-2</u> | Laboratory: <u>(Sequia)</u> GTEL N. Creek Assoc. Labs |
| Analyzed for: <u>TPH-G BTEX MTBE</u> TPH-D Other: | |
| Duplicate I.D.: | Analyzed for: TPH-G BTEX MTBE TPH-D Other: |
| D.O. (if req'd): | Pre-purge: <u> </u> ^{mg/L} Post-purge: <u> </u> ^{mg/L} |
| O.R.P. (if req'd): | Pre-purge: <u> </u> mV Post-purge: <u> </u> mV |

CHEVRON WELL MONITORING DATA SHEET

| | |
|-----------------------------------|-----------------------------------|
| Project #: <u>970123-J</u> | Station #: <u>90329</u> |
| Sampler: <u>MS</u> | Date: <u>1/23/97</u> |
| Well I.D.: <u>C-3</u> | Well Diameter: <u>(2)</u> 3 4 6 8 |
| Total Well Depth: <u>14.87</u> | Depth to Water: <u>0.21</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 |
| Disposable Bailer <input checked="" type="checkbox"/> | Disposable Bailer <input checked="" type="checkbox"/> |
| Middleburg | Extraction Port |
| Electric Submersible | Other: _____ |
| Extraction Pump | |
| Other: _____ | |

| | | | | | |
|-----------------------|----------|-------------------|-----|-------------------|-------|
| <u>2.3</u> | \times | <u>3</u> | $=$ | <u>7.0</u> | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|------------|-------------|------------|------------|---------------|--------------|
| <u>850</u> | <u>57.4</u> | <u>7.7</u> | <u>360</u> | <u>25</u> | |
| <u>855</u> | <u>58.8</u> | <u>7.5</u> | <u>200</u> | <u>5</u> | |
| <u>900</u> | <u>59.2</u> | <u>7.4</u> | <u>180</u> | <u>7</u> | |
| | | | | | |
| | | | | | |

| | |
|---|---|
| Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Gallons actually evacuated: <u>7</u> |
| Sampling Time: <u>905</u> | Sampling Date: <u>1/23</u> |
| Sample I.D.: <u>C-3</u> | Laboratory: <u>Sequoia</u> GTEL N. Creek Assoc. Labs |
| Analyzed for: <u>(TPH-G BTEX MTBE TPH-D)</u> Other: | |
| Duplicate I.D.: | Analyzed for: TPH-G BTEX MTBE TPH-D Other: |
| D.O. (if req'd): | Pre-purge: <u> </u> mg/L Post-purge: <u> </u> mg/L |
| O.R.P. (if req'd): | Pre-purge: <u> </u> mV Post-purge: <u> </u> mV |

CHEVRON WELL MONITORING DATA SHEET

| | |
|---------------------------------|-----------------------------------|
| Project #: <u>970123-51</u> | Station #: <u>9-0329</u> |
| Sampler: <u>MS</u> | Date: <u>1/23/97</u> |
| Well I.D.: <u>C-4</u> | Well Diameter: <u>2</u> 3 4 6 8 |
| Total Well Depth: <u>10.44</u> | Depth to Water: <u>4.39</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
 Disposable Bailer Disposable Bailer
 Middleburg Extraction Port
 Electric Submersible Other: _____
 Extraction Pump
 Other: _____

| | | | | |
|-----------------------|----------|-------------------|-----|-------------------|
| <u>1.0</u> | \times | <u>3</u> | $=$ | <u>2.9</u> Gals. |
| I Case Volume (Gals.) | | Specified Volumes | | Calculated Volume |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|------------|-------------|------------|------------|---------------|--------------|
| <u>921</u> | <u>62.2</u> | <u>7.4</u> | <u>340</u> | <u>1</u> | |
| <u>924</u> | <u>63.0</u> | <u>7.4</u> | <u>320</u> | <u>2</u> | |
| <u>927</u> | <u>63.0</u> | <u>7.3</u> | <u>310</u> | <u>3</u> | |
| | | | | | |
| | | | | | |

Did well dewater? Yes No Gallons actually evacuated: 3

Sampling Time: 930 Sampling Date: 1/23

Sample I.D.: C-4 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: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

CHEVRON WELL MONITORING DATA SHEET

| | |
|-----------------------------------|-----------------------------------|
| Fr. #: <u>970123-J</u> | Station #: <u>9-0329</u> |
| Sampler: <u>MS</u> | Date: <u>1/23/97</u> |
| Well I.D.: <u>C-5</u> | Well Diameter: <u>(2)</u> 3 4 6 8 |
| Total Well Depth: | Depth to Water: <u>1.45</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
 Disposable Bailer Disposable Bailer
 Middleburg Extraction Port
 Electric Submersible Other: _____
 Extraction Pump

| | | | | | |
|-----------------------|---|-------------------|---|-------------------|-------|
| <u>2.6</u> | x | <u>3</u> | = | <u>7.8</u> | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|-------------|-------------|------------|------------|---------------|--------------|
| <u>1014</u> | <u>63.2</u> | <u>6.8</u> | <u>830</u> | <u>3</u> | |
| <u>1019</u> | <u>63.6</u> | <u>6.9</u> | <u>780</u> | <u>55</u> | |
| <u>1023</u> | <u>63.6</u> | <u>7.0</u> | <u>770</u> | <u>8</u> | |
| | | | | | |
| | | | | | |

Did well dewater? Yes No Gallons actually evacuated: 8

Sampling Time: 1030 Sampling Date: 1/27

Sample I.D.: C-5 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: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

CHEVRON WELL MONITORING DATA SHEET

| | |
|---------------------------------|-----------------------------------|
| Project #: <u>97012351</u> | Station #: <u>9-0329</u> |
| Sampler: <u>MS</u> | Date: <u>1/23/97</u> |
| Well I.D.: <u>C-6</u> | Well Diameter: <u>2</u> 3 4 6 8 |
| Total Well Depth: <u>17.62</u> | Depth to Water: <u>0.00</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 |
| Disposable Bailer <input checked="" type="checkbox"/> | Disposable Bailer <input checked="" type="checkbox"/> |
| Middleburg | Extraction Port |
| Electric Submersible | Other: _____ |
| Extraction Pump | |
| Other: _____ | |

| | | | | | |
|-----------------------|---|-------------------|---|-------------------|-------|
| <u>2.8</u> | x | <u>3</u> | = | <u>8.5</u> | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|------|-----------|-----|-------|---------------|--------------|
| 1047 | 62.4 | 6.8 | 700 | 3 | |
| 1052 | 63.6 | 6.9 | 690 | 6 | |
| 1058 | 63.4 | 6.9 | 690 | 8.5 | |
| | | | | | |
| | | | | | |

Did well dewater? Yes No Gallons actually evacuated: 8.5

Sampling Time: 1105 Sampling Date: 1/23

Sample I.D.: C-6 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: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

CHEVRON WELL MONITORING DATA SHEET

| | |
|--------------------------|-----------------------------------|
| Project #: 970214-53 | Station #: 9-0329 |
| Sampler: DOUG | Date: 2-14-97 |
| Well I.D.: C-2 | Well Diameter: (2) 3 4 6 8 ____ |
| Total Well Depth: 15.74 | Depth to Water: 1.97 |
| 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) Middleburg Electric Submersible Extraction Pump Other: _____ | Sampling Method: Bailer (Disposable Bailer) Extraction Port Other: _____ |
|--|---|

| | | | | | |
|-----------------------|----------|-------------------|-----|-------------------|-------|
| <u>2.2</u> | \times | <u>3</u> | $=$ | <u>6.6</u> | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|-------|-----------|-----|-------|---------------|----------------|
| 13:12 | 63.8 | 7.3 | 980 | 2 | Sheen and Odor |
| 13:15 | 63.4 | 7.3 | 950 | 5 | |
| 13:17 | 63.4 | 7.3 | 960 | 7 | |
| | | | | | |
| | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 7.0

Sampling Time: 13:20 Sampling Date: 2-14-97

Sample I.D.: C-2 Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs

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

Duplicate I.D.: Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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