

Chevron



Chevron

November 6, 1995

ENVIRONMENTAL
PROTECTION
SECTION - 9 PM 11:30

Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Site Assessment & Remediation Group
Phone (510) 842-9500

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, CA**

Dear Mr. Chan:

Enclosed is the Third Quarter 1995 Groundwater Monitoring Report dated October 13, 1995, prepared by our consultant Blaine Tech Services, Inc. for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline and BTEX. A sample collected from MW-3 was also analyzed for total petroleum hydrocarbons as diesel.

Dissolved concentrations of these constituents observed during the past quarter are consistent with historical results. Depth to ground water was measured at approximately 9.1 to 10.2 feet below grade and the direction of flow is to the south.

We will continue to monitor and sample all wells at this site for an additional two quarters to verify ground water quality. If you have any questions or comments, please feel free to call me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

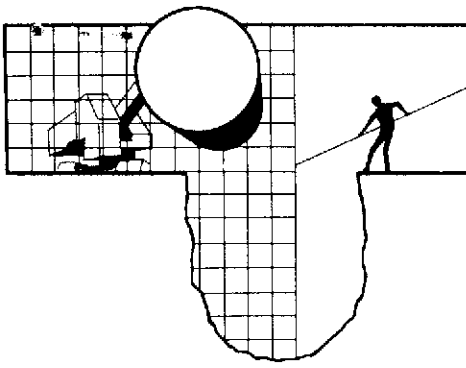
Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Ms. B.C. Owen

Mr. Jack Ratto
P.O. Box 6032
Oakland, CA 94603

Mr. Terry McIlraith
407 Castello Road
Lafayette, CA 94549



BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

October 13, 1995

Mark Miller
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, CA 94583-0804

3rd Quarter 1995 Monitoring at 9-4612

Third Quarter 1995 Groundwater Monitoring at
Chevron Service Station Number 9-4612
3616 San Leandro Street
Oakland, CA

Monitoring Performed on August 22, 1995

Groundwater Sampling Report 950822-K-2

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 Chevron's Richmond Refinery for disposal.

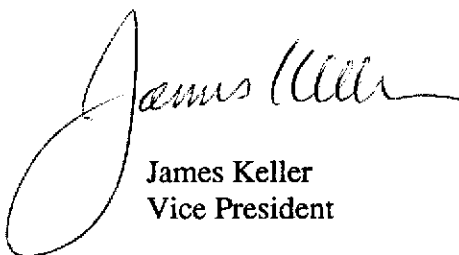
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater 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,

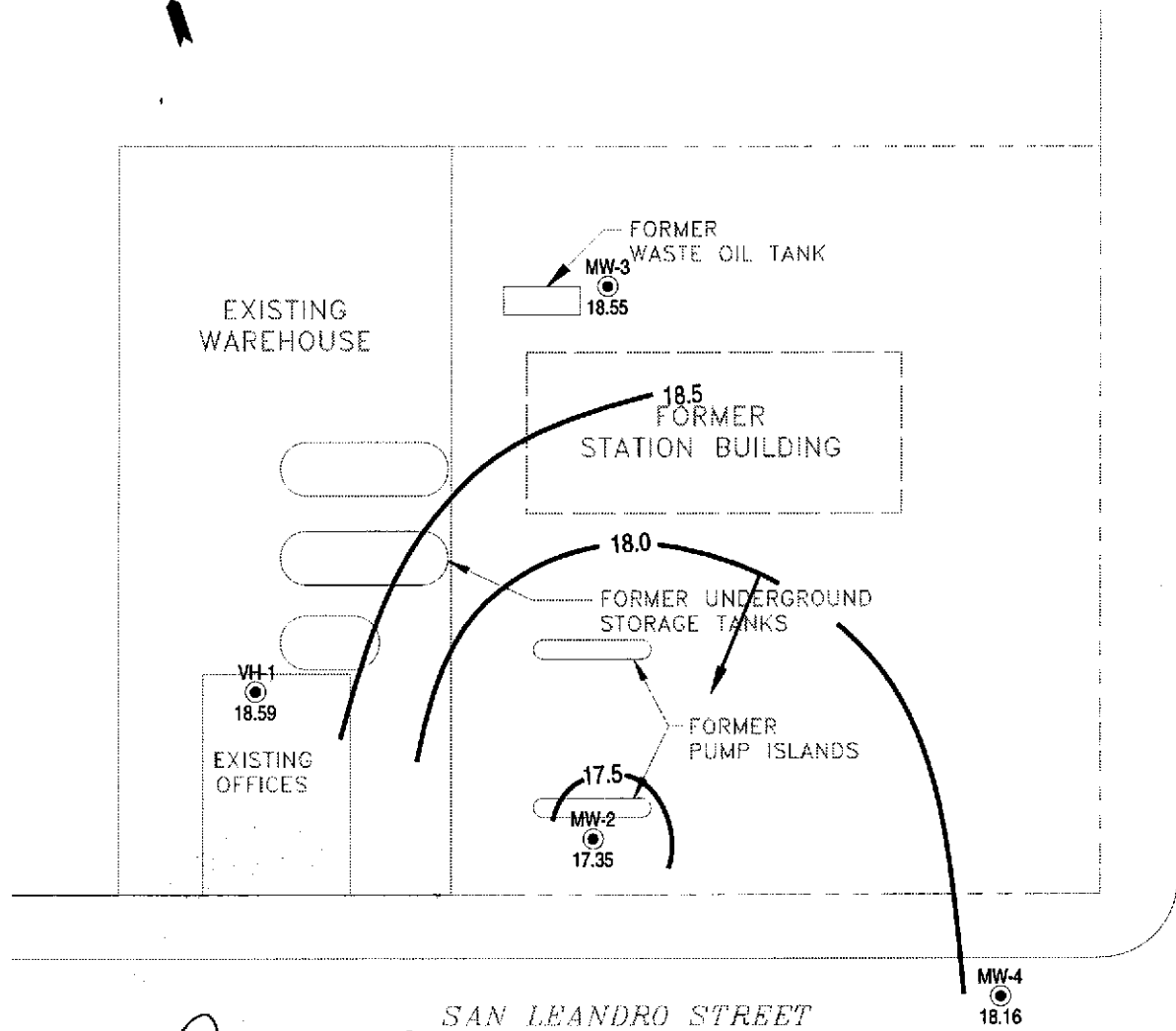
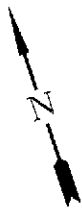
A handwritten signature in black ink, appearing to read "James Keller". The signature is fluid and cursive, with a large initial "J" and a long horizontal stroke at the end.

James Keller
Vice President

JPK/dk

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

Professional Engineering Appendix



J.P.H.



LEGEND

- PROPERTY LINE
- MONITORING WELL
- 22.00 POTENTIOMETRIC SURFACE ELEVATION (FT)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION AND GRADIENT

NOTE:
 1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.

Base map from Groundwater Technology, Inc.


| | | | |
|---|---|--|-----------------------------|
|  <p>CAMBRIA Environmental Technology, Inc.</p> | <p>Chevron Station 9-4612 3616 San Leandro Street Oakland, California</p> <p>\\CHEVRON\9-4612\4612-QM.DWG</p> | <p>Ground Water Elevation August 22, 1995</p> | <p>FIGURE 1</p> |
|---|---|--|-----------------------------|

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 |
|-------------|-----------------|--------------------|----------------|-------|--------------|---------|---------|---------------|--------|------------|-----|------|
| 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 | -- | -- | -- |

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 |
|-------------|-----------------|--------------------|----------------|-------|--------------|---------|---------|---------------|--------|------------|-------|------|
| 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 | -- | -- | -- |
| 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* | -- | -- |
| MW-4 | | | | | | | | | | | | |
| 08/22/95 | 27.27 | 18.16 | 9.11 | -- | 9600 | 100 | <10 | <10 | <10 | -- | -- | -- |

* 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 |
|-------------------|-----------------|--------------------|----------------|-------|--------------|---------|---------|---------------|--------|------------|-------|------|
| 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 | -- | -- | -- |

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

Analytical Appendix



| | | |
|---------------------------|---------------------------------|--------------------|
| Blaine Technical Services | Client Proj. ID: Chevron 9-4612 | Sampled: 08/22/95 |
| 985 Timothy Drive | Sample Descript: VH-1 | Received: 08/23/95 |
| San Jose, CA 95133 | Matrix: LIQUID | |
| Attention: Jim Keller | Analysis Method: 8015Mod/8020 | Analyzed: 08/26/95 |
| | Lab Number: 9508H09-01 | Reported: 08/29/95 |

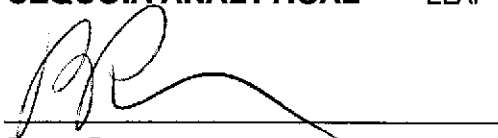
QC Batch Number: GC082595BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|--|-----------------------------|------------------------|
| TPPH as Gas | 1250 | 2900 |
| Benzene | 12 | 310 |
| Toluene | 12 | 15 |
| Ethyl Benzene | 12 | 28 |
| Xylenes (Total) | 12 | 32 |
| Chromatogram Pattern: Weathered Gas | | C6-C12 |
| Surrogates | Control Limits % | % Recovery |
| Trifluorotoluene | 70 130 | 102 |

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

SEQUOIA ANALYTICAL - ELAP #1210



Peggy Penner
Project Manager





Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Client Proj. ID: Chevron 9-4612
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9508H09-02

Sampled: 08/22/95
Received: 08/23/95
Analyzed: 08/26/95
Reported: 08/29/95

QC Batch Number: GC082595BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|--|-------------------------|------------------------|
| TPPH as Gas | 1000 | 4500 |
| Benzene | 10 | 220 |
| Toluene | 10 | 16 |
| Ethyl Benzene | 10 | 61 |
| Xylenes (Total) | 10 | 47 |
| Chromatogram Pattern: Weathered Gas | | C6-C12 |
| Surrogates | Control Limits % | % Recovery |
| Trifluorotoluene | 70 130 | 92 |

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





| | | |
|---------------------------|---------------------------------|--------------------|
| Blaine Technical Services | Client Proj. ID: Chevron 9-4612 | Sampled: 08/22/95 |
| 985 Timothy Drive | Sample Descript: MW-3 | Received: 08/23/95 |
| San Jose, CA 95133 | Matrix: LIQUID | |
| Attention: Jim Keller | Analysis Method: 8015Mod/8020 | Analyzed: 08/28/95 |
| | Lab Number: 9508H09-03 | Reported: 08/29/95 |

QC Batch Number: GC082895BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|--|-----------------------------|------------------------|
| TPPH as Gas | 100 | 980 |
| Benzene | 1.0 | 32 |
| Toluene | 1.0 | N.D. |
| Ethyl Benzene | 1.0 | N.D. |
| Xylenes (Total) | 1.0 | N.D. |
| Chromatogram Pattern: Gas & Unidentified HC | | Gas < C8 |
| Surrogates | Control Limits % | % Recovery |
| Trifluorotoluene | 70 130 | 189 Q |

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

SEQUOIA ANALYTICAL - ELAP #1210



Peggy Penner
Project Manager





Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chevron 9-4612
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9508H09-03

Sampled: 08/22/95
Received: 08/23/95
Extracted: 08/26/95
Analyzed: 08/28/95
Reported: 08/29/95

QC Batch Number: GC0826950HBPEXY
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|---|------------------------|
| TEPH as Diesel Chromatogram Pattern: | 50 C9-C24 | 550 Unidentified HC |
| Surrogates n-Pentacosane (C25) | Control Limits % 50 150 | % Recovery 91 |

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chevron 9-4612
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9508H09-04

Sampled: 08/22/95
Received: 08/23/95

Analyzed: 08/25/95
Reported: 08/29/95

QC Batch Number: GC082595BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|--|-------------------------|------------------------|
| TPPH as Gas | 1000 | 9600 |
| Benzene | 10 | 100 |
| Toluene | 10 | N.D. |
| Ethyl Benzene | 10 | N.D. |
| Xylenes (Total) | 10 | N.D. |
| Chromatogram Pattern: Unidentified HC | | Gas < C8 |
| Surrogates | Control Limits % | % Recovery |
| Trifluorotoluene | 70 130 | 153 Q |

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Client Proj. ID: Chevron 9-4612
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9508H09-05

Sampled: 08/22/95
Received: 08/23/95
Analyzed: 08/24/95
Reported: 08/29/95

QC Batch Number: GC082495BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|-----------------------|-------------------------|------------------------|
| TPPH as Gas | 50 | 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 | 73 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





| | | |
|---------------------------|---------------------------------|--------------------|
| Blaine Technical Services | Client Proj. ID: Chevron 9-4612 | Received: 08/23/95 |
| 985 Timothy Drive | | |
| San Jose, CA 95133 | Lab Proj. ID: 9508H09 | Reported: 08/29/95 |
| Attention: Jim Keller | | |

LABORATORY NARRATIVE

Q = High surrogate recovery due to coelution.

TPPH Note: Sample 9508H09-01 was diluted 25-fold.
Sample 9508H09-02 was diluted 20-fold.
Sample 9508H09-03 was diluted 2-fold.
Sample 9508H09-04 was diluted 20-fold.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager





| | | |
|--|---|-----------------------|
| Blaine Tech Services, Inc. 985 Timothy Drive San Jose, CA 95133 Attention: Jim Keller | Client Project ID: Chevron 9-4612/950822-K2 Matrix: Liquid Work Order #: 9508H09 -01-02 | Reported: Sep 1, 1995 |
|--|---|-----------------------|

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC082595BTEX17A | GC082595BTEX17A | GC082595BTEX17A | GC082595BTEX17A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | |
|-------------------|-----------|-----------|-----------|-----------|
| Analyst: | J. Woo | J. Woo | J. Woo | J. Woo |
| MS/MSD #: | 9508H0806 | 9508H0806 | 9508H0806 | 9508H0806 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 8/25/95 | 8/25/95 | 8/25/95 | 8/25/95 |
| Analyzed Date: | 8/25/95 | 8/25/95 | 8/25/95 | 8/25/95 |
| Instrument I.D.#: | GCHP17 | GCHP17 | GCHP17 | GCHP17 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| Result: | 11 | 11 | 11 | 32 |
| MS % Recovery: | 110 | 110 | 110 | 107 |
| Dup. Result: | 10 | 10 | 10 | 30 |
| MSD % Recov.: | 100 | 100 | 100 | 100 |
| RPD: | 9.5 | 9.5 | 9.5 | 6.5 |
| RPD Limit: | 0-50 | 0-50 | 0-50 | 0-50 |

| | | | | |
|-------------------|---|---|---|---|
| LCS #: | - | - | - | - |
| Prepared Date: | - | - | - | - |
| Analyzed Date: | - | - | - | - |
| Instrument I.D.#: | - | - | - | - |
| Conc. Spiked: | - | - | - | - |
| LCS Result: | - | - | - | - |
| LCS % Recov.: | - | - | - | - |

| | | | | |
|----------------|--------|--------|--------|--------|
| MS/MSD | | | | |
| LCS | 71-133 | 72-128 | 72-130 | 71-120 |
| Control Limits | | | | |

SEQUOIA ANALYTICAL

Peggy Penner
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

9508H09.BLA <1>





Blaine Tech Services, Inc. Client Project ID: Chevron 9-4612/950822-K2
 985 Timothy Drive Matrix: Liquid
 San Jose, CA 95133 Work Order #: 9508H09-03 Reported: Sep 1, 1995
 Attention: Jim Keller

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes | Diesel |
|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC082895BTEX21A | GC082895BTEX21A | GC082895BTEX21A | GC082895BTEX21A | GC0825950HBPEXY |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8015M |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 | EPA 3520 |
| Analyst: | J. Minkel | J. Minkel | J. Minkel | J. Minkel | N. Herrera |
| MS/MSD #: | 9508B8703 | 9508B8703 | 9508B8703 | 9508B8703 | 9508H0806 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. | 380 |
| Prepared Date: | 8/28/95 | 8/28/95 | 8/28/95 | 8/28/95 | 8/25/95 |
| Analyzed Date: | 8/28/95 | 8/28/95 | 8/28/95 | 8/28/95 | 8/28/95 |
| Instrument I.D.#: | GCHP21 | GCHP21 | GCHP21 | GCHP21 | GCHP5 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 1000 µg/L |
| Result: | 11 | 11 | 11 | 33 | 1000 |
| MS % Recovery: | 110 | 110 | 110 | 110 | 62 |
| Dup. Result: | 11 | 11 | 11 | 32 | 1100 |
| MSD % Recov.: | 110 | 110 | 110 | 107 | 72 |
| RPD: | 0.0 | 0.0 | 0.0 | 3.1 | 9.5 |
| RPD Limit: | 0-50 | 0-50 | 0-50 | 0-50 | 0-50 |

| | | | | | |
|-------------------|---|---|---|---|-----------|
| LCS #: | - | - | - | - | BLK082595 |
| Prepared Date: | - | - | - | - | 8/25/95 |
| Analyzed Date: | - | - | - | - | 8/28/95 |
| Instrument I.D.#: | - | - | - | - | GCHP5 |
| Conc. Spiked: | - | - | - | - | 1000 µg/L |
| LCS Result: | - | - | - | - | 770 |
| LCS % Recov.: | - | - | - | - | 77 |

| MS/MSD LCS Control Limits | 71-133 | 72-128 | 72-130 | 71-120 | 38-122 |
|---------------------------|--------|--------|--------|--------|--------|
|---------------------------|--------|--------|--------|--------|--------|

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.





| | | |
|--|---|-----------------------|
| Blaine Tech Services, Inc. 985 Timothy Drive San Jose, CA 95133 Attention: Jim Keller | Client Project ID: Chevron 9-4612/950822-K2 Matrix: Liquid Work Order #: 9508H09-04 | Reported: Sep 1, 1995 |
|--|---|-----------------------|

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC082595BTEX21A | GC082595BTEX21A | GC082595BTEX21A | GC082595BTEX21A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | |
|-------------------|------------|------------|------------|------------|
| Analyst: | R. Vincent | R. Vincent | R. Vincent | R. Vincent |
| MS/MSD #: | 9508H0806 | 9508H0806 | 9508H0806 | 9508H0806 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 8/25/95 | 8/25/95 | 8/25/95 | 8/25/95 |
| Analyzed Date: | 8/25/95 | 8/25/95 | 8/25/95 | 8/25/95 |
| Instrument I.D.#: | GCHP21 | GCHP21 | GCHP21 | GCHP21 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| Result: | 11 | 11 | 11 | 32 |
| MS % Recovery: | 110 | 110 | 110 | 107 |
| Dup. Result: | 9.5 | 9.7 | 9.7 | 29 |
| MSD % Recov.: | 95 | 97 | 97 | 97 |
| RPD: | 15 | 13 | 13 | 9.8 |
| RPD Limit: | 0-50 | 0-50 | 0-50 | 0-50 |

| | | | | |
|-------------------|---|---|---|---|
| LCS #: | - | - | - | - |
| Prepared Date: | - | - | - | - |
| Analyzed Date: | - | - | - | - |
| Instrument I.D.#: | - | - | - | - |
| Conc. Spiked: | - | - | - | - |
| LCS Result: | - | - | - | - |
| LCS % Recov.: | - | - | - | - |

| MS/MSD | LCS | Control Limits |
|--------|--------|----------------|
| 71-133 | 72-128 | 72-130 |
| 71-120 | | |

SEQUOIA ANALYTICAL

Peggy Penner
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.





Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: Chevron 9-4612/950822-K2
Matrix: Liquid

Work Order #: 9508H09-05

Reported: Sep 1, 1995

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC082395BTEX20A | GC082395BTEX20A | GC082395BTEX20A | GC082395BTEX20A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | |
|-------------------|-----------|-----------|-----------|-----------|
| Analyst: | J. Minkel | J. Minkel | J. Minkel | J. Minkel |
| MS/MSD #: | 9508D2103 | 9508D2103 | 9508D2103 | 9508D2103 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 8/24/95 | 8/24/95 | 8/24/95 | 8/24/95 |
| Analyzed Date: | 8/24/95 | 8/24/95 | 8/24/95 | 8/24/95 |
| Instrument I.D.#: | GCHP20 | GCHP20 | GCHP20 | GCHP20 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L |
| Result: | 10 | 9.8 | 9.8 | 29 |
| MS % Recovery: | 100 | 98 | 98 | 97 |
| Dup. Result: | 9.8 | 9.8 | 10 | 30 |
| MSD % Recov.: | 98 | 98 | 100 | 100 |
| RPD: | 2.0 | 0.0 | 2.0 | 3.4 |
| RPD Limit: | 0-50 | 0-50 | 0-50 | 0-50 |

| | | | | |
|-------------------|---|---|---|---|
| LCS #: | - | - | - | - |
| Prepared Date: | - | - | - | - |
| Analyzed Date: | - | - | - | - |
| Instrument I.D.#: | - | - | - | - |
| Conc. Spiked: | - | - | - | - |
| LCS Result: | - | - | - | - |
| LCS % Recov.: | - | - | - | - |

| MS/MSD LCS Control Limits | 71-133 | 72-128 | 72-130 | 71-120 |
|---------------------------------|--------|--------|--------|--------|
| | | | | |

SEQUOIA ANALYTICAL

Peggy Penner
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

9508H09.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 9-4612
Facility Address 3616 San Leandro St., Oakland, CA
Consultant Project Number 950 822-K2
Consultant Name Blaine Tech Services, Inc.
Address 985 Timothy Dr., San Jose, CA 95133
Project Contact (Name) Jim Keller
(Phone) 408 995-5535 (Fax Number) 408 293-8773

Chevron Contact (Name) Mark Miller
(Phone) (510) 842-8134
Laboratory Name Sequoia
Laboratory Release Number 2172660
Samples Collected by (Name) Keith Brown
Collection Date 8/22/95
Signature [Signature]

| Sample Number | Lab Sample Number | Number of Containers | Matrix S = Soil W = Water A = Air C = Chertool | Type G = Grab C = Composite D = Discrete | Time | Sample Preservation | Iced (Yes or No) | Analyses To Be Performed | | | | | | | | | | DO NOT BILL FOR TB-LB | Remarks | | | | | | | |
|---------------|-------------------|----------------------|--|---|------|---------------------|------------------|------------------------------|-------------------|-----------------------|------------------------------|----------------------------|---------------------------|-----------------------------|--|--|--|-----------------------|---------|--|--|--|--|--|--|--|
| | | | | | | | | BTEX + TPH GAS (8020 + 8012) | 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) | | | | | | | | | | | |
| VH-1 | 01 | 3 | W | D | 1115 | HCl | Y | X | | | | | | | | | | | | | | | | | | |
| MW2 | 02 | 3 | | | 1235 | HCl | | X | | | | | | | | | | | | | | | | | | |
| MW3 | 03 | 5 | | | 1150 | HCl None | | X | | | | | | | | | | | | | | | | | | |
| MW4 | 04 | 3 | | | 1350 | HCl | | X | | | | | | | | | | | | | | | | | | |
| TB | 05 | 2 | | | - | HCl | | X | | | | | | | | | | | | | | | | | | |

9508109

| | | | | | |
|--|-------------------------|--------------------------------|---|-----------------------------|--------------------------------|
| Relinquished By (Signature) <u>[Signature]</u> | Organization <u>BTS</u> | Date/Time <u>8/23/95 11:00</u> | Received By (Signature) <u>[Signature]</u> | Organization <u>527001A</u> | Date/Time <u>8/23/95 11:00</u> |
| Relinquished By (Signature) <u>[Signature]</u> | Organization | Date/Time <u>8/23/95</u> | Received By (Signature) | Organization | Date/Time |
| Relinquished By (Signature) | Organization | Date/Time | Received For Laboratory By (Signature) <u>[Signature]</u> | | Date/Time <u>8/23/95 13:15</u> |

Turn Around Time (Circle Choice)

- 24 Hrs.
- 48 Hrs.
- 5 Days
- 10 Days
- As Contracted

Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

| | |
|---|--|
| Project #: <u>950822-K2</u> | Station #: <u>9-4612</u> |
| Sampler: <u>ICCB</u> | Start Date: <u>8/22</u> |
| Well I.D.: <u>VH-1</u> | Well Diameter: (circle one) 2 3 <u>(4)</u> 6 |
| Total Well Depth: Before <u>2793</u> After | Depth to Water: Before <u>926</u> After |
| Depth to Free Product: _____ | Thickness of Free Product (feet): _____ |
| Measurements referenced to: <u>PVC</u> | Grade Other: |

| | | | |
|---------------|------|---------------|-------|
| Well Diameter | VCF | Well Diameter | VCF |
| 1" | 0.04 | 6" | 1.47 |
| 2" | 0.16 | 8" | 2.61 |
| 3" | 0.37 | 10" | 4.08 |
| 4" | 0.65 | 12" | 5.87 |
| 5" | 1.02 | 16" | 10.43 |

| | | | | |
|---------------|---|-------------------|---|-------------|
| <u>12.1</u> | x | <u>3</u> | = | <u>36.3</u> |
| 1 Case Volume | | Specified Volumes | | gallons |

| | |
|--|---|
| Purging: Bailer Disposable Bailer Middleburg Electric Submersible Extraction Pump Other _____ | Sampling: Bailer Disposable Bailer Extraction Port Other _____ |
|--|---|

| TIME | TEMP. (F) | PH | COND. | TURBIDITY: | VOLUME REMOVED: | OBSERVATIONS: |
|-------------|-------------|------------|-------------|------------|-----------------|-----------------|
| <u>1100</u> | <u>64.2</u> | <u>7.2</u> | <u>1000</u> | — | <u>13</u> | <u>gas odor</u> |
| <u>1102</u> | <u>64.4</u> | <u>7.0</u> | <u>960</u> | — | <u>26</u> | |
| <u>1105</u> | <u>64.4</u> | <u>7.0</u> | <u>940</u> | — | <u>39</u> | |
| | | | | | | |
| | | | | | | |

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 39

| | |
|---|----------------------------|
| Sampling Time: <u>1115</u> | Sampling Date: <u>8/22</u> |
| Sample I.D.: <u>VH-1</u> | Laboratory: <u>See</u> |
| Analyzed for: <u>TPH-G</u> <u>BTEX</u> TPH-D OTHER: | |
| Duplicate I.D.: _____ | Cleaning Blank I.D.: _____ |
| Analyzed for: <u>TPH-G</u> <u>BTEX</u> TPH-D OTHER: | |

CHEVRON WELL MONITORING DATA SHEET

| | |
|---|--|
| Project #: <u>950822-101</u> | Station #: <u>8-4612</u> |
| Sampler: <u>8/22</u> | Start Date: <u>8/22</u> |
| Well I.D.: <u>NW2</u> | Well Diameter: (circle one) <u>(2)</u> 3 4 6 |
| Total Well Depth: Before <u>1949</u> After | Depth to Water: Before <u>1016</u> After |
| Depth to Free Product: _____ | Thickness of Free Product (feet): _____ |
| Measurements referenced to: <u>(PVC)</u> | Grade _____ Other: _____ |

| Well Diameter | VCF | Well Diameter | VCF |
|---------------|------|---------------|-------|
| 1" | 0.04 | 6" | 1.47 |
| 2" | 0.16 | 8" | 2.61 |
| 3" | 0.37 | 10" | 4.08 |
| 4" | 0.65 | 12" | 5.87 |
| 5" | 1.02 | 16" | 10.43 |

| | | | | |
|---------------|---|-------------------|---|------------|
| <u>1.5</u> | x | <u>3</u> | = | <u>4.5</u> |
| 1 Case Volume | | Specified Volumes | | gallons |

Purging: Bailer
 Disposable Bailer
 Middleburg
 Electric Submersible
 Extraction Pump
 Other _____

Sampling: Bailer
 Disposable Bailer
 Extraction Port
 Other _____

| TIME | TEMP. (F) | PH | COND. <small>uv</small> | TURBIDITY: | VOLUME REMOVED: | OBSERVATIONS: |
|-------------|-------------|------------|----------------------------|------------|-----------------|------------------|
| <u>1223</u> | <u>68.2</u> | <u>6.9</u> | <u>830</u> | ← | <u>1.5</u> | <u>942 color</u> |
| <u>1225</u> | <u>68.0</u> | <u>6.7</u> | <u>860</u> | — | <u>3.0</u> | |
| <u>1227</u> | <u>68.4</u> | <u>6.8</u> | <u>840</u> | — | <u>4.5</u> | |
| | | | | | | |
| | | | | | | |

Did Well Dewater? If yes, gals. _____ Gallons Actually Evacuated: 4.5

Sampling Time: 1235 Sampling Date: 8/22

Sample I.D.: NW2 Laboratory: Self

Analyzed for: (TPH-G) (BTEX) TPH-D OTHER:

Duplicate I.D.: _____ Cleaning Blank I.D.: _____

Analyzed for: TPH-G BTEX TPH-D OTHER:
 (Circle)

CHEVRON WELL MONITORING DATA SHEET

| | | | |
|---|-------|--|-------|
| Project #: <u>950822-K2</u> | | Station #: <u>9-4612</u> | |
| Sampler: <u>KCB</u> | | Start Date: <u>8/22</u> | |
| Well I.D.: <u>NW3</u> | | Well Diameter: (circle one) <u>2</u> 3 4 6 | |
| Total Well Depth: | | Depth to Water: | |
| Before <u>1958</u> | After | Before <u>945</u> | After |
| Depth to Free Product: <u> </u> | | Thickness of Free Product (feet): | |
| Measurements referenced to: <u>(FVC)</u> Grade Other: | | | |

| Well Diameter | VCF | Well Diameter | VCF |
|---------------|------|---------------|-------|
| 1" | 0.04 | 6" | 1.47 |
| 2" | 0.16 | 8" | 2.61 |
| 3" | 0.37 | 10" | 4.08 |
| 4" | 0.65 | 12" | 5.87 |
| 5" | 1.02 | 16" | 10.43 |

| | | | | | |
|---|---|----------|---|------------|---------|
| <u>1.5</u> | x | <u>3</u> | = | <u>4.5</u> | gallons |
| 1 Case Volume Specified Volumes = gallons | | | | | |

| | |
|--|---|
| Purging: Bailer Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other _____ | Sampling: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other _____ |
|--|---|

| TIME | TEMP. (F) | pH | COND. | TURBIDITY: | VOLUME REMOVED: | OBSERVATIONS: |
|-------------|-------------|------------|------------|------------|-----------------|-------------------------|
| <u>1139</u> | <u>67.7</u> | <u>7.0</u> | <u>890</u> | — | <u>1.5</u> | <u>gas od</u> |
| <u>1142</u> | <u>67.2</u> | <u>6.9</u> | <u>870</u> | — | <u>3.0</u> | <u>grey/tan f/silty</u> |
| <u>1144</u> | <u>66.8</u> | <u>7.0</u> | <u>860</u> | — | <u>4.5</u> | |
| | | | | | | |
| | | | | | | |

Did Well Dewater? If yes, gals. Gallons Actually Evacuated: 4.5

Sampling Time: 1150 Sampling Date: 8/22

Sample I.D.: NW3 Laboratory: Sy

Analyzed for: (Circle) TPH-G BTEX TPH-D OTHER:

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: (Circle) TPH-G BTEX TPH-D OTHER:

CHEVRON WELL MONITORING DATA SHEET

| | |
|---|--|
| Project #: <u>950822-K2</u> | Station #: <u>9-4612</u> |
| Sampler: <u>TCB</u> | Start Date: <u>8/22</u> |
| Well I.D.: <u>NW4</u> | Well Diameter: (circle one) <u>2</u> 3 4 6 |
| Total Well Depth: Before <u>2054</u> After <u>2065</u> | Depth to Water: Before <u>911</u> After |
| Depth to Free Product: <u> </u> | Thickness of Free Product (feet): |
| Measurements referenced to: <u>PVC</u> | Grade Other: |

| Well Diameter | VCF | Well Diameter | VCF |
|---------------|------|---------------|-------|
| 1" | 0.04 | 6" | 1.47 |
| 2" | 0.16 | 8" | 2.61 |
| 3" | 0.37 | 10" | 4.08 |
| 4" | 0.65 | 12" | 5.87 |
| 5" | 1.02 | 16" | 10.43 |

| | | | | |
|---------------|---|-------------------|---|------------|
| <u>1.8</u> | x | <u>3</u> | = | <u>5.4</u> |
| 1 Case Volume | | Specified Volumes | | gallons |

| | |
|--|---|
| Purging: Bailer Disposable Bailer Middleburg Electric Submersible Extraction Pump Other | Sampling: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other |
|--|---|

| TIME | TEMP. (F) | pH | COND. | TURBIDITY: | VOLUME REMOVED: | OBSERVATIONS: |
|------|-----------|-----|-------|------------|-----------------|---------------|
| 1336 | 66.2 | 7.1 | 580 | — | 2 | light tan |
| 1340 | 66.0 | 7.1 | 600 | — | 4 | gas odor |
| 1345 | 66.4 | 7.0 | 600 | — | 6 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did Well Dewater? If yes, gals. Gallons Actually Evacuated: 6

| | |
|---|----------------------------------|
| Sampling Time: <u>1350</u> | Sampling Date: <u>8/22</u> |
| Sample I.D.: <u>NW4</u> | Laboratory: <u>SEA</u> |
| Analyzed for: <u>TPH-G</u> <u>BTEX</u> TPH-D OTHER: | |
| Duplicate I.D.: <u> </u> | Cleaning Blank I.D.: <u> </u> |
| Analyzed for: TPH-G BTEX TPH-D OTHER: | |