

11/10/98 11:30 AM



Chevron

April 3, 1998

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

#541

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

Marketing - Sales West
Phone 510 842-9500

**Re: Chevron Service Station #9-1851
451 Hegenberger Road
Oakland, California**

Dear Mr. Chan:

Enclosed is the First Quarter Groundwater Monitoring Report for 1998 that was prepared by our consultant Blaine Tech Services Inc., for the above noted site. The groundwater samples collected were analyzed for TPH-g, BTEX, MtBE, TPH-d and VOC constituents, in monitoring well M-2 and analyzed for TPH-g, BTEX, and MtBE constituents in the remaining three wells.

The TPH-g and BTEX constituents for monitoring well MW-1 were below the method detection limits, while the concentration of the benzene constituent decreased in well MW-3, but increased in well MW-4. The benzene concentration remained the same in well MW-2 as in the previous sampling event. Results from testing for TPH-d in well MW-2, indicated a chromatogram pattern of an unidentified hydrocarbon. ?

The depth to ground water varied from 1.83 feet to 3.35 feet below grade with a direction of flow southwesterly.

Encroachment permits have finally been received from the City of Oakland and our consultant Pacific Environmental can now proceed with the groundwater investigation on preferential pathways. It is expected that their report will be submitted in four to six weeks.

It appears that there has been minimal or no impact from VOC constituents, as the last three sampling events have been below method detection limits in well MW-2. **Therefore, Chevron requests that this analysis be deleted for future events.**

April 3, 1998
Mr. Barney Chan
Chevron Service Station #9-1851
Page 2

Chevron will continue to sample quarterly for the present and until the results of the groundwater investigation is completed. If you have any questions call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY



Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Bill Scudder, Chevron

Mr. Ben Shimek
451 Hegenberger Road
Oakland, CA 94621

BLAINE
TECH SERVICES INC.

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



April 2, 1998

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

1st Quarter 1998 Monitoring at 9-1851

First Quarter 1998 Groundwater Monitoring at
Chevron Service Station Number 9-1851
451 Hegenberger Rd.
Oakland, CA

Monitoring Performed on February 19, 1998

Groundwater Sampling Report 980219-S-2

This report covers the routine monitoring of groundwater wells at this Chevron facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to McKittrick Waste Treatment Site for disposal.

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

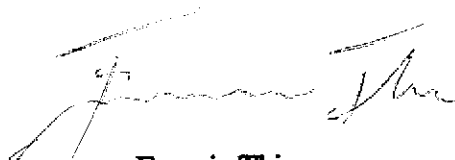
map which is located in the **Professional Engineering Appendix**.

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

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

Please call if you have any questions.

Yours truly,

A handwritten signature in cursive script, appearing to read "Francis Thie".

Francis Thie
Vice President

FPT/ck

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

Professional Engineering Appendix

EXPLANATION

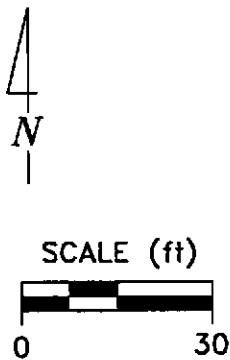
⊙ MONITORING WELL LOCATION

● SOIL BORING LOCATION

0.78 GROUNDWATER ELEVATION (FT, MSL)

0.75 — GROUNDWATER ELEVATION CONTOUR (FT, MSL)

⇩ APPROXIMATE GROUNDWATER FLOW DIRECTION;
APPROXIMATE GRADIENT = 0.007



EDGEWATER ROAD

Approximate Property Boundary

MW-1
0.78

0.75

0.50

MW-2
0.55
Waste Oil Tank

MW-3
0.86

Underground Methanol Storage Tank

Station Building

MW-4
0.13

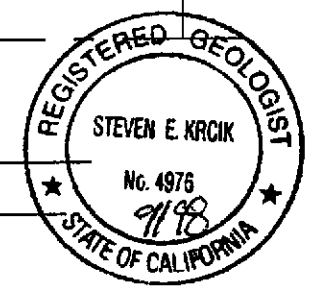
Planter

Underground Storage Tanks

Dispenser Islands

SB-1

Planter



HEGENBERGER ROAD

Basemap from Geoconsultants, Inc.

PREPARED BY

Chevron Station 9-1851
451 Hegenberger Road
Oakland, California

GROUNDWATER ELEVATION CONTOUR MAP,
FEBRUARY 19, 1998

FIGURE:
1
PROJECT:
DAC04

Table of Well Data and Analytical Results

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet

Analytical results are in parts per billion (ppb)

| DATE | Well Head Elev. | Ground Water Elev. | Depth To Water | Notes | TPH- Gasoline | Benzene | Toluene | Ethyl- Benzene | Xylene | TOG | TPH- Diesel (EPA 8240) | Benzene by (EPA 8240) | Xylene by (EPA 8240) | C-1, 2- DCE | Carbon Disulfide | Vinyl Chloride | MTBE |
|-------------|-----------------|--------------------|----------------|--------------|---------------|---------|---------|----------------|--------|-------|------------------------|-----------------------|----------------------|-------------|------------------|----------------|------|
| MW-1 | | | | | | | | | | | | | | | | | |
| 10/17/95 | 2.61 | -1.51 | 4.12 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/29/96 | 2.61 | -0.72 | 3.33 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 9.5 |
| 06/26/96 | 2.61 | -1.23 | 3.84 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 46 |
| 09/25/96 | 2.61 | -1.41 | 4.02 | -- | <250 | <2.5 | <2.5 | <2.5 | <2.5 | -- | -- | -- | -- | -- | -- | -- | 940 |
| 12/17/96 | 2.61 | -0.96 | 3.57 | -- | <50 | 0.86 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 260 |
| 03/20/97 | 2.61 | -1.54 | 4.15 | -- | <50 | <2.0 | <2.0 | <2.0 | <2.0 | -- | -- | -- | -- | -- | -- | -- | 76 |
| 06/20/97 | 2.61 | -1.72 | 4.33 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 64 |
| 09/09/97 | 2.61 | -1.74 | 4.35 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 110 |
| 12/12/97 | 2.61 | -0.39 | 3.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 27 |
| 02/19/98 | 2.61 | 0.78 | 1.83 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 14 |
| MW-2 | | | | | | | | | | | | | | | | | |
| 10/17/95 | 3.51 | -1.82 | 5.33 | * | 170 | 3.5 | <0.5 | 1.0 | 6.1 | <5000 | 1600** | -- | -- | 11 | -- | -- | -- |
| 03/29/96 | 3.51 | -0.44 | 3.95 | -- | 89 | 4.7 | <0.5 | 0.64 | 0.74 | -- | 3000** | 11 | 2.5 | 17 | -- | 5.4 | 21 |
| 06/26/96 | 3.51 | -1.09 | 4.60 | -- | 80 | 8.7 | <0.5 | 1.2 | 1.3 | -- | 2000** | 11 | <2.0 | 15 | -- | 12 | 31 |
| 09/25/96 | 3.51 | -- | -- | Inaccessible | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12/17/96 | 3.51 | -0.41 | 3.92 | -- | 110 | <0.5 | <0.5 | 0.75 | 2.1 | -- | 2400** | 10 | <2.0 | 2.3 | -- | 5.5 | 27 |
| 03/20/97 | 3.51 | -1.32 | 4.83 | -- | 140 | 8.2 | <2.0 | <2.0 | <2.0 | -- | 3400** | -- | -- | <2.0 | -- | 3.2 | 58 |
| 06/20/97 | 3.51 | -1.53 | 5.04 | -- | 62 | 7.7 | <0.5 | <0.5 | <0.5 | -- | 1600** | 7.2 | <2.0 | 4.6 | 2.2 | 5.2 | 38 |
| 09/09/97 | 3.51 | -1.47 | 4.98 | -- | 190 | 9.4 | <0.5 | <0.5 | 0.86 | -- | 82** | 11 | <2.0 | <2.0 | <2.0 | <2.0 | 48 |
| 12/12/97 | 3.51 | -0.40 | 3.91 | -- | 180 | 1.8 | <0.5 | <0.5 | 3.2 | -- | 8500** | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 34 |
| 02/19/98 | 3.51 | 0.55 | 2.96 | -- | <100 | 1.8 | <1.0 | <1.0 | <1.0 | -- | 3800** | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | 230 |

* Results of EPA 8010 test indicates that the detection of 1,1-Dichloroethane is 1.7 ppb.

** 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 | TOG | TPH-Diesel | Benzene (EPA 8240) | Xylene (EPA 8240) | 1,2-DCE | Carbon Disulfide | Vinyl Chloride | MTBE |
|-------------|-----------------|--------------------|----------------|-----------|--------------|---------|---------|---------------|--------|-----|------------|--------------------|-------------------|---------|------------------|----------------|--------|
| MW-3 | | | | | | | | | | | | | | | | | |
| 10/17/95 | 3.08 | -1.34 | 4.42 | *** | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/29/96 | 3.08 | 0.08 | 3.00 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 26 |
| 06/26/96 | 3.08 | -0.52 | 3.60 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 47 |
| 09/25/96 | 3.08 | -1.06 | 4.14 | -- | <125 | <1.2 | <1.2 | <1.2 | <1.2 | -- | -- | -- | -- | -- | -- | -- | 570 |
| 12/17/96 | 3.08 | -0.12 | 3.20 | -- | <500 | <5.0 | <5.0 | <5.0 | <5.0 | -- | -- | -- | -- | -- | -- | -- | 680 |
| 03/20/97 | 3.08 | -0.22 | 3.30 | -- | <50 | <5.7 | <5.7 | <5.7 | <5.7 | -- | -- | -- | -- | -- | -- | -- | 430 |
| 06/20/97 | 3.08 | -0.78 | 3.86 | -- | <500 | <5.0 | <5.0 | <5.0 | <5.0 | -- | -- | -- | -- | -- | -- | -- | 1400 |
| 09/09/97 | 3.08 | -1.11 | 4.19 | -- | 76** | 22 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 920 |
| 12/12/97 | 3.08 | 0.12 | 2.96 | -- | 52 | 15 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 710 |
| 02/19/98 | 3.08 | 0.86 | 2.22 | -- | <50 | 6.6 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 380 |
| MW-4 | | | | | | | | | | | | | | | | | |
| 10/17/95 | 3.48 | -1.60 | 5.08 | -- | <125 | <1.2 | <1.2 | <1.2 | <1.2 | -- | -- | -- | -- | -- | -- | -- | -- |
| 03/29/96 | 3.48 | -1.13 | 4.61 | -- | <1000 | <10 | <10 | <10 | <10 | -- | -- | -- | -- | -- | -- | -- | 6700 |
| 06/26/96 | 3.48 | -0.82 | 4.30 | -- | <2000 | <20 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- | 7200 |
| 09/25/96 | 3.48 | -1.85 | 5.33 | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |
| 12/17/96 | 3.48 | 0.67 | 2.81 | -- | <2000 | 120 | <20 | <20 | <20 | -- | -- | -- | -- | -- | -- | -- | 11,000 |
| 03/20/97 | 3.48 | -1.02 | 4.50 | -- | 250** | <2.0 | <2.0 | <2.0 | <2.0 | -- | -- | -- | -- | -- | -- | -- | 10,000 |
| 03/20/97 | 3.48 | -1.02 | 4.50 | Conf. run | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8600 |
| 06/20/97 | 3.48 | -2.20 | 5.68 | -- | <2500 | <25 | <25 | <25 | <25 | -- | -- | -- | -- | -- | -- | -- | 9300 |
| 09/09/97 | 3.48 | -2.02 | 5.50 | -- | 460** | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 6600 |
| 12/12/97 | 3.48 | -1.55 | 5.03 | -- | 430** | 120 | <2.5 | <2.5 | <2.5 | -- | -- | -- | -- | -- | -- | -- | 7800 |
| 02/19/98 | 3.48 | 0.13 | 3.35 | -- | 510** | 130 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | 6600 |

** Chromatogram pattern indicates an unidentified hydrocarbon.

what is it? could it be MTBE?

*** Results of EPA 8015 test indicates that levels of Methanol and Methyl ethyl ketone are respectively <1000 and <200 ppb.

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 | TOG | TPH- Diesel (EPA 8240) | Benzene (EPA 8240) | Xylene (EPA 8240) | 1, 2- DCE | Carbon Disulfide | Vinyl Chloride | MTBE |
|-------------------|-----------------|--------------------|----------------|-------|---------------|---------|---------|----------------|--------|-----|------------------------|--------------------|-------------------|-----------|------------------|----------------|------|
| TRIP BLANK | | | | | | | | | | | | | | | | | |
| 10/17/95 | | | | | | | | | | | | | | | | | |
| 03/29/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | -- |
| 06/26/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |
| 09/25/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |
| 12/17/96 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |
| 03/20/97 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |
| 06/20/97 | -- | -- | -- | -- | <50 | <2.0 | <2.0 | <2.0 | <2.0 | -- | -- | -- | -- | -- | -- | -- | -- |
| 09/09/97 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |
| 12/12/97 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |
| 02/19/98 | -- | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | -- | -- | -- | <2.5 |

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on March 29, 1996. Earlier field data and analytical results are drawn from the December 29, 1995 Gettler-Ryan, Inc. report.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

ND = Not detected at or above the minimum quantitation limit. See laboratory reports for minimum quantitation limits.

TOG = Total Oil Grease

MTBE = Methyl t-butyl Ether

C-1,2 DCE = Cis-1,2-Dichloroethylene

Conf. run = Confirmation run

Analytical Appendix



| | | |
|--|---|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-1851/980219-S2 Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802E23-01 | Sampled: 02/19/98 Received: 02/20/98 Analyzed: 02/28/98 Reported: 03/05/98 |
|--|---|---|

QC Batch Number: GC022898BTEX06A
Instrument ID: GCHP6

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 | 14 |
| 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 | 90 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Panner
Project Manager





| | | |
|--|---|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-1851/980219-S2 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802E23-02 | Sampled: 02/19/98 Received: 02/20/98 Analyzed: 03/03/98 Reported: 03/05/98 |
| Attention: Fran Thie | | |

QC Batch Number: GC030398BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|-----------------------|-------------------------|------------------------|
| TPPH as Gas | 100 | N.D. |
| Methyl t-Butyl Ether | 5.0 | 230 |
| Benzene | 1.0 | 1.8 |
| Toluene | 1.0 | N.D. |
| Ethyl Benzene | 1.0 | N.D. |
| Xylenes (Total) | 1.0 | N.D. |
| Chromatogram Pattern: | | |
| Surrogates | Control Limits % | % Recovery |
| Trifluorotoluene | 70 130 | 86 |

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 9-1851/980219-S2
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8240
Lab Number: 9802E23-02

Sampled: 02/19/98
Received: 02/20/98
Analyzed: 02/27/98
Reported: 03/05/98

Attention: Fran Thie

QC Batch Number: MS0227988240F3A
Instrument ID: F3

Volatile Organics (EPA 8240)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---------------------------|-------------------------|------------------------|
| Acetone | 17 | N.D. |
| Benzene | 3.3 | N.D. |
| Bromodichloromethane | 3.3 | N.D. |
| Bromoform | 3.3 | N.D. |
| Bromomethane | 3.3 | N.D. |
| 2-Butanone | 17 | N.D. |
| Carbon disulfide | 3.3 | N.D. |
| Carbon tetrachloride | 3.3 | N.D. |
| Chlorobenzene | 3.3 | N.D. |
| Chloroethane | 3.3 | N.D. |
| 2-Chloroethyl vinyl ether | 17 | N.D. |
| Chloroform | 3.3 | N.D. |
| Chloromethane | 3.3 | N.D. |
| Dibromochloromethane | 3.3 | N.D. |
| 1,1-Dichloroethane | 3.3 | N.D. |
| 1,2-Dichloroethane | 3.3 | N.D. |
| 1,1-Dichloroethene | 3.3 | N.D. |
| cis-1,2-Dichloroethene | 3.3 | N.D. |
| trans-1,2-Dichloroethene | 3.3 | N.D. |
| 1,2-Dichloropropane | 3.3 | N.D. |
| cis-1,3-Dichloropropene | 3.3 | N.D. |
| trans-1,3-Dichloropropene | 3.3 | N.D. |
| Ethylbenzene | 3.3 | N.D. |
| 2-Hexanone | 17 | N.D. |
| Methylene chloride | 8.4 | N.D. |
| 4-Methyl-2-pentanone | 17 | N.D. |
| Styrene | 3.3 | N.D. |
| 1,1,2,2-Tetrachloroethane | 3.3 | N.D. |
| Tetrachloroethene | 3.3 | N.D. |
| Toluene | 3.3 | N.D. |
| 1,1,1-Trichloroethane | 3.3 | N.D. |
| 1,1,2-Trichloroethane | 3.3 | N.D. |
| Trichloroethene | 3.3 | N.D. |
| Trichlorofluoromethane | 3.3 | N.D. |
| Vinyl acetate | 8.4 | N.D. |
| Vinyl chloride | 3.3 | N.D. |
| Total Xylenes | 3.3 | N.D. |





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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

| | | |
|--|---|---|
| Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 | Client Proj. ID: Chevron 9-1851/980219-S2 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: EPA 8240 Lab Number: 9802E23-02 | Sampled: 02/19/98 Received: 02/20/98 Analyzed: 02/27/98 Reported: 03/05/98 |
|--|---|---|

QC Batch Number: MS0227988240F3A
Instrument ID: F3

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|-----------------------|-------------------------|------------------------|
| Surrogates | Control Limits % | % Recovery |
| 1,2-Dichloroethane-d4 | 76 | 114 |
| Toluene-d8 | 88 | 110 |
| 4-Bromofluorobenzene | 86 | 115 |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Renner
Project Manager





Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Client Proj. ID: Chevron 9-1851/980219-S2
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9802E23-02

Sampled: 02/19/98
Received: 02/20/98
Extracted: 02/25/98
Analyzed: 02/27/98
Reported: 03/05/98


QC Batch Number: GC0225980HBPEXZ
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|---|-------------------------|------------------------|
| TEPH as Diesel Chromatogram Pattern: | 200 C9-C24 | 3800 Unid.-HC |
| Surrogates | Control Limits % | % Recovery |
| n-Pentacosane (C25) | 50 150 | 276 Q |

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Fenner
Project Manager





Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Client Proj. ID: Chevron 9-1851/980219-S2
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9802E23-03

Sampled: 02/19/98
Received: 02/20/98
Analyzed: 03/03/98
Reported: 03/05/98

QC Batch Number: GC030398BTEX02A
Instrument ID: GCHP2

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 | 5.0 | 380 |
| Benzene | 0.50 | 6.6 |
| 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 | 80 |

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 9-1851/980219-S2 Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802E23-04 | Sampled: 02/19/98 Received: 02/20/98 Analyzed: 03/03/98 Reported: 03/05/98 |
|--|---|---|

QC Batch Number: GC030398BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit ug/L | Sample Results ug/L |
|--|-------------------------|------------------------|
| TPPH as Gas | 50 | 510 |
| Methyl t-Butyl Ether | 125 | 6600 |
| Benzene | 0.50 | 130 |
| Toluene | 0.50 | N.D. |
| Ethyl Benzene | 0.50 | N.D. |
| Xylenes (Total) | 0.50 | N.D. |
| Chromatogram Pattern: Unidentified HC | | C6-C8 |
| Surrogates | Control Limits % | % Recovery |
| Trifluorotoluene | 70 130 | 80 |

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 9-1851/980219-S2 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802E23-05 | Sampled: 02/19/98 Received: 02/20/98 Analyzed: 02/28/98 Reported: 03/05/98 |
|--|---|---|

QC Batch Number: GC022898BTEX06A
Instrument ID: GCHP06

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 | 100 |

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, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Chevron 9-1851 / 980219-S2
Matrix: Liquid

Work Order #: 9802E23 -01, 05

Reported: Mar 13, 1998

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes | Gas |
|----------------|-----------------|-----------------|------------------|-----------------|-----------------|
| QC Batch#: | GC022898BTEX06A | GC022898BTEX06A | GC022898BTEX06A | GC022898BTEX06A | GC022898BTEX06A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8015M |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | | |
|-------------------|-----------|-----------|-----------|-----------|-----------|
| Analyst: | J. Minkel | J. Minkel | J. Minkel | J. Minkel | J. Minkel |
| MS/MSD #: | 9802D6005 | 9802D6005 | 9802D6005 | 9802D6005 | 9802D6005 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 |
| Analyzed Date: | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 |
| Instrument I.D.#: | GCHP6 | GCHP6 | GCHP6 | GCHP6 | GCHP6 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| Result: | 11 | 11 | 11 | 33 | 53 |
| MS % Recovery: | 110 | 110 | 110 | 110 | 88 |
| Dup. Result: | 11 | 11 | 11 | 33 | 55 |
| MSD % Recov.: | 110 | 110 | 110 | 110 | 92 |
| RPD: | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK022898 | BLK022898 | BLK022898 | BLK022898 | BLK022898 |
|-------------------|-----------|-----------|-----------|-----------|-----------|
| Prepared Date: | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 |
| Analyzed Date: | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 | 2/28/98 |
| Instrument I.D.#: | GCHP6 | GCHP6 | GCHP6 | GCHP6 | GCHP6 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| LCS Result: | 11 | 11 | 11 | 34 | 56 |
| LCS % Recov.: | 110 | 110 | 110 | 113 | 93 |

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

9802E23.BLA <1>





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

Client Project ID: Chevron 9-1851 / 980219-S2
Matrix: Liquid

Work Order #: 9802E23-02

Reported: Mar 13, 1998

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes | Gas |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC030398BTEX21A | GC030398BTEX21A | GC030398BTEX21A | GC030398BTEX21A | GC030398BTEX21A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8015M |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | | |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| Analyst: | C. DeMartini | C. DeMartini | C. DeMartini | C. DeMartini | C. DeMartini |
| MS/MSD #: | 9802E2505 | 9802E2505 | 9802E2505 | 9802E2505 | 9802E2505 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Analyzed Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Instrument I.D.#: | GCHP21 | GCHP21 | GCHP21 | GCHP21 | GCHP21 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| Result: | 11 | 10 | 10 | 29 | 53 |
| MS % Recovery: | 110 | 100 | 100 | 97 | 88 |
| Dup. Result: | 11 | 10 | 10 | 31 | 54 |
| MSD % Recov.: | 110 | 100 | 100 | 103 | 90 |
| RPD: | 0.0 | 0.0 | 0.0 | 6.7 | 1.9 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK030398 | BLK030398 | BLK030398 | BLK030398 | BLK030398 |
|-------------------|-----------|-----------|-----------|-----------|-----------|
| Prepared Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Analyzed Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Instrument I.D.#: | GCHP21 | GCHP21 | GCHP21 | GCHP21 | GCHP21 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| LCS Result: | 11 | 10 | 10 | 30 | 54 |
| LCS % Recov.: | 110 | 100 | 100 | 100 | 90 |

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

9802E23.BLA <2>





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

Client Project ID: Chevron 9-1851 / 980219-S2
Matrix: Liquid

Work Order #: 9802E23-03, 04

Reported: Mar 13, 1998

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes | Gas |
|-----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC030398BTEX02A | GC030398BTEX02A | GC030398BTEX02A | GC030398BTEX02A | GC030398BTEX02A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8015M |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|
| Analyst: | C. DeMartini | C. DeMartini | C. DeMartini | C. DeMartini | C. DeMartini |
| MS/MSD #: | 9802E2505 | 9802E2505 | 9802E2505 | 9802E2505 | 9802E2505 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Analyzed Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Instrument I.D.#: | GCHP2 | GCHP2 | GCHP2 | GCHP2 | GCHP2 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| Result: | 9.5 | 9.1 | 9.1 | 27 | 66 |
| MS % Recovery: | 95 | 91 | 91 | 90 | 110 |
| Dup. Result: | 9.4 | 9.0 | 9.1 | 27 | 66 |
| MSD % Recov.: | 94 | 90 | 91 | 90 | 110 |
| RPD: | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK030398 | BLK030398 | BLK030398 | BLK030398 | BLK030398 |
|--------------------------|-----------|-----------|-----------|-----------|-----------|
| Prepared Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Analyzed Date: | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 | 3/3/98 |
| Instrument I.D.#: | GCHP2 | GCHP2 | GCHP2 | GCHP2 | GCHP2 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| LCS Result: | 9.6 | 9.2 | 9.3 | 28 | 66 |
| LCS % Recov.: | 96 | 92 | 93 | 93 | 110 |

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

9802E23.BLA <3>





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

Client Project ID: **Chevron 9-1851 / 980219-S2**
Matrix: **Liquid**

Work Order #: **9802E23-03, 04 - MTBE**

Reported: **Mar 13, 1998**

QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes | Gas |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | GC030298BTEX03A | GC030298BTEX03A | GC030298BTEX03A | GC030298BTEX03A | GC030298BTEX03A |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8015M |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |

| | | | | | |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| Analyst: | C. DeMartini | C. DeMartini | C. DeMartini | C. DeMartini | C. DeMartini |
| MS/MSD #: | 9802H7004 | 9802H7004 | 9802H7004 | 9802H7004 | 9802H7004 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 |
| Analyzed Date: | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 |
| Instrument I.D.#: | GCHP3 | GCHP3 | GCHP3 | GCHP3 | GCHP3 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| Result: | 9.7 | 9.6 | 9.8 | 30 | 64 |
| MS % Recovery: | 97 | 96 | 98 | 100 | 107 |
| Dup. Result: | 9.6 | 9.5 | 9.7 | 30 | 64 |
| MSD % Recov.: | 96 | 95 | 97 | 100 | 107 |
| RPD: | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | BLK030298 | BLK030298 | BLK030298 | BLK030298 | BLK030298 |
|-------------------|-----------|-----------|-----------|-----------|-----------|
| Prepared Date: | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 |
| Analyzed Date: | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 | 3/2/98 |
| Instrument I.D.#: | GCHP3 | GCHP3 | GCHP3 | GCHP3 | GCHP3 |
| Conc. Spiked: | 10 µg/L | 10 µg/L | 10 µg/L | 30 µg/L | 60 µg/L |
| LCS Result: | 9.9 | 9.7 | 9.8 | 30 | 65 |
| LCS % Recov.: | 99 | 97 | 98 | 100 | 108 |

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

Please Note:

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

SEQUOIA ANALYTICAL

Reggy Penner
Project Manager

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

9802E23.BLA <4>





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

Client Project ID: Chevron 9-1851 / 980219-S2

Matrix: Liquid

Work Order #: 9802E23-02

Reported: Mar 13, 1998

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0225980HBPEXZ

Analy. Method: EPA 8015M

Prep. Method: EPA 3520

Analyst: A. Porter

MS/MSD #: 9802D3301

Sample Conc.: 210

Prepared Date: 2/25/98

Analyzed Date: 2/26/98

Instrument I.D.#: GCHP5

Conc. Spiked: 1000 µg/L

Result: 980

MS % Recovery: 77

Dup. Result: 980

MSD % Recov.: 77

RPD: 0.0

RPD Limit: 0-50

LCS #: BLK022598Zs

Prepared Date: 2/25/98

Analyzed Date: 2/26/98

Instrument I.D.#: GCHP5

Conc. Spiked: 1000 µg/L

LCS Result: 750

LCS % Recov.: 75

MS/MSD 50-150

LCS 60-140

Control Limits

Please Note:

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

SEQUOIA ANALYTICAL

Peggy Fenner
Project Manager

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

9802E23.BLA <5>





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

Client Project ID: **Chevron 9-1851 / 980219-S2**
Matrix: **Liquid**

Work Order #: **9802E23-02**

Reported: **Mar 13, 1998**

QUALITY CONTROL DATA REPORT

| Analyte: | 1,1-Dichloroethene | Trichloroethene | Benzene | Toluene | Chloro-benzene |
|-------------------|--------------------|-----------------|-----------------|-----------------|-----------------|
| QC Batch#: | MS0227988240F3A | MS0227988240F3A | MS0227988240F3A | MS0227988240F3A | MS0227988240F3A |
| Analy. Method: | EPA 8240 | EPA 8240 | EPA 8240 | EPA 8240 | EPA 8240 |
| Prep. Method: | N.A. | N.A. | N.A. | N.A. | N.A. |
| Analyst: | E. Manuel | E. Manuel | E. Manuel | E. Manuel | E. Manuel |
| MS/MSD #: | 9802C7002 | 9802C7002 | 9802C7002 | 9802C7002 | 9802C7002 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 |
| Analyzed Date: | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 |
| Instrument I.D.#: | F3 | F3 | F3 | F3 | F3 |
| Conc. Spiked: | 50 µg/L | 50 µg/L | 50 µg/L | 50 µg/L | 50 µg/L |
| Result: | 44 | 46 | 46 | 47 | 44 |
| MS % Recovery: | 88 | 92 | 92 | 94 | 88 |
| Dup. Result: | 49 | 50 | 50 | 51 | 48 |
| MSD % Recov.: | 98 | 100 | 100 | 102 | 96 |
| RPD: | 11 | 8.3 | 8.3 | 8.2 | 8.7 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 | 0-25 |

| LCS #: | LCS022798 | LCS022798 | LCS022798 | LCS022798 | LCS022798 |
|-------------------|-----------|-----------|-----------|-----------|-----------|
| Prepared Date: | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 |
| Analyzed Date: | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 | 2/27/98 |
| Instrument I.D.#: | F3 | F3 | F3 | F3 | F3 |
| Conc. Spiked: | 50 µg/L | 50 µg/L | 50 µg/L | 50 µg/L | 50 µg/L |
| LCS Result: | 44 | 43 | 46 | 46 | 44 |
| LCS % Recov.: | 88 | 86 | 92 | 92 | 88 |

| | | | | | |
|----------------|--------|--------|--------|--------|--------|
| MS/MSD | 60-140 | 60-140 | 60-140 | 60-140 | 60-140 |
| LCS | 65-135 | 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



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 9-1851
Facility Address 451 Hegenberger Rd., Oakland, CA
Chevron Contact (Name) Phil Briggs
(Phone) (510)842-9136
Laboratory Name SEQUOIA

Consultant Project Number 980219-52
Laboratory Release Number 9034738
Consultant Name Blaine Tech Services, Inc.
Address 1680 Rogers Ave., San Jose, CA 95112
Samples Collected by (Name) DOUG SANDERS
Project Contact (Name) Fran Thie
Collection Date 2-19-98
(Phone) (408)573-0555 (Fax Number) (408)573-7771
Signature *Doug Sanders*

| Sample Number | Lab Sample Number | Number of Containers | Matrix S = Soil W = Water 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) | TPH Diesel (8015) | Oil and Grease (8020) | Purgeable Halocarbons (8010) | Purgeable Aromatics (8020) | Purgeable Organics (8040) | Extractable Organics (8070) | Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA) | 9802E23 | | | | | | | |
| MW-1 | 01 | 3 | W | D | 1410 | HCl | Yes | X | | | | | | | | | | | | | | | |
| MW-2 | 02 | 8 | W | D | 1400 | HCl/None | | X | X | | | | | | | | | | X | | | | |
| MW-3 | 03 | 3 | W | D | 1420 | HCl | | X | | | | | | | | | | | | | | | |
| MW-4 | 04 | 3 | W | D | 1440 | HCl | | X | | | | | | | | | | | | | | | |
| TB | 05 | 2 | W | D | - | HCl | | X | | | | | | | | | | | | | | | |

Relinquished By (Signature) *Doug Sanders* Organization BTS Date/Time 2/20/98 12:00

Relinquished By (Signature) *Steve Thie* Organization SEA Date/Time 2/24/98

Relinquished By (Signature) _____ Organization _____ Date/Time _____

Received By (Signature) *Steve Thie* Organization SEA Date/Time 2/20/98 12:00

Received By (Signature) _____ Organization _____ Date/Time _____

Received For Laboratory By (Signature) *Marc* Date/Time 2/20/98 14:34

Turn Around Time (Circle Choice)

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

SEA-12/10/98 14:34

Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

| | |
|-----------------------------------|---|
| Project #: 98021952 | Station #: 9-1851 |
| Sampler: DOUG & STEVE | Date: 2-19-98 |
| Well I.D.: MW-1 | Well Diameter: (2) 3 4 6 8 _____ |
| Total Well Depth: 14.62 | Depth to Water: 1.83 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (EVC) 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: | Sampling Method: |
| Bailer | Bailer |
| Disposible Bailer <input checked="" type="checkbox"/> | Disposible Bailer <input checked="" type="checkbox"/> |
| Middieburg | Extraction Port |
| Electric Submersible | Other: _____ |
| Extraction Pump | |
| Other: _____ | |

| | | | | | |
|-----------------------|---|-------------------|---|-------------------|-------|
| 2.0 | x | 3 | = | 6.0 | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|-------------|-------------|------------|-------------|---------------|--------------|
| 1359 | 57.4 | 7.4 | 1370 | 2.0 | |
| 1402 | 57.8 | 7.3 | 1350 | 4.0 | |
| 1405 | 58.0 | 7.2 | 1350 | 6.0 | |
| | | | | | |
| | | | | | |

| | |
|---|--|
| Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Gallons actually evacuated: 6.0 |
| Sampling Time: 1410 | Sampling Date: 2-19-98 |
| Sample I.D.: MW-1 | Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs |
| Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other: | |
| Duplicate I.D.: | Analyzed for: TPH-G BTEX MTBE TPH-D Other: |
| D.O. (if req'd): | Pre-purge: _____ mg/L Post-purge: _____ mg/L |
| O.R.P. (if req'd): | Pre-purge: _____ mV Post-purge: _____ mV |

CHEVRON WELL MONITORING DATA SHEET

| | |
|----------------------------|-----------------------------------|
| Project #: 980219-52 | Station #: 9-1351 |
| Sampler: DOUG + STEVE | Date: 2-19-98 |
| Well I.D.: MW-2 | Well Diameter: (2) 3 4 6 8 _____ |
| Total Well Depth: 14.79 | Depth to Water: 2.96 |
| 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: | Sampling Method: |
| Bailer | Bailer |
| Disposable Bailer <input checked="" type="checkbox"/> | Disposable Bailer <input checked="" type="checkbox"/> |
| Middleburg | Extraction Port |
| Electric Submersible | Other: _____ |
| Extraction Pump | |
| Other: _____ | |

| | | | | | |
|-----------------------|---|-------------------|---|-------------------|-------|
| 1.9 | x | 3 | = | 5.7 | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|------|-----------|-----|-------|---------------|----------------|
| 1351 | 59.1 | 7.0 | 6220 | 2.0 | * Odor + Sheen |
| 1353 | 59.6 | 7.0 | 6200 | 4.0 | |
| 1356 | 59.9 | 6.9 | 6180 | 6.0 | |
| | | | | | |
| | | | | | |

Did well dewater? Yes No Gallons actually evacuated: 6.0

Sampling Time: 1400 Sampling Date: 2-19-98

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

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) (Other): 8240

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 #: 980219-SZ | Station #: 9-1851 |
| Sampler: Doug + Steve | Date: 2-19-98 |
| Well I.D.: MW-3 | Well Diameter: (2) 3 4 6 8 _____ |
| Total Well Depth: 14.70 | Depth to Water: 2.22 |
| 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 Sampling Method: Bailer

Disposable Bailer **X** Disposable Bailer **X**

Middleburg Extraction Port

Electric Submersible Other: _____

Extraction Pump

Other: _____

| | | | | | |
|-----------------------|---|-------------------|---|-------------------|-------|
| 2.0 | x | 3 | = | 6.0 | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|------|-----------|-----|-------|---------------|--------------|
| 1411 | 58.3 | 6.6 | 4540 | 2.0 | |
| 1414 | 58.7 | 6.6 | 4530 | 4.0 | |
| 1417 | 59.0 | 6.5 | 4530 | 6.0 | |
| | | | | | |
| | | | | | |

Did well dewater? Yes **(No)** Gallons actually evacuated: **6.0**

Sampling Time: **1420** Sampling Date: **2-19-98**

Sample I.D.: **MW-3** 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>930219-52</u> | Station #: <u>9-1051</u> |
| Sampler: <u>DOUG + STEVE</u> | Date: <u>2-19-98</u> |
| Well I.D.: <u>MW-4</u> | Well Diameter: <u>(2)</u> 3 4 6 8 _____ |
| Total Well Depth: <u>14.95</u> | Depth to Water: <u>3.35</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>1.9</u> | x | <u>3</u> | = | <u>5.6</u> | Gals. |
| 1 Case Volume (Gals.) | | Specified Volumes | | Calculated Volume | |

| Time | Temp (°F) | pH | Cond. | Gals. Removed | Observations |
|------|-----------|-----|-------|---------------|--------------|
| 1432 | 59.3 | 6.7 | 3740 | 2.0 | |
| 1434 | 59.7 | 6.8 | 3740 | 4.0 | |
| 1436 | 59.8 | 6.7 | 3720 | 6.0 | |
| | | | | | |
| | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 6.0

Sampling Time: 1440 Sampling Date: 2/19/98

Sample I.D.: MW-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 |