

ENVIRONMENTAL  
PROTECTION

97 FEB 32 AM 9:31



**Chevron**

February 27 1997

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

**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: Former Chevron Service Station #9-4930  
3369 Castro Valley Blvd., Castro Valley, California**

Dear Mr. Seery:

Enclosed is a copy of the First Quarter Groundwater Monitoring Report for 1997, that was prepared by Blaine Tech Services Inc., for the above noted site. The groundwater samples were analyzed for TPH-g, BTEX and MtBE constituents.

Monitoring well MW-2 showed a decline in the concentration of the benzene constituent to 1.6 ppb, with the concentration of benzene in well MW-4 remaining almost the same as in the last sampling event. Well MW-3 was below method detection limits for the BTEX and MtBE constituents. The concentration of benzene declined in well MW-1 to 9.9 ppb in this sampling event.

Depth to ground water varied from 4.20 feet to 6.51 feet below grade with a direction of flow to the southwest.

Chevron will continue to monitor the site for the next year as outlined in our letter of June 26, 1996. It appears that natural attenuation is occurring and we would expect that the future sampling events will continue to support this. 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

February 25, 1997  
Mr. Scott Seery  
Former Chevron Service Station #9-4930  
3369 Castro Valley Blvd., Castro Valley, California  
Page 2

cc. Ms. Bette Owen, Chevron Products Co.

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

Anna Counelis & Tula Gallanes  
109 Casa Vieja  
Orinda, CA 94563

**BLAINE**  
TECH SERVICES INC.



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

ENVIRONMENTAL  
PROTECTION

97 FEB 32 AM 9:31

February 26, 1997

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

**1st Quarter 1997 Monitoring at 9-4930**

First Quarter 1997 Groundwater Monitoring at  
Chevron Service Station Number 9-4930  
3369 Castro Valley Blvd.  
Castro Valley, CA

**Monitoring Performed on February 4, 1997**

Groundwater Sampling Report 970204-H-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

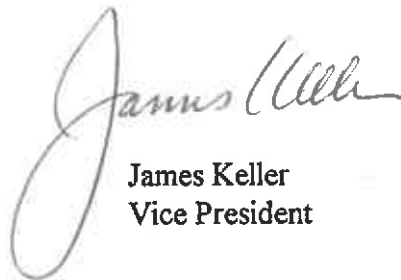
analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix**.

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,

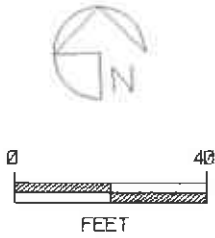
A handwritten signature in cursive script that reads "James Keller". The signature is written in dark ink and is positioned above the printed name and title.

James Keller  
Vice President

JPK/cg

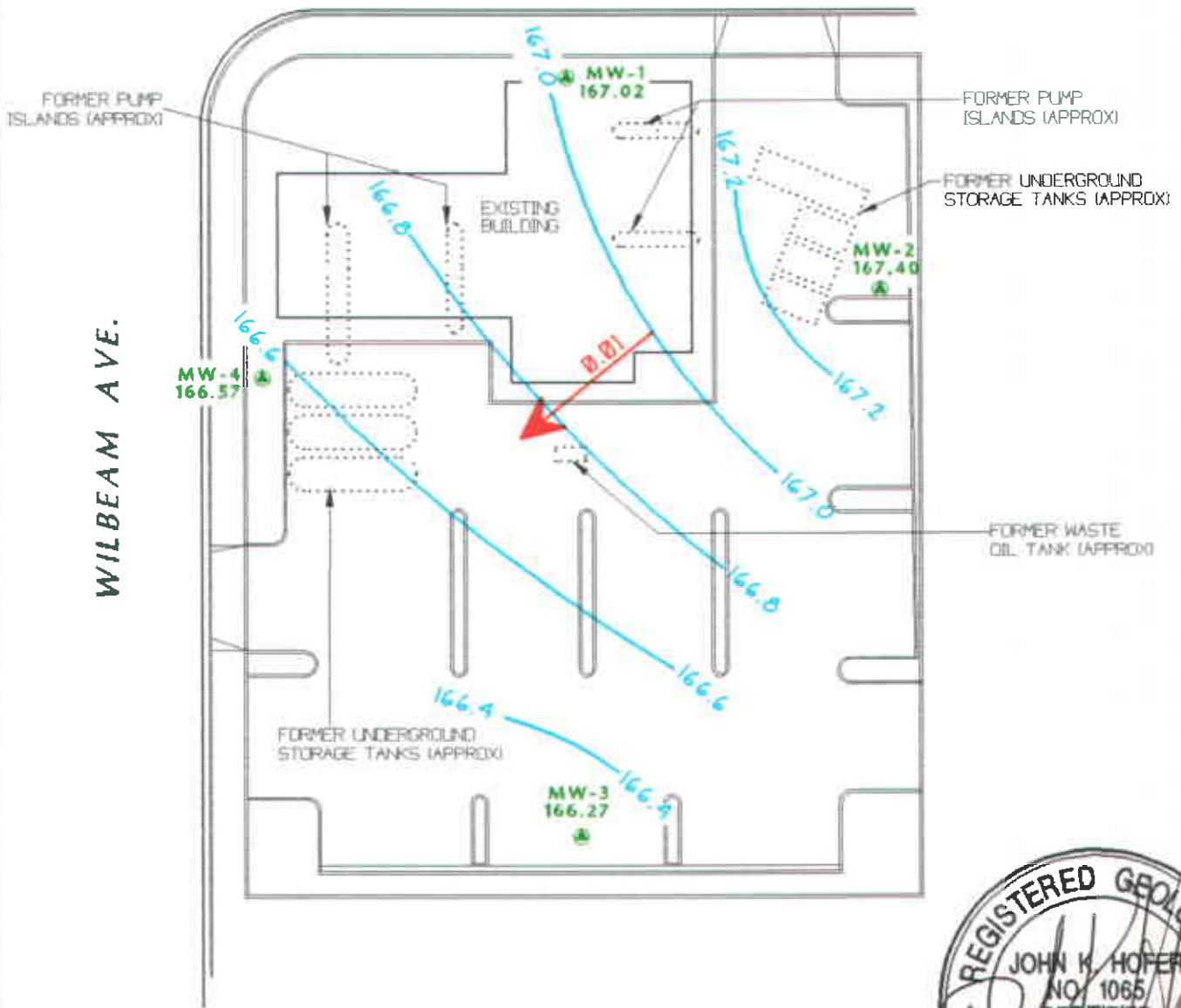
attachments: Professional Engineering Appendix  
Cumulative Table of Well Data and Analytical Results  
Analytical Appendix  
Field Data Sheets

# **Professional Engineering Appendix**



EXPLANATION	
● MW-1	MONITORING WELL LOCATION AND WELL NUMBER
167.02	GROUND-WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
— 166.6	GROUND-WATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
0.01 →	APPROXIMATE DIRECTION OF GROUND-WATER FLOW. GRADIENT INDICATED IN FEET / FEET

**CASTRO VALLEY BLVD.**



TITLE : GROUND-WATER ELEVATION CONTOUR MAP - FEBRUARY 4, 1997  
 LOCATION : CHEVRON SERVICE STATION No.: 9-4930  
 3369 CASTRO VALLEY BLVD., CASTRO VALLEY, CALIFORNIA  
 SOURCE : RON ARCHER CIVIL ENGR & CAMBRIA ENVIRONMENTAL TECHNOLOGY



**GEOCONSULTANTS, INC**  
 SAN JOSE, CALIFORNIA  
 Project No. 0758-09  
 DRAWING NO. CHEVRON-CHES2-4822497

**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	1,2-DCE	TCE	DCFM	PCE	MTBE
<b>MW-1</b>														
10/29/93	172.90	166.15	6.75	--	1000	11	17	32	110	--	--	--	--	--
02/25/94	172.90	166.80	6.10	--	250	6.0	1.0	5.0	3.0	--	--	--	--	--
04/04/94	172.90	166.14	6.76	--	--	--	--	--	--	--	--	--	--	--
04/29/94	172.90	166.35	6.55	--	--	--	--	--	--	--	--	--	--	--
06/13/94	172.90	166.12	6.78	--	670	35	3.5	43	3.9	0.8	16	14	47	--
06/30/94	172.90	166.06	6.84	--	--	--	--	--	--	--	--	--	--	--
07/28/94	172.90	166.03	6.87	--	--	--	--	--	--	--	--	--	--	--
08/31/94	172.90	166.00	6.90	--	560	43	9.5	25	5.0	1.3	19	13	65	--
11/11/94	172.90	167.00	5.90	--	460	53	4.0	50	3.4	--	--	--	--	--
02/01/95	172.90	166.88	6.02	--	240	25	0.60	4.0	<0.5	--	--	--	--	--
05/18/95	172.90	166.82	6.08	--	580	42	1.0	53	2.6	--	--	--	--	--
08/22/95	172.90	166.52	6.38	--	840	73	1.2	110	1.6	--	--	--	--	--
11/01/95	172.90	166.40	6.50	--	350	36	<0.5	30	<0.5	--	--	--	--	15
01/26/96	172.90	166.85	6.05	--	210	23	<0.5	12	<0.5	--	--	--	--	4.7
05/08/96	172.90	166.50	6.40	--	310	42	2.3	56	1.1	--	--	--	--	52
10/03/96	173.53	166.61	6.92	--	240	31	<0.5	1.7	<0.5	--	--	--	--	18
02/04/97	173.53	167.02	6.51	--	200	9.9	<0.5	3.7	<0.5	--	--	--	--	16



## 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	1,2-DCE	TCE	DCFM	PCE	MTBE
<b>MW-2</b>														
10/29/93	173.91	166.05	7.86	--	5600	140	3.2	17	330	--	--	--	--	--
02/25/94	173.91	166.96	6.95	--	820	41	<0.5	17	5.0	--	--	--	--	--
04/04/94	173.91	166.18	7.73	--	--	--	--	--	--	--	--	--	--	--
04/29/94	173.91	166.23	7.68	--	--	--	--	--	--	--	--	--	--	--
06/13/94	173.91	166.20	7.71	--	1100	160	0.8	64	2.0	<0.5	0.9	<0.5	2.0	--
06/30/94	173.91	165.87	8.04	--	--	--	--	--	--	--	--	--	--	--
07/28/94	173.91	165.99	7.92	--	--	--	--	--	--	--	--	--	--	--
08/31/94	173.91	165.98	7.93	--	190	7.1	4.1	3.1	1.2	<0.5	1.1	<0.5	4.5	--
11/11/94	173.91	167.08	6.83	--	440	120	<1.0	18	<1.0	--	--	--	--	--
02/01/95	173.91	167.77	6.14	--	240	81	<1.0	<1.0	<1.0	--	--	--	--	--
05/18/95	173.91	166.91	7.00	--	330	74	<0.5	26	1.3	--	--	--	--	--
08/22/95	173.91	166.58	7.33	--	390	84	<1.0	2.1	<1.0	--	--	--	--	--
11/01/95	173.91	166.54	7.37	--	190	46	<0.5	1.6	<0.5	--	--	--	--	<2.5
01/26/96	173.91	168.13	5.78	--	<50	13	<0.5	<0.5	<0.5	--	--	--	--	<2.5
05/08/96	173.91	166.76	7.15	--	<50	4.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
10/03/96	172.67	166.66	6.01	--	63	4.3	<0.5	<0.5	<0.5	--	--	--	--	<2.5
02/04/97	172.67	167.40	5.27	--	<50	1.6	<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	1,2-DCE	TCE	DCFM	PCE	MTBE
<b>MW-3</b>														
10/29/93	172.60	164.96	7.64	--	110	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
02/25/94	172.60	166.22	6.38	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
04/04/94	172.60	165.21	7.39	--	--	--	--	--	--	--	--	--	--	--
04/29/94	172.60	165.62	6.98	--	--	--	--	--	--	--	--	--	--	--
06/13/94	172.60	165.15	7.45	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	220	--
06/30/94	172.60	165.05	7.55	--	--	--	--	--	--	--	--	--	--	--
07/28/94	172.60	164.93	7.67	--	--	--	--	--	--	--	--	--	--	--
08/31/94	172.60	164.81	7.79	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	320	--
11/11/94	172.60	165.73	6.87	Sampled biannually	--	--	--	--	--	--	--	--	--	--
02/01/95	172.60	167.03	5.57	--	89	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
05/18/95	172.60	165.79	6.81	--	--	--	--	--	--	--	--	--	--	--
08/22/95	172.60	165.35	7.25	--	190	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
11/01/95	172.60	165.70	6.90	--	--	--	--	--	--	--	--	--	--	--
01/26/96	172.60	167.35	5.25	--	160	<2.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
05/08/96	172.60	165.55	7.05	--	--	--	--	--	--	--	--	--	--	--
10/03/96	170.47	165.29	5.18	--	150	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
02/04/97	170.47	166.27	4.20	--	88	<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	Ground	Depth	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	1,2- DCE	TCE	DCFM	PCE	MTBE
	Head Elev.	Water Elev.	To Water											
<b>MW-4</b>														
10/29/93	170.68	165.18	5.50	--	640	6.7	3.3	0.6	6.7	--	--	--	--	--
02/25/94	170.68	165.86	4.82	--	450	20	0.8	12	6.0	--	--	--	--	--
04/04/94	170.68	165.23	5.45	--	--	--	--	--	--	--	--	--	--	--
04/29/94	170.68	165.45	5.23	--	--	--	--	--	--	--	--	--	--	--
06/13/94	170.68	165.14	5.54	--	1700	130	1.4	100	11	22	59	13	180	--
06/30/94	170.68	165.13	5.55	--	--	--	--	--	--	--	--	--	--	--
07/28/94	170.68	165.06	5.62	--	--	--	--	--	--	--	--	--	--	--
08/31/94	170.68	165.00	5.68	--	800	17	3.5	9.3	4.4	25	53	22	510	--
11/11/94	170.68	165.46	5.22	--	500	26	<0.5	30	4.3	--	--	--	--	--
02/01/95	170.68	165.12	5.56	--	1600	180	<2.0	31	42	--	--	--	--	--
05/18/95	170.68	165.70	4.98	--	1300	130	<2.0	140	5.5	--	--	--	--	--
08/22/95	170.68	165.35	5.33	--	970	50	<1.2	75	<1.2	--	--	--	--	--
11/01/95	170.68	165.28	5.40	--	320	3.3	<0.5	4.1	<0.5	--	--	--	--	27
01/26/96	170.68	166.40	4.28	--	1400	65	<2.5	98	71	--	--	--	--	100
05/08/96	170.68	165.33	5.35	--	610	28	1.2	58	4.4	--	--	--	--	70
10/03/96	171.70	165.48	6.22	--	210	4.2	<0.5	<0.5	<0.5	--	--	--	--	12
02/04/97	171.70	166.57	5.13	--	60	4.4	<0.5	<0.5	<0.5	--	--	--	--	--

## 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	1,2-DCE	TCE	DCFM	PCE	MTBE
<b>TRIP BLANK</b>														
02/25/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
06/13/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
08/31/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
11/11/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
02/01/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
05/18/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
08/22/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
11/01/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/26/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
05/08/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
10/03/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
02/04/97	--	---	---	--	<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 November 1, 1994.

Earlier field data and analytical results are drawn from the September 27, 1994 Groundwater Technology, Inc. report.

New survey information drawn from the October 11, 1996 Ron Archer Civil Engineer Inc. report.

**ABBREVIATIONS:**

TPH = Total Petroleum Hydrocarbons

1,2-DCE = 1,2-Dichloroethene

TCE = Trichloroethene

DCFM = Dichlorodifluoromethane

PCE = Tetrachloroethene

MTBE = Methyl t-Butyl Ether

# **Analytical Appendix**



Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-4930/970204-H1 Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9702135-01	Sampled: 02/04/97 Received: 02/05/97 Analyzed: 02/07/97 Reported: 02/12/97
Attention: Fran Thie		

QC Batch Number: GC020697BTEX21A  
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	200
Methyl t-Butyl Ether	2.5	16
Benzene	0.50	9.9
Toluene	0.50	N.D.
Ethyl Benzene	0.50	3.7
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gas
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
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 Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-4930/970204-H1 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9702135-02	Sampled: 02/04/97 Received: 02/05/97  Analyzed: 02/06/97 Reported: 02/12/97
Attention: Fran Thie		

QC Batch Number: GC020697BTEX06A  
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.
<b>Benzene</b>	<b>0.50</b>	<b>1.6</b>
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
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 Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-4930/970204-H1 Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9702135-03	Sampled: 02/04/97 Received: 02/05/97  Analyzed: 02/06/97 Reported: 02/12/97
--	---	---

QC Batch Number: GC020697BTEX06A  
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	88
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: Discrete Peaks		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	91

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 9-4930/970204-H1 Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9702135-04	Sampled: 02/04/97 Received: 02/05/97 Analyzed: 02/06/97 Reported: 02/12/97
--	---	---

QC Batch Number: GC020697BTEX06A  
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	60
Methyl t-Butyl Ether	2.5	-
Benzene	0.50	4.4
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Discrete Peaks		....
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
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	Client Proj. ID: Chevron 9-4930/970204-H1 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9702135-05	Sampled: 02/04/97 Received: 02/05/97 Analyzed: 02/06/97 Reported: 02/12/97
Attention: Fran Thie		

QC Batch Number: GC020697BTEX06A  
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:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
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  
1680 Rogers Avenue  
San Jose, CA 95112  
Attention: Fran Thie

Client Proj. ID: Chevron 9-4930/970204-H1

Received: 02/05/97

Lab Proj. ID: 9702135

Reported: 02/12/97

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 8 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH Note: No MTBE value could be determined for sample 9702135-04 due to co-elution with early eluting compounds.

SEQUOIA ANALYTICAL

  
Peggy Penner  
Project Manager





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

Client Project ID: Chevron 9-4930 / 970204-H1  
Matrix: Liquid

Work Order #: 9702135 -01

Reported: Feb 19, 1997

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020697BTEX21A	GC020697BTEX21A	GC020697BTEX21A	GC020697BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	9701D1204	9701D1204	9701D1204	9701D1204
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/6/97	2/6/97	2/6/97	2/6/97
Analyzed Date:	2/6/97	2/6/97	2/6/97	2/6/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	32
MS % Recovery:	100	100	100	107
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	0.0	0.0	0.0	3.2
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK020697	BLK020697	BLK020697	BLK020697
Prepared Date:	2/6/97	2/6/97	2/6/97	2/6/97
Analyzed Date:	2/6/97	2/6/97	2/6/97	2/6/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.7	9.9	30
LCS % Recov.:	97	97	99	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

9702135.BLA <1>





Blaine Tech Services, Inc. Client Project ID: Chevron 9-4930 / 970204-H1  
 1680 Rogers Avenue Matrix: Liquid  
 San Jose, CA 95112  
 Attention: Fran Thie Work Order #: 9702135-02-05 Reported: Feb 19, 1997

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020697BTEX06A	GC020697BTEX06A	GC020697BTEX06A	GC020697BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	9701G3404	9701G3404	9701G3404	9701G3404
Sample Conc.:	1.2	N.D.	N.D.	5.6
Prepared Date:	2/6/97	2/6/97	2/6/97	2/6/97
Analyzed Date:	2/6/97	2/6/97	2/6/97	2/6/97
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	12	12	12	36
MS % Recovery:	108	120	120	101
Dup. Result:	12	12	12	36
MSD % Recov.:	108	120	120	101
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK020697	BLK020697	BLK020697	BLK020697
Prepared Date:	2/6/97	2/6/97	2/6/97	2/6/97
Analyzed Date:	2/6/97	2/6/97	2/6/97	2/6/97
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	13	13	13	37
LCS % Recov.:	130	130	130	123

MS/MSD	60-140	60-140	60-140	60-140
LCS	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.



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

Chevron Facility Number 9-4930  
Facility Address 3369 Castro Valley Blvd., Castro Valley, CA  
Consultant Project Number 970204-H1  
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 9034497  
Samples Collected by (Name) TROY N. HORNER  
Collection Date 2/4/97  
Signature Troy N. Horner

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											DO NOT BILL FOR TB-LB	Remarks				
								BTEX + TPH GAS (8020 + 8015) <i>M/T/B</i>	TPH Diesel (8015)	Oil and Grease (5920)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)									
MW-1	01	3	W		1115	HCL	Y	<input checked="" type="checkbox"/>																
MW-2	02	3	W		1005	HCL	Y	<input checked="" type="checkbox"/>																
MW-3	03	3	W		1035	HCL	Y	<input checked="" type="checkbox"/>																
MW-4	04	3	W		1055	HCL	Y	<input checked="" type="checkbox"/>																
TD	05	2	W			HCL	Y	<input checked="" type="checkbox"/>																

970204-135

Relinquished By (Signature) <u>Troy N. Horner</u>	Organization <u>BTS</u>	Date/Time <u>0940 2-5-97</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>SEQUOIA</u>	Date/Time <u>0940 2-5-97</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>SEQUOIA</u>	Date/Time <u>1045 2-5-97</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>SEQUOIA</u>	Date/Time <u>1045 2-5-97</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>SEQUOIA</u>	Date/Time <u>1045 2-5-97</u>	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization <u>SEQUOIA</u>	Date/Time <u>2/5/97 1045</u>

Turn Around Time (Circle Choice)

24 Hrs.  
48 Hrs.  
6 Days  
**10 Days**  
As Contracted

COC-3.DWG (03 01) MCH

# **Field Data Sheets**





# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>970204-H1</u>	Station #: <u>9-4930</u>
Sampler: <u>TNH</u>	Date: <u>2/4/97</u>
Well I.D.: <u>MW-1</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>18.31</u>	Depth to Water: <u>6.51</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 <sup>2</sup> * 0.163

Purge Method:  Bailer                      Sampling Method:  Bailer

Disposable Bailer

Middleburg     Disposable Bailer

Electric Submersible     Extraction Port

Extraction Pump    Other: \_\_\_\_\_

Other: \_\_\_\_\_

<u>1.9</u>	x	<u>3</u>	=	<u>5.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1002</u>	<u>65.0</u>	<u>7.0</u>	<u>770</u>	<u>2</u>	
<u>1006</u>	<u>65.2</u>	<u>6.9</u>	<u>830</u>	<u>4</u>	
<u>1100</u>	<u>65.4</u>	<u>7.0</u>	<u>800</u>	<u>6</u>	

Did well dewater?    Yes    (No)    Gallons actually evacuated: 6

Sampling Time: 1115                      Sampling Date: 2/4/97

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 #: <u>970204-H1</u>	Station #: <u>9-4930</u>
Sampler: <u>TNH</u>	Date: <u>2/4/97</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>17.34</u>	Depth to Water: <u>5.27</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 <sup>2</sup> * 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: _____	

<u>1.9</u>	x	<u>3</u>	=	<u>5.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>953</u>	<u>62.8</u>	<u>7.0</u>	<u>700</u>	<u>2</u>	
<u>957</u>	<u>63.2</u>	<u>7.0</u>	<u>700</u>	<u>4</u>	
<u>1003</u>	<u>63.6</u>	<u>6.9</u>	<u>750</u>	<u>6</u>	

Did well dewater? Yes  No  Gallons actually evacuated: 6

Sampling Time: 1005 Sampling Date: 2/4/97

Sample I.D.: MW-2 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>970204-HH</u>	Station #: <u>9-4930</u>
Sampler: <u>TNH</u>	Date: <u>2/4/97</u>
Well I.D.: <u>MW-3</u>	Well Diameter: <u>(2)</u> 3 4 6 8 <u>   </u>
Total Well Depth: <u>17.47</u>	Depth to Water: <u>4.20</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 <sup>2</sup> * 0.163

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

<u>2.1</u>	x	<u>3</u>	=	<u>6.3</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1021	61.0	7.6	880	2	
1025	60.8	7.5	880	4.5	
1030	60.6	7.4	840	6.5	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>6.5</u>
Sampling Time: <u>1035</u>	Sampling Date: <u>2/4/97</u>
Sample I.D.: <u>MW-3</u>	Laboratory: <u>(Sequoia)</u> GTEL N. Creek Assoc. Labs
Analyzed for: <u>(TPH-G)</u> <u>(BTEX)</u> <u>(MTBE)</u> <u>(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>970204-H1</u>	Station #: <u>9-4930</u>
Sampler: <u>TNH</u>	Date: <u>2/4/97</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>(2)</u> 3 4 6 8 <u>    </u>
Total Well Depth: <u>17.93</u>	Depth to Water: <u>5.13</u>
Depth to Free Product: <u>    </u>	Thickness of Free Product (feet): <u>    </u>
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 <sup>2</sup> * 0.163

Purge Method:                      Bailer                      Sampling Method:                      Bailer

Disposable Bailer

Middleburg

Electric Submersible

Extraction Pump

Other:     

Disposable Bailer

Extraction Port

Other:     

<u>2.0</u>	x	<u>3</u>	=	<u>6.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1042</u>	<u>63.8</u>	<u>7.2</u>	<u>370</u>	<u>2</u>	
<u>1047</u>	<u>63.2</u>	<u>7.1</u>	<u>380</u>	<u>4</u>	
<u>1052</u>	<u>62.9</u>	<u>7.2</u>	<u>340</u>	<u>6</u>	

Did well dewater?    Yes    (No)    Gallons actually evacuated: 6

Sampling Time: 1055                      Sampling Date: 2/4/97

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