

**BLAINE**  
TECH SERVICES INC.



1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112  
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ENVIRONMENTAL  
PROTECTION  
97 SEP 10 AM 11:19

August 28, 1997

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

### 3rd Quarter 1997 Monitoring at 9-4930

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

Monitoring Performed on July 22, 1997

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### Groundwater Sampling Report 970722-L-2

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

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

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

also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix**.

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

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

Please call if you have any questions.

Yours truly,

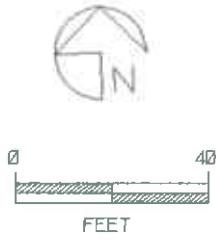
A handwritten signature in cursive script, appearing to read "Francis Thie".

Francis Thie  
Vice President

FPT/ew

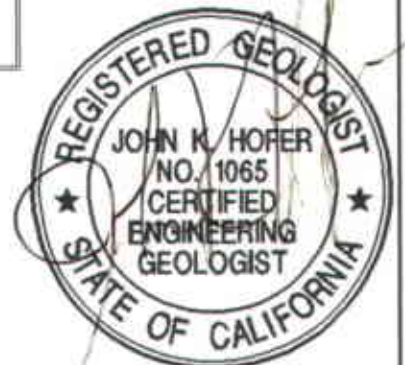
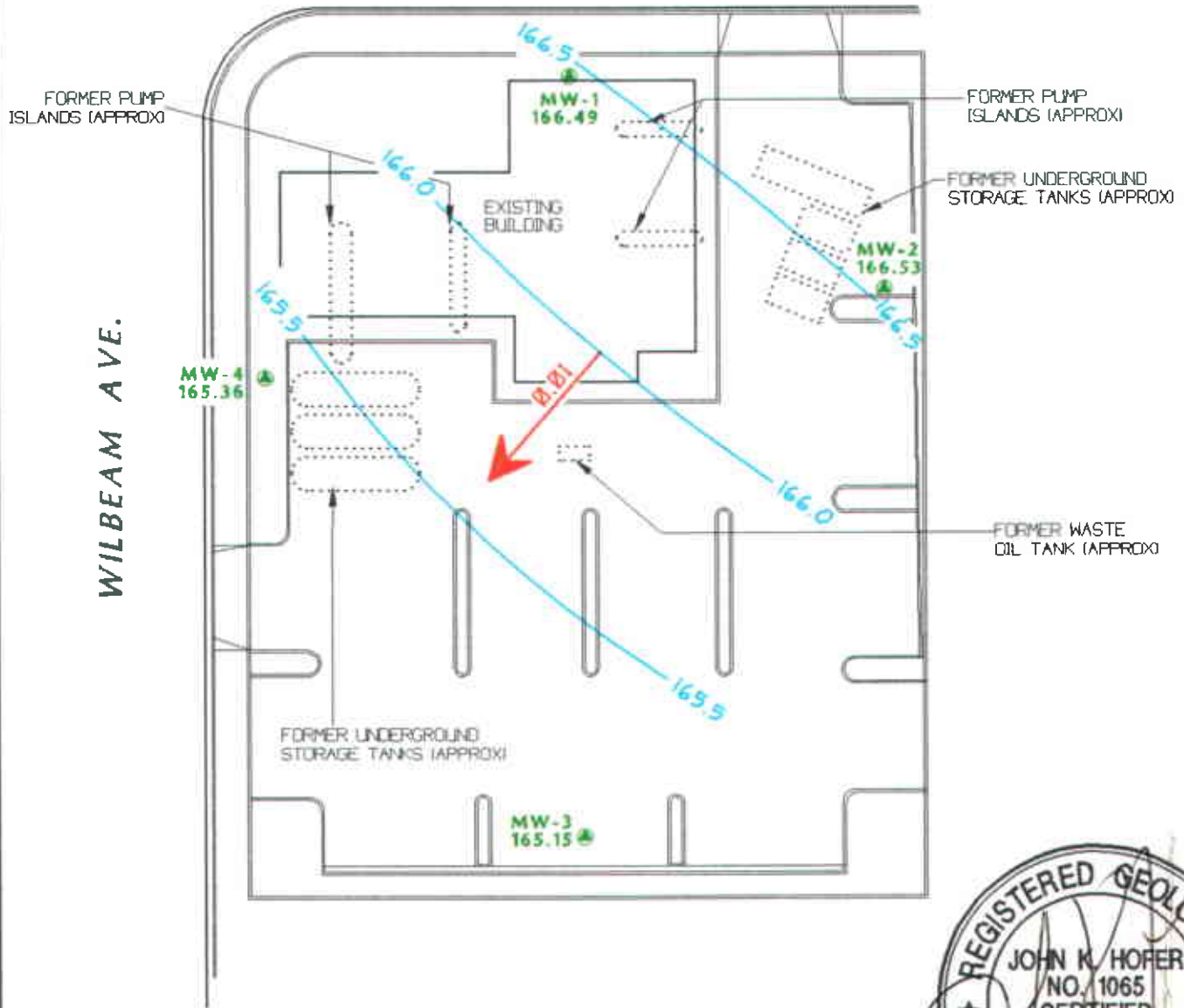
attachments: Professional Engineering Appendix  
Cumulative Table of Well Data and Analytical Results  
Analytical Appendix  
Field Data Sheets

# **Professional Engineering Appendix**



EXPLANATION	
● MW-1	MONITORING WELL LOCATION AND WELL NUMBER
166.49	GROUND-WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
— 166.5	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 - JULY 22, 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. G756-09  
 DRAWING NO. CHEVRON-D-94930-4872257

# **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
04/30/97	173.53	166.64	6.89	--	260	11	<0.5	17	<0.5	--	--	--	--	13
07/22/97	173.53	166.49	7.04	--	170	50	<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-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
04/30/97	172.67	166.74	5.93	--	<50	5.4	<0.5	0.80	<0.5	--	--	--	--	<2.5
07/22/97	172.67	166.53	6.14	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	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
04/30/97	170.47	165.37	5.10	--	--	--	--	--	--	--	--	--	--	<2.5
07/22/97	170.47	165.15	5.32	--	180	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5



## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	1,2-DCE	TCE	DCFM	PCE	MTBE
<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	--	--	--	--	--
04/30/97	171.70	165.80	6.10	--	870	49	<2.0	100	<2.0	--	--	--	--	18
07/22/97	171.70	165.36	6.34	--	420	16	<0.5	23	<0.5	--	--	--	--	9.4

## 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
04/30/97	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
07/22/97	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5

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 9-4930/970722-L2 Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9707C14-01	Sampled: 07/22/97 Received: 07/23/97 Analyzed: 07/25/97 Reported: 08/04/97
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QC Batch Number: GC072597BTEX06A  
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	170
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	5.0
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	110

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 9-4930/970722-L2 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9707C14-02	Sampled: 07/22/97 Received: 07/23/97 Analyzed: 07/29/97 Reported: 08/04/97
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QC Batch Number: GC072997BTEX06A  
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	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	92

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 9-4930/970722-L2 Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9707C14-03	Sampled: 07/22/97 Received: 07/23/97 Analyzed: 07/25/97 Reported: 08/04/97
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QC Batch Number: GC072597BTEX06A  
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	180
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	82

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 9-4930/970722-L2 Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9707C14-04	Sampled: 07/22/97 Received: 07/23/97 Analyzed: 07/25/97 Reported: 08/04/97
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QC Batch Number: GC072597BTEX06A  
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	420
Methyl t-Butyl Ether	2.5	9.4
Benzene	0.50	16
Toluene	0.50	N.D.
Ethyl Benzene	0.50	23
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gas
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	82

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 9-4930/970722-L2 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9707C14-05	Sampled: 07/22/97 Received: 07/23/97 Analyzed: 07/25/97 Reported: 08/04/97
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QC Batch Number: GC072597BTEX06A  
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	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	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, Inc. Client Project ID: Chevron 9-4930 / 970722-L2  
1680 Rogers Avenue Matrix: Liquid  
San Jose, CA 95112  
Attention: Fran Thie Work Order #: 9707C14 -01, 03-05 Reported: Aug 6, 1997

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC072597BTEX06A	GC072597BTEX06A	GC072597BTEX06A	GC072597BTEX06A	GC072597BTEX06A
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:	A. Porter	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9707B0006	9707B0006	9707B0006	9707B0006	9707B0006
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/25/97	7/25/97	7/25/97	7/25/97	7/25/97
Analyzed Date:	7/25/97	7/25/97	7/25/97	7/25/97	7/25/97
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:	9.8	9.2	9.5	28	70
MS % Recovery:	98	92	95	93	117
Dup. Result:	9.9	9.1	9.3	27	69
MSD % Recov.:	99	91	93	90	115
RPD:	1.0	1.1	2.1	3.6	1.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK072597	BLK072597	BLK072597	BLK072597	BLK072597
Prepared Date:	7/25/97	7/25/97	7/25/97	7/25/97	7/25/97
Analyzed Date:	7/25/97	7/25/97	7/25/97	7/25/97	7/25/97
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:	9.4	9.1	9.3	27	67
LCS % Recov.:	94	91	93	90	112

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 9707C14.BLA <1>





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

Client Project ID: Chevron 9-4930 / 970722-L2  
Matrix: Liquid

Work Order #: 9707C14-02

Reported: Aug 6, 1997

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC072997BTEX06A	GC072997BTEX06A	GC072997BTEX06A	GC072997BTEX06A	GC072997BTEX06A
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:	A. Porter	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9707A7709	9707A7709	9707A7709	9707A7709	9707A7709
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/29/97	7/29/97	7/29/97	7/29/97	7/29/97
Analyzed Date:	7/29/97	7/29/97	7/29/97	7/29/97	7/29/97
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:	9.0	8.7	8.8	25	61
MS % Recovery:	90	87	88	83	102
Dup. Result:	9.0	8.6	8.7	25	61
MSD % Recov.:	90	86	87	83	102
RPD:	0.0	1.2	1.1	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK072997	BLK072997	BLK072997	BLK072997	BLK072997
Prepared Date:	7/29/97	7/29/97	7/29/97	7/29/97	7/29/97
Analyzed Date:	7/29/97	7/29/97	7/29/97	7/29/97	7/29/97
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:	9.2	8.8	9.0	26	62
LCS % Recov.:	92	88	90	87	103

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 Fenner*  
Peggy Fenner  
Project Manager

**Please Note:**

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

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

9707C14.BLA <2>





Sequoia  
Analytical

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(916) 921-9600

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FAX (916) 921-0100

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

Client Proj. ID: Chevron 9-4930/970722-L2

Received: 07/23/97

Lab Proj. ID: 9707C14

Reported: 08/04/97

### 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.).

SEQUOIA ANALYTICAL

Peggy Penner  
Project Manager



Fax copy of Lab Report and COC to Chevron Contact:  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 9-4930  
Facility Address 3369 Castro Valley Blvd., Castro Valley, CA  
Consultant Project Number 970722-L2  
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) LAD GLOTTIST  
Collection Date 7-22-97  
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Lead (Yes or No)	BTEX + TPH GAS (8020 + 8015) <u>MIBK</u>	Analytes To Be Performed <u>9707C14</u>										DO NOT BILL FOR TB-LB	Remarks	
									TPH Diesel (8015)	Oil and Grease (8020)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)						
MW-1	1	3	W		1335	HCL	YES	X													
MW-2	2	3			1250			X													
MW-3	3	3			1314			X													
MW-4	4	3			1355			X													
TB	5	2						X													

7/23/97

Shipped By (Signature) <u>[Signature]</u>	Organization <u>BIS</u>	Date/Time <u>7/23/97</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Sequoia</u>	Date/Time <u>7/23/97</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days <u>10 Days</u> As Contracted
By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>7/23/97</u>	Received By (Signature)	Organization	Date/Time	
Signature	Organization	Date/Time	Received For Laboratory By (Signature) <u>Mara Garcia</u>		Date/Time <u>7/23/97</u>	

# **Field Data Sheets**



## CHEVRON WELL MONITORING DATA SHEET

Project #: <b>970722-L2</b>	Station #: <b>9-4930</b>
Sampler: <b>LAD</b>	Date: <b>7-22-97</b>
Well I.D.: <b>MW-1</b>	Well Diameter: <b>(2)</b> 3 4 6 8 _____
Total Well Depth: <b>18.30</b>	Depth to Water: <b>7.04</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVC</b> 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 Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other: _____
--	---

<u>1.8</u>	$\times$	<u>3</u>	$=$	<u>5.4</u> Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1323	71.2	7.3	840.	2.	
1326	69.6	7.2	820.	4.	
1330	69.0	7.1	810.	6.	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <b>6.</b>	
Sampling Time: <b>1335</b>	Sampling Date: <b>7-22-97</b>	
Sample I.D.: <b>MW-1</b>	Laboratory: <b>sequoia</b> GTEL N. Creek Assoc. Labs	
Analyzed for: <del>TPH-G</del> <del>BTEX</del> <del>MTBE</del> 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>970722-L2</u>	Station #: <u>9-4930</u>
Sampler: <u>LAD</u>	Date: <u>7-22-97</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8 <u>    </u>
Total Well Depth: <u>17.04</u>	Depth to Water: <u>6.14</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>FVC</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 Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method:                      Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other: _____
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<u>1.7</u>	x	<u>3</u>	=	<u>5.1</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1240</u>	<u>73.0</u>	<u>7.5</u>	<u>880.</u>	<u>2.</u>	
<u>1243</u>	<u>70.0</u>	<u>7.4</u>	<u>900.</u>	<u>4.</u>	
<u>1246</u>	<u>70.2</u>	<u>7.5</u>	<u>940.</u>	<u>6.</u>	

Did well dewater?    Yes <input checked="" type="checkbox"/> <u>No</u> <input type="checkbox"/>	Gallons actually evacuated: <u>6.</u>	
Sampling Time: <u>1250</u>	Sampling Date: <u>7-22-97</u>	
Sample I.D.: <u>MW-2</u>	Laboratory: <u>Sequoia</u> GTEL N. Creek Assoc. Labs	
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> TPH-D    Other:		
Duplicate I.D.:                      Analyzed for:    TPH-G    BTEX    MTBE    TPH-D    Other:		
D.O. (if req'd):	Pre-purge: <u>    </u> mg/L	Post-purge: <u>    </u> mg/L
O.R.P. (if req'd):	Pre-purge: <u>    </u> mV	Post-purge: <u>    </u> mV



## CHEVRON WELL MONITORING DATA SHEET

Project #: 970722-L2	Station #: 9-4930
Sampler: LAD	Date: 7-22-97
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8
Total Well Depth: 17.44	Depth to Water: 5.32
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 <sup>2</sup> * 0.163

Purge Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other: _____
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1.9	x	3	=	5.7	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1303	64.6	7.3	980.	2.	
1306	65.0	7.3	960	4.	
1310	64.8	7.3	960.	6.	

Did well dewater?	Yes	(No)	Gallons actually evacuated: 6.
Sampling Time:	1314	Sampling Date:	7-22-97
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 #: <b>970722-L2</b>	Station #: <b>9-4930</b>
Sampler: <b>LAD</b>	Date: <b>7-22-97</b>
Well I.D.: <b>MW-4</b>	Well Diameter: <b>(2)</b> 3 <del>4</del> 6 8
Total Well Depth: <b>17.90</b>	Depth to Water: <b>6.34</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>(PVC)</b> 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 Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other: _____
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<u>1.8</u>	x	<u>3</u>	=	<u>5.4</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1343	72.0	7.2	870	2.	
1346	71.0	7.3	900.	4.	
1349	69.8	7.2	900.	6.	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <b>6</b>
Sampling Time: <b>1355</b>	Sampling Date: <b>7-22-97</b>
Sample I.D.: <b>MW-4</b>	Laboratory: <b>Sequoyia</b> GTEL N. Creek Assoc. Labs
Analyzed for: <b>(TPH-G) (BTEX) (MTBE)</b> TPH-D Other:	
Duplicate I.D.:	Analyzed for: TPH-G BTEX MTBE TPH-D Other:
D.O. (if req'd):	Pre-purge: <span style="margin-left: 100px;">mg/L</span> Post-purge: <span style="margin-left: 100px;">mg/L</span>
O.R.P. (if req'd):	Pre-purge: <span style="margin-left: 100px;">mV</span> Post-purge: <span style="margin-left: 100px;">mV</span>