

**BLAINE**  
TECH SERVICES, INC.



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

June 23, 1997

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

### 2nd Quarter 1997 Monitoring at 9-1723

Second Quarter 1997 Groundwater Monitoring at  
Chevron Service Station Number 9-1723  
9757 San Leandro Street  
Oakland, CA

Monitoring Performed on May 2 & 29, 1997

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### Groundwater Sampling Report 970502-Z-2

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

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

Francis Thie  
Vice President

FPT/aa

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

June 28, 1997  
Ms. Eva Chu  
Former Service Station # 9-1723  
Page 2

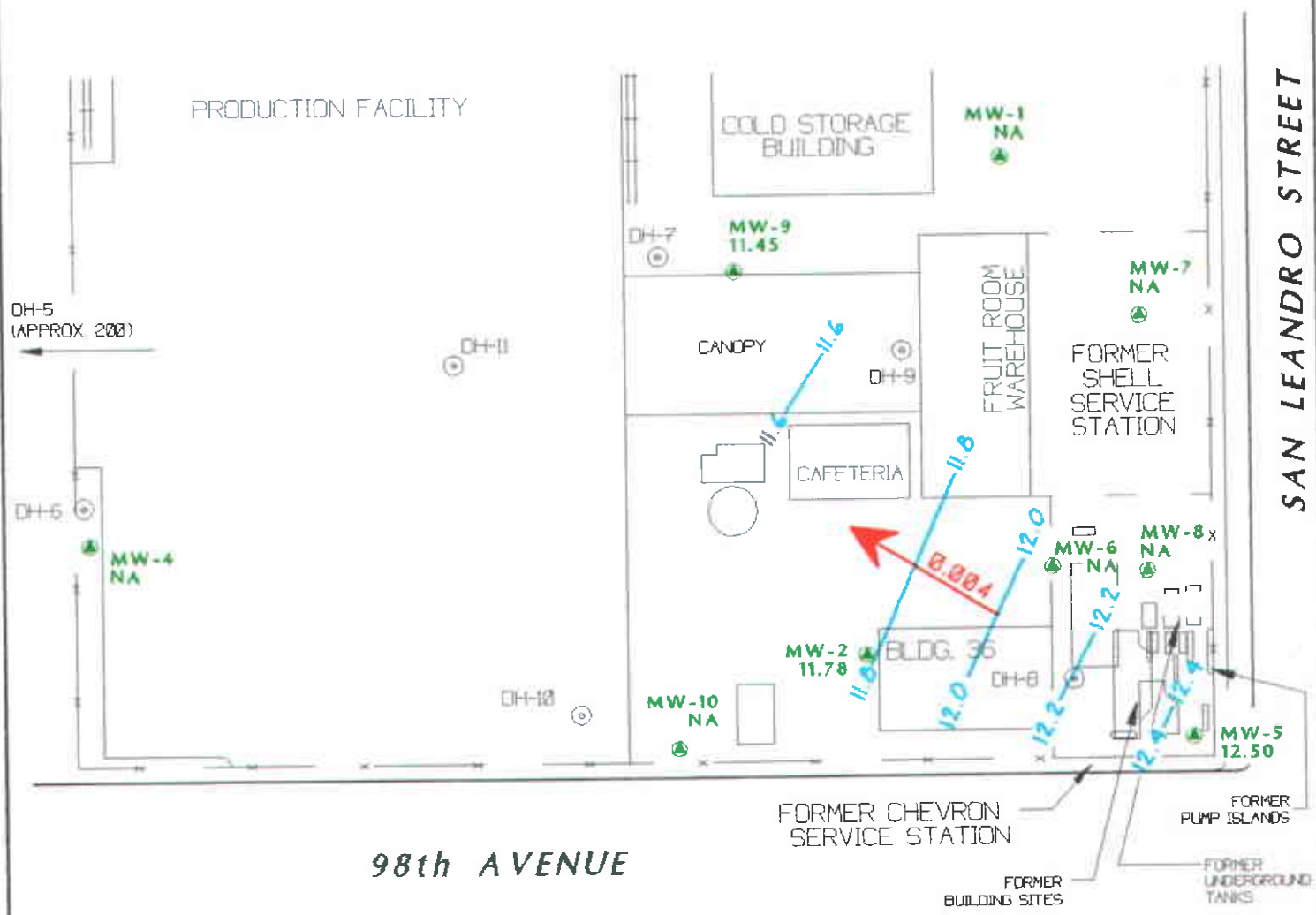
cc. Ms. Bette Owen, Chevron

Mr. Kevin Graves  
RWQWB- S.F. Bay Region  
2101 Webster Street, Suite 500  
Oakland, CA 94612

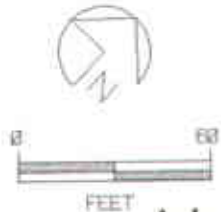
Mr. Ron Hothem  
Pacific American Management Co.  
369 Broadway  
San Francisco, CA 94133

Mr. Curtis Peck, Chevron  
CRTC/HES/Richmond, CA/Rm 208

# **Professional Engineering Appendix**



EXPLANATION	
	MW-2 MONITORING WELL LOCATION AND WELL NUMBER
11.78	GROUND-WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
NA	DATA NOT AVAILABLE
	GROUND-WATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
	APPROXIMATE DIRECTION OF GROUND-WATER FLOW, GRADIENT INDICATED IN FEET / FEET



TITLE : GROUND-WATER ELEVATION CONTOUR MAP - MAY 2, 1997

LOCATION : CHEVRON SERVICE STATION No.: 9-1723 9757 SAN LEANDRO STREET, OAKLAND, CALIFORNIA

SOURCE : CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC.



GEOCONSULTANTS, INC  
SAN JOSE, CALIFORNIA  
Project No. G758-09  
DRAWN BY: CHEVRON-DHE723/HES257

# **Table of Field 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	Lead	MTBE
<b>MW-1</b>											
11/02/93	20.92	10.68	10.24	--	--	--	--	--	--	--	--
02/10/94	20.92	--	--	--	--	--	--	--	--	--	--
05/12/94	20.92	--	--	--	--	--	--	--	--	--	--
08/26/94	20.92	--	--	--	--	--	--	--	--	--	--

No longer monitored or sampled.

### MW-2

11/02/93	21.31	10.83	10.48	--	--	--	--	--	--	--	--
02/10/94	21.31	--	--	--	--	--	--	--	--	--	--
05/12/94	21.31	11.94	9.37	--	390	6.8	2.0	6.3	14	--	--
08/26/94	21.31	--	--	Sampled Biannually	--	--	--	--	--	--	--
02/01/95	21.31	13.76	7.55	--	78	10	1.2	<0.5	0.51	--	--
08/02/95	21.31	11.53	9.78	--	100	3.5	<0.5	2.6	4.1	--	--
01/31/96	21.31	14.38	6.93	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	21.31	11.49	9.82	--	73	<0.5	<0.5	<0.5	<0.5	--	610
12/17/96	21.31	12.75	8.56	--	--	--	--	--	--	--	--
02/20/97	21.31	12.30	9.01	--	280	6.7	0.56	1.5	2.9	--	11
05/02/97	21.31	11.78	9.53	--	--	--	--	--	--	--	--

### MW-4

11/02/93	--	--	10.23	--	--	--	--	--	--	--	--
02/10/94	--	--	--	--	--	--	--	--	--	--	--
05/12/94	--	--	--	--	--	--	--	--	--	--	--
08/26/94	--	--	--	--	--	--	--	--	--	--	--

No longer monitored or sampled.

## 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	Lead	MTBE	
<b>MW-5</b>												
11/02/93	21.84	11.15	10.69	--	790	43	3.4	22	12	<400	--	
02/10/94	21.84	13.10	8.74	--	1400	52	3.0	50	40	--	--	
05/12/94	21.84	12.40	9.44	--	1800	87	6.2	77	66	--	--	
08/26/94	21.84	--	--	--	--	--	--	--	--	--	--	
11/11/94	21.84	13.50	8.34	--	380	18	<1.0	18	11	--	--	
02/01/95	21.84	14.32	7.52	--	570	36	0.59	21	11	--	--	
05/18/95	21.84	12.87	8.97	--	590	29	1.0	16	9.8	--	--	
08/02/95	21.84	11.98	9.86	--	210	9.2	<0.5	4.0	1.2	--	--	
11/01/95	21.84	11.58	10.26	--	210	5.6	<0.5	1.9	<0.5	--	<2.5	
01/31/96	21.84	14.72	7.12	--	1200	50	<5.0	19	29	--	<25	
05/16/96	21.84	14.22	7.62	--	440	14	<0.5	17	8.6	--	11	
08/01/96	21.84	11.86	9.98	--	58	1.4	<0.5	<0.5	<0.5	--	2.5	
12/17/96	21.84	13.13	8.71	--	300	9.7	<0.5	11	6.3	--	6.9	
02/20/97	21.84	12.81	9.03	--	350	6.7	<0.5	4.3	1.9	--	5.0	
05/02/97	21.84	12.50	9.34	--	270	4.8	<0.5	3.5	1.3	--	7.3	
<b>MW-6</b>												
11/02/93	21.71	10.93	10.78	--	300	19	1.8	2.5	5.0	<400	--	
02/10/94	21.71	12.86	8.85	--	200	10	0.9	2.0	4.0	--	--	
05/12/94	21.71	12.08	9.63	--	210	10	1.1	1.2	3.1	--	--	
08/26/94	21.71	10.82	10.89	--	310	16	1.4	2.3	7.1	--	--	
11/11/94	21.71	13.25	8.46	--	<50	1.3	<0.5	<0.5	1.0	--	--	
02/01/95	21.71	14.02	7.69	--	<50	1.9	<0.5	<0.5	0.51	--	--	
05/18/95	21.71	12.43	9.28	--	<50	8.2	<0.5	<0.5	<0.5	--	--	
08/02/95	21.71	11.64	10.07	--	<50	2.3	<0.5	<0.5	<0.5	--	--	
11/01/95	21.71	11.31	10.40	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5	
01/31/96	21.71	13.63	8.08	--	<50	0.98	<0.5	<0.5	<0.5	--	<2.5	
05/16/96	21.71	13.91	7.80	--	<50	1.6	<0.5	<0.5	<0.5	--	<2.5	
08/01/96	21.71	11.56	10.15	--	<50	0.82	<0.5	<0.5	<0.5	--	<2.5	
12/17/96	21.71	13.26	8.45	--	63	2.6	<0.5	<0.5	<0.5	--	<2.5	
02/20/97	21.71	--	--	Inaccessible	--	--	--	--	--	--	--	
05/02/97	21.71	--	--	Inaccessible	--	--	--	--	--	--	--	
05/29/97	21.71	11.72	9.99	--	120	1.8	<0.5	<0.5	<0.5	--	2.6	



## 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	Lead	MTBE
<b>MW-7</b>											
11/02/93	20.95	10.88	10.07	--	--	--	--	--	--	--	--
02/10/94	20.95	--	--	--	--	--	--	--	--	--	--
05/12/94	20.95	--	--	--	--	--	--	--	--	--	--
08/26/94	20.95	--	--	--	--	--	--	--	--	--	--
No longer monitored or sampled											
<b>MW-8</b>											
11/02/93	21.84	11.02	10.82	--	15,000	2000	440	420	1400	<400	--
02/10/94	21.84	12.97	8.87	--	6500	1200	380	250	7900	--	--
05/12/94	21.84	12.19	9.65	--	30,000	1400	2900	800	3800	--	--
08/26/94	21.84	10.90	10.94	--	17,000	720	200	330	930	--	--
11/11/94	21.84	13.38	8.46	--	6800	250	170	190	650	--	--
02/01/95	21.84	14.36	7.48	--	330	68	2.8	2.7	4.3	--	--
05/18/95	21.84	12.54	9.30	--	540	120	12	11	23	--	--
08/02/95	21.84	11.73	10.11	--	1100	150	9.7	20	40	--	--
11/01/95	21.84	11.36	10.48	--	1700	120	15	16	39	--	<5.0
01/31/96	21.84	14.64	7.20	--	57	5.3	<0.5	<0.5	<0.5	--	<2.5
05/16/96	21.84	13.99	7.85	--	2100	260	43	56	130	--	64
08/01/96	21.84	11.59	10.25	--	1100	45	0.92	8.9	25	--	7.4
12/17/96	21.84	12.95	8.89	--	2000	280	30	51	88	--	22
02/20/97	21.84	--	--	Inaccessible	--	--	--	--	--	--	--
05/02/97	21.84	--	--	Inaccessible	--	--	--	--	--	--	--
05/29/97	21.84	11.79	10.05	--	3400	280	31	53	120	--	<50

## 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	Lead	MTBE
<b>MW-9</b>											
11/02/93	20.55	10.53	10.02	--	--	--	--	--	--	--	--
02/10/94	20.55	--	--	--	--	--	--	--	--	--	--
05/12/94	20.55	11.60	8.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	20.55	--	--	Sampled Biannually	--	--	--	--	--	--	--
02/01/95	20.55	13.35	7.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/02/95	20.55	11.22	9.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/96	20.55	14.10	6.45	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	20.55	11.20	9.35	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
12/17/96	20.55	12.29	8.26	--	--	--	--	--	--	--	--
02/20/97	20.55	12.09	8.46	--	55*	1.1	<0.5	<0.5	<0.5	--	<2.5
05/02/97	20.55	11.45	9.10	--	--	--	--	--	--	--	--
<b>MW-10</b>											
11/02/93	21.25	10.93	10.32	--	--	--	--	--	--	--	--
02/10/94	21.25	--	--	--	--	--	--	--	--	--	--
05/12/94	21.25	--	--	--	--	--	--	--	--	--	--
08/26/94	21.25	--	--	--	--	--	--	--	--	--	--

No longer monitored or sampled

\* 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	Lead	MTBE
<b>TRIP BLANK</b>											
02/10/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	--	--	--	--	<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	--	--
08/02/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/01/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
05/16/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	--	--	--	--	<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
02/20/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
05/02/97	--	--	--	--	<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 14, 1994 Groundwater Technology, Inc. report.

**ABBREVIATIONS:**

TPH = Total Petroleum Hydrocarbons  
 MTBE = Methyl t-Butyl Ether

# **Analytical Appendix**



Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-1723/970502-Z1 Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9705165-01	Sampled: 05/02/97 Received: 05/05/97 Analyzed: 05/07/97 Reported: 05/08/97
--	---	---

QC Batch Number: GC050797BTEX07A  
Instrument ID: GCHP07

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	270
Methyl t-Butyl Ether	2.5	7.3
Benzene	0.50	4.8
Toluene	0.50	N.D.
Ethyl Benzene	0.50	3.5
Xylenes (Total)	0.50	1.3
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                      130	121

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 9-1723/970502-Z1 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9705165-02	Sampled: 05/02/97 Received: 05/05/97 Analyzed: 05/07/97 Reported: 05/08/97
--	---	---

QC Batch Number: GC050797BTEX07A  
Instrument ID: GCHP07

**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	89

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

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Peggy Penner  
Project Manager





Blaine Tech Services, Inc. Client Project ID: Chevron 9-1723/ 970502-Z1  
 985 Timothy Drive Matrix: Liquid  
 San Jose, CA 95133  
 Attention: Fran Thie Work Order #: 9704165 01 -02 Reported: May 9, 1997

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC050797BTEX07A	GC050797BTEX07A	GC050797BTEX07A	GC050797BTEX07A	GC050797BTEX07A
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 #:	970511801	970511801	970511801	970511801	970511801
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/7/97	5/7/97	5/7/97	5/7/97	5/7/97
Analyzed Date:	5/7/97	5/7/97	5/7/97	5/7/97	5/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	10	10	32	68
MS % Recovery:	100	100	100	107	113
Dup. Result:	9.4	9.4	9.4	28	61
MSD % Recov.:	94	94	94	93	102
RPD:	6.2	6.2	6.2	13	11
RPD Limit:	0-50	0-50	0-50	0-50	0-50

LCS #:	BLK050797BSA	BLK050797BSA	LK050797BSA	BLK050797BSA	BLK050797BSA
Prepared Date:	5/7/97	5/7/97	5/7/97	5/7/97	5/7/97
Analyzed Date:	5/7/97	5/7/97	5/7/97	5/7/97	5/7/97
Instrument I.D.#:	GCHP07	GCHP07	GCHP07	GCHP07	GCHP07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	31	66
LCS % Recov.:	100	100	100	103	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

9704165.BLA <1>



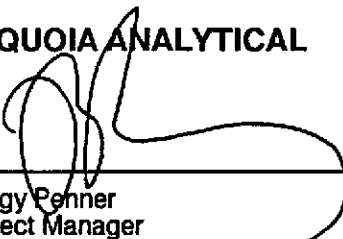


Blaine Tech Services	Client Proj. ID: Chevron 9-1723/970502-Z1	Received: 05/05/97
1680 Rogers Avenue	Lab Proj. ID: 9705165	Reported: 05/08/97
San Jose, CA 95112		
Attention: Fran Thie		

**LABORATORY NARRATIVE**

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 4 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

**SEQUOIA ANALYTICAL**

  
Peggy Renner  
Project Manager









Blaine Tech Services	Client Proj. ID: Chevron 9-1723/970529-Z3	Sampled: 05/29/97
1680 Rogers Avenue	Sample Descript: MW-6	Received: 05/30/97
San Jose, CA 95112	Matrix: LIQUID	
Attention: Fran Thie	Analysis Method: 8015Mod/8020	Analyzed: 06/04/97
	Lab Number: 9705F59-01	Reported: 06/05/97

QC Batch Number: GC060497BTEX06A  
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	120
Methyl t-Butyl Ether	2.5	2.6
Benzene	0.50	1.8
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gas
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70                      130	89

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Peggy Penner  
Project Manager





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-1723/970529-Z3 Sample Descript: MW-8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9705F59-02	Sampled: 05/29/97 Received: 05/30/97  Analyzed: 06/04/97 Reported: 06/05/97
Attention: Fran Thie		

QC Batch Number: GC060497BTEX06A  
Instrument ID: GCHP06

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	3400
Methyl t-Butyl Ether	50	N.D.
Benzene	10	280
Toluene	10	31
Ethyl Benzene	10	53
Xylenes (Total)	10	120
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70      130	93

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





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

Client Project ID: Chevron 9-1723 / 970529-Z3  
Matrix: Liquid

Work Order #: 9705F59 -01-02

Reported: Jun 16, 1997

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC060497BTEX06B	GC060497BTEX06B	GC060497BTEX06B	GC060497BTEX06B	GC060497BTEX06B
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. Heider	J. Heider	J. Heider	J. Heider	J. Heider
MS/MSD #:	9705F5001	9705F5001	9705F5001	9705F5001	9705F5001
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/4/97	6/4/97	6/4/97	6/4/97	6/4/97
Analyzed Date:	6/4/97	6/4/97	6/4/97	6/4/97	6/4/97
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:	9.5	8.5	8.5	25	63
MS % Recovery:	95	85	85	83	105
Dup. Result:	10	9.0	9.1	26	68
MSD % Recov.:	100	90	91	87	113
RPD:	5.1	5.7	6.8	3.9	7.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK060497	BLK060497	BLK060497	BLK060497	BLK060497
Prepared Date:	6/4/97	6/4/97	6/4/97	6/4/97	6/4/97
Analyzed Date:	6/4/97	6/4/97	6/4/97	6/4/97	6/4/97
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:	9.6	9.2	9.2	27	61
LCS % Recov.:	96	92	92	90	102

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  
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

9705F59.BLA <1>





Sequoia  
Analytical

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

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

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

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

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

Client Proj. ID: Chevron 9-1723/970529-Z3

Received: 05/30/97

Lab Proj. ID: 9705F59

Reported: 06/05/97

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 4 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:  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 9-1723  
Facility Address 9757 San Leandro St., Oakland, CA  
Consultant Project Number 970529-23  
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 9034824  
Samples Collected by (Name) BRETT BLEAU  
Collection Date 5-29-97  
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal A = Air	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											Remarks				
								BTX + TPH GAS + MIBK (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)								
MW-4	01	3	S		1320		Y	X															
MW-8	02	3	S		1340		Y	X															

DO NOT BILL FOR TB-LB.  
9705F59  
Remarks

30 11 59

Shipped By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>1025</u> <u>5/30/97</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>1035</u> <u>5/30/97</u>	Turn Around Time (Circle Choice)  24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Shipped By (Signature) <u>[Signature]</u>	Organization <u>SEO.</u>	Date/Time <u>1159</u> <u>5/30/97</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	
(Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time, <u>1159</u>	

# **Field Data Sheets**





# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>970521-21</u>	Station #: <u>7-1723</u>
Sampler: <u>BB/TM</u>	Date: <u>5-21</u>
Well I.D.: <u>MW-6</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>19.86</u>	Depth to Water: <u>9.91</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 <sup>✓</sup>    Disposable Bailer <sup>✓</sup>  
                                     Middleburg    Extraction Port  
                                     Electric Submersible    Other: \_\_\_\_\_  
                                     Extraction Pump  
 Other: \_\_\_\_\_

<u>1.6</u>	×	<u>3</u>	=	<u>4.8</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1311</u>	<u>66.0</u>	<u>7.2</u>	<u>1000</u>	<u>1.75</u>	
<u>1313</u>	<u>65.8</u>	<u>7.2</u>	<u>1000</u>	<u>3.50</u>	
<u>1315</u>	<u>65.8</u>	<u>7.2</u>	<u>1000</u>	<u>5.0</u>	

Did well dewater?    Yes    (No)    Gallons actually evacuated: 5.0

Sampling Time: 1320                                  Sampling Date: 5-21

Sample I.D.: MW-6                                  Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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

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

## CHEVRON WELL MONITORING DATA SHEET

Project #: 970527-23	Station #: 9-1723
Sampler: 88 ITM	Date: 5-21
Well I.D.: MW-8	Well Diameter: (2) 3 4 6 8 _____
Total Well Depth: 18.69	Depth to Water: 10.05
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                                      Sampling Method:                      Bailer

Disposable Bailer                                       Disposable Bailer

Middleburg    Extraction Port

Electric Submersible    Other: \_\_\_\_\_

Extraction Pump

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

1.4	X	3	=	4.20	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1327	66.0	7.5	1000	1.5	ODOR
1329	65.6	7.4	1000	3.0	"
1332	65.4	7.4	1000	4.25	"

Did well dewater?      Yes      (No)      Gallons actually evacuated: 4.25

Sampling Time: 1340                                      Sampling Date: 5-21

Sample I.D.: MW-8                                      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