

0.3. *ll*



December 19, 1997

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

Ms. Eva Chu  
Alameda County Health Care Services  
Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**Marketing - Sales West**  
Phone 510 842-9500

*10 soil vapor is minimal - can  
evaluate for dosage*

**Re: Former Chevron Service Station # 9-1723  
9757 San Leandro Blvd.  
San Leandro, California**

Dear Ms. Chu:

Enclosed is a copy of the Fourth Quarter Groundwater Monitoring report for 1997 that was prepared by our consultant Blaine Tech Services. Monitoring wells MW-5, MW-6 and MW-8 are sampled quarterly and MW-2 and MW-9 are sampled semiannually ( 1st and 3rd quarters ). All wells are sampled and analyzed for TPH-g, BTEX and MtBE constituents.

The benzene constituent increased slightly in monitoring wells MW-5 and MW-6 and increased in well MW-8.

The depth to ground water varied from 10.15 feet to 10.35 feet below grade, with a direction of flow westerly.

When the report on the recently conducted vapor study is finalized, it will be forwarded to your office for review. I expect this will occur within the next two weeks.

Chevron will continue to monitor the site in accordance with the guidelines noted above.

57 DEC 22 PM 6:43  
RECEIVED  
ENVIRONMENTAL  
HEALTH SERVICES  
DIVISION



December 19, 1997  
Ms. Eva Chu  
Former Chevron Service Station #9-1723  
Page 2

If you have any questions or comments, call me at (510) 842-9136.

Sincerely  
**CHEVRON PRODUCTS COMPANY**



Philip R. Briggs  
Site Assessment and Remediation Project Manager

Enclosure

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

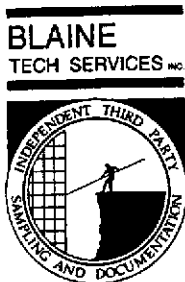
Trustees of the Estate  
Pacific American Management Co.  
369 Broadway  
San Francisco, CA 94133

Dr. Eric J. McHuron, CEG, CEA  
President  
McHuron Geosciences  
1670 8<sup>th</sup> Avenue  
San Francisco, CA 94122

Mr. Chuck Headlee  
Cambria Environmental Technology, Inc.  
1144 65<sup>th</sup> Street, Suite B  
Oakland, CA 94608

Ms. Bette Owen, Chevron

Mr. Curtis Peck, Chevron, CRTC, RIC 100/10-3514



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

December 11, 1997

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

#### **4th Quarter 1997 Monitoring at 9-1723**

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

Monitoring Performed on November 4, 1997

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#### **Groundwater Sampling Report 971104-H-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.

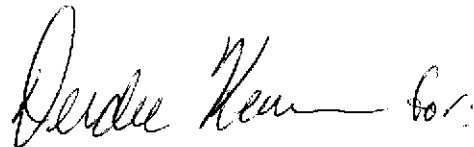
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater 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", followed by a horizontal line and the initials "F.T.". The signature is written in dark ink on a white background.

Francis Thie  
Vice President

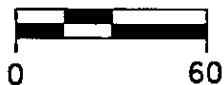
FPT/ew

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

# **Professional Engineering Appendix**



SCALE (ft)



PRODUCTION FACILITY

COLD STORAGE BUILDING

MW-1  
NA

DH-7

MW-9  
NA

DH-5  
(APPROX. 200')

DH-11

CANOPY

DH-9

MW-7  
NA

FORMER SHELL SERVICE STATION

SAN LEANDRO STREET

DH-6

CAFETERIA

FRUIT ROOM WAREHOUSE

MW-4  
NA

MW-6  
11.38

MW-8  
11.49

DH-10

MW-2  
NA

DH-8

BLDG. 36

MW-10  
NA

MW-5  
11.69

98th AVENUE

FORMER CHEVRON SERVICE STATION

FORMER PUMP ISLANDS

FORMER BUILDING SITES

FORMER UNDERGROUND TANKS

EXPLANATION

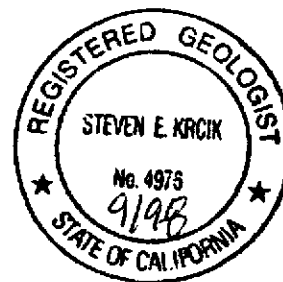
⊙ MONITORING WELL LOCATION

11.49 GROUNDWATER ELEVATION (FT, MSL)

11.40 — GROUNDWATER ELEVATION CONTOUR (FT, MSL)

NA DATA NOT AVAILABLE

↖ APPROXIMATE GROUNDWATER FLOW DIRECTION;  
APPROXIMATE GRADIENT = 0.003



Base map from Geoconsultants, Inc.

PREPARED BY

**RRM**

engineering contracting firm

Chevron Station 9-1723  
9757 San Leandro Street  
Oakland, California

GROUNDWATER ELEVATION CONTOUR MAP,  
NOVEMBER 4, 1997

FIGURE:

1

PROJECT:

DAC04

**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

<b>MW-2</b>											
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	--	--	--	--	--	--	--	--
07/23/97	21.31	11.23	10.08	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5

<b>MW-4</b>											
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	13.19	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
07/23/97	21.84	11.70	10.14	--	290	3.4	<0.5	<0.5	<0.5	--	3.1
11/04/97	21.84	11.69	10.15	--	180	3.8	<0.5	1.5	<0.5	--	8.6
<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
07/23/97	21.71	11.31	10.40	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
11/04/97	21.71	11.38	10.33	--	63	1.2	<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	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
07/23/97	21.84	11.48	10.36	--	760	20	2.2	2.6	5.0	--	9.7
11/04/97	21.84	11.49	10.35	--	1100	150	13	22	39	--	49

## 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	--	--	--	--	--	--	--	--
07/23/97	20.55	10.95	9.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5

### MW-10

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
07/23/97	--	--	--	--	<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 9-1723/971104-H2 Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9711308-01	Sampled: 11/04/97 Received: 11/05/97 Analyzed: 11/18/97 Reported: 11/20/97
--	---	---

QC Batch Number: GC111897BTEX03A  
Instrument ID: GCHP3

**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	8.6
Benzene	0.50	3.8
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.5
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

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 9-1723/971104-H2 Sample Descript: MW-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9711308-02	Sampled: 11/04/97 Received: 11/05/97 Analyzed: 11/18/97 Reported: 11/20/97
Attention: Fran Thie		

QC Batch Number: GC111897BTEX02A  
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	63
Methyl t-Butyl Ether	2.5	N.D.
<b>Benzene</b>	<b>0.50</b>	<b>1.2</b>
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	112

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 9-1723/971104-H2 Sample Descript: MW-8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9711308-03	Sampled: 11/04/97 Received: 11/05/97 Analyzed: 11/18/97 Reported: 11/20/97
--	---	---

QC Batch Number: GC111897BTEX21A  
Instrument ID: GCHP21

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1100
Methyl t-Butyl Ether	25	49
Benzene	5.0	150
Toluene	5.0	13
Ethyl Benzene	5.0	22
Xylenes (Total)	5.0	39
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	107

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Peaner  
Project Manager







# 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

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FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Project ID: Chevron 9-1723 / 971104-H2  
Matrix: Liquid

Work Order #: 9711308 -01

Reported: Nov 21, 1997

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC111897BTEX03A	GC111897BTEX03A	GC111897BTEX03A	GC111897BTEX03A	GC111897BTEX03A
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. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971189004	971189004	971189004	971189004	971189004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
Analyzed Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
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:	11	10	9.4	27	77
MS % Recovery:	110	100	94	90	128
Dup. Result:	9.5	9.3	9.2	26	72
MSD % Recov.:	95	93	92	87	120
RPD:	15	7.3	2.2	3.8	6.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK111897	BLK111897	BLK111897	BLK111897	BLK111897
Prepared Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
Analyzed Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
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:	9.1	8.9	8.9	25	70
LCS % Recov.:	91	89	89	83	117

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

9711308.BLA <1>





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

Client Project ID: Chevron 9-1723 / 971104-H2  
Matrix: Liquid

Work Order #: 9711308-02

Reported: Nov 21, 1997

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC111897BTEX02A	GC111897BTEX02A	GC111897BTEX02A	GC111897BTEX02A	GC111897BTEX02A
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. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971189004	971189004	971189004	971189004	971189004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
Analyzed Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
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:	10	9.8	9.9	30	69
MS % Recovery:	100	98	99	100	115
Dup. Result:	10	9.9	10	30	71
MSD % Recov.:	100	99	100	100	118
RPD:	0.0	1.0	1.0	0.0	2.9
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK111897	BLK111897	BLK111897	BLK111897	BLK111897
Prepared Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
Analyzed Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
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:	9.7	9.4	9.6	29	66
LCS % Recov.:	97	94	96	97	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:**

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9711308.BLA <2>





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

Client Project ID: Chevron 9-1723 / 971104-H2  
Matrix: Liquid

Work Order #: 9711308-03-04

Reported: Nov 21, 1997

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC111897BTEX21A	GC111897BTEX21A	GC111897BTEX21A	GC111897BTEX21A	GC111897BTEX21A
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. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971189004	971189004	971189004	971189004	971189004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
Analyzed Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
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:	10	10	11	31	54
MS % Recovery:	100	100	110	103	90
Dup. Result:	11	11	11	32	56
MSD % Recov.:	110	110	110	107	93
RPD:	9.5	9.5	0.0	3.2	3.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK111897	BLK111897	BLK111897	BLK111897	BLK111897
Prepared Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
Analyzed Date:	11/18/97	11/18/97	11/18/97	11/18/97	11/18/97
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	11	11	33	56
LCS % Recov.:	110	110	110	110	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

Peggy Penner  
Project Manager

**Please Note:**

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9711308.BLA <3>





Sequoia  
Analytical

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

Client Proj. ID: Chevron 9-1723/971104-H2

Received: 11/05/97

Lab Proj. ID: 9711308

Reported: 11/20/97

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 9 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH Note: Sample 9711308-03 was diluted 10-fold.  
Sample 9711308-04 was diluted 5-fold.

SEQUOIA ANALYTICAL

Peggy Penner  
Project Manager





revised COC

- 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 971104-H2  
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) Morgan Hargrave  
Collection Date 11-4-97  
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Lead (Yes or No)	Analyses To Be Performed															
								BTEX + TPH GAS + (8020 + 8015) <u>MTBE</u>	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-5	01	3	W	D	1330		Yes	X															
MW-6	02	↓	↓	↓	000		↓	↓															
MW-8	03	↓	↓	↓	1411		↓	↓															
<del>DUP</del>	<del>04</del>	<del>↓</del>	<del>↓</del>	<del>↓</del>			<del>↓</del>	<del>↓</del>			ELW												

DO NOT BILL FOR TB-LB.

9711308  
Remarks

NO 5 12 03

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>BTS</u>	Date/Time <u>10:00</u> <u>11/5/97</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Sequoia</u>	Date/Time <u>10:00</u> <u>11/5/97</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

Turn Around Time (Circle Choice)  
24 Hrs.  
48 Hrs.  
5 Days  
10 Days  
As Contracted

# **Field Data Sheets**





## CHEVRON WELL MONITORING DATA SHEET

Project #: <u>971104-H2</u>	Station #: <u>9-1723</u>
Sampler: <u>MH</u>	Date: <u>11-4</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>17.52</u>	Depth to Water: <u>10.15</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 x Disposable Bailer Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method:                  Bailer x Disposable Bailer Extraction Port Other: _____
---	--

<u>1.2</u>	<u>x</u>	<u>3</u>	<u>=</u>	<u>3.6</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1320	73.4	7.1	800	1.5	
1323	72.2	7.1	810	3.0	
1327	71.8	7.2	810	4.5	

Did well dewater?    Yes <u>(No)</u>	Gallons actually evacuated: <u>4.5</u>
Sampling Time: <u>1330</u>	Sampling Date: <u>11-4</u>
Sample I.D.: <u>MW-5</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: <span style="float: right;">mg/L</span> Post-purge: <span style="float: right;">mg/L</span>
O.R.P. (if req'd):	Pre-purge: <span style="float: right;">mV</span> Post-purge: <span style="float: right;">mV</span>

## CHEVRON WELL MONITORING DATA SHEET

Project #: <u>971104-H2</u>	Station #: <u>9-1723</u>
Sampler: <u>M4</u>	Date: <u>11/4</u>
Well I.D.: <u>MW-6</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>17.80</u>	Depth to Water: <u>10.33</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
	<input checked="" type="checkbox"/> Disposable Bailer		<input checked="" type="checkbox"/> Disposable Bailer
	Middleburg		Extraction Port
	Electric Submersible		Other: _____
	Extraction Pump		
	Other: _____		

<u>1.5</u>	x	<u>3</u>	=	<u>4.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1250</u>	<u>71.8</u>	<u>7.2</u>	<u>910</u>	<u>1.5</u>	
<u>1254</u>	<u>71.8</u>	<u>7.1</u>	<u>940</u>	<u>3.0</u>	
<u>1258</u>	<u>71.4</u>	<u>7.1</u>	<u>950</u>	<u>4.5</u>	

Did well dewater? Yes   No Gallons actually evacuated: 4.5

Sampling Time: 1300 Sampling Date: 11-4

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
--------------------	------------	----	-------------	----

