



97 AUG 19 PM 2:49

August 18, 1997

Ms. Juliet Shin
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

SDP 1699

Re: **Chevron Service Station #9-6607**
2340 Otis Drive, Alameda, California

Dear Ms. Shin:

Enclosed is the Third Quarter Groundwater Monitoring Report for 1997, that was prepared by our consultant Blaine Tech Services Inc. for the above noted site. Ground water samples were collected and analyzed for TPH-g, BTEX and MtBE constituents.

Monitoring wells MW-1 and M-2 are sampled quarterly and analyzed for all of the constituents, while wells MW-3 and MW-4 are sampled annually (first quarter), but measured for groundwater depth quarterly.

Concentrations of all of the constituents increased in wells MW-1 while decreasing in well MW-2. This increase in well MW-1 may be an anomaly since it is upgradient of the pump islands. Chevron will continue to monitor these wells quarterly.

Depth to groundwater varied from 3.87 feet to 5.14 feet below grade, with a direction of flow south easterly.

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

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

August 18, 1997
Ms. Juliet Shin
Chevron Service Station # 9-6607
Page 2

cc. Ms. Bette Owen, Chevron

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

Mr. Wayne Weber
Chevron Station # 9-6607
2340 Otis Drive
Alameda, CA 94501

Harsh Investment Corp.
235 West MacArthur Blvd., Suite 64
Oakland, CA 94611

BLAINE
TECH SERVICES INC.



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

ENVIRONMENTAL
PROTECTION

97 AUG 19 PM 2:49

August 8, 1997

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

3rd Quarter 1997 Monitoring at 9-6607

Third Quarter 1997 Groundwater Monitoring at
Chevron Service Station Number 9-6607
2340 Otis Drive
Alameda, CA

Monitoring Performed on July 9, 1997

Groundwater Sampling Report 970709-X-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,

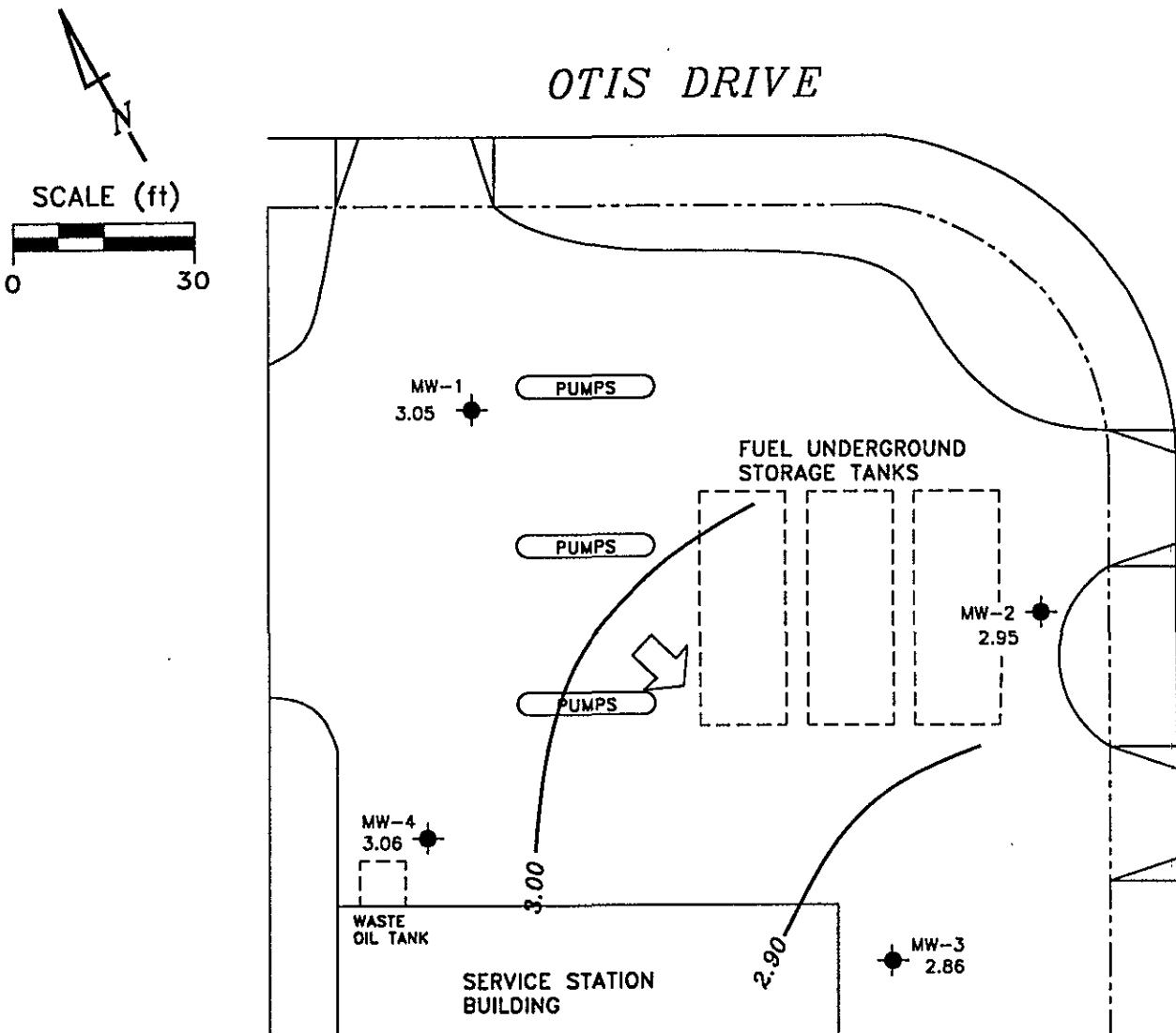


Francis Thie
Vice President

FPT/aa

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

Professional Engineering Appendix

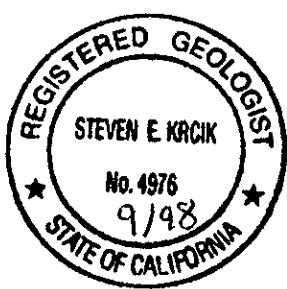


EXPLANATION

MONITORING WELL
GROUNDWATER ELEVATION (FT, MSL)
GROUNDWATER ELEVATION CONTOUR (FT, MSL)
APPROXIMATE GROUNDWATER FLOW DIRECTION;
APPROXIMATE GRADIENT = 0.002

2.86

3.00



Base map from Cambio Environmental Technology, Inc.

PREPARED BY

RRM
engineering contracting firm

Chevron Station 9-6607
2340 Otis Drive
Alameda, California

GROUNDWATER ELEVATION CONTOUR MAP,
JULY 9, 1997

FIGURE:
1
PROJECT:
DAC04

Table of Well Data and Analytical Results

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TOG	TPH-Diesel	MTBE	Other VOCs	PNAs
MW-1														
08/21/91	7.12	1.02	6.10	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/09/92	7.12	3.16	3.96	--	<50	<0.5	<0.5	<0.5	<0.5	<5000	--	--	--	--
04/20/92	7.12	3.22	3.90	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
07/25/92	7.12	2.94	4.18	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
11/24/92	7.12	2.40	4.72	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/21/93	7.12	3.94	3.18	--	<50	<0.5	0.7	<0.5	1.0	--	--	--	--	--
04/13/93	7.12	3.42	3.70	--	<50	<0.5	<0.5	<0.5	1.0	--	--	--	--	--
07/14/93	7.12	2.91	4.21	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/26/93	7.12	2.84	4.28	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/11/94	7.12	2.96	4.16	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
03/31/94	7.12	3.24	3.88	--	<50	<0.5	0.6	<0.5	0.7	--	--	--	--	--
07/14/94	7.12	4.12	3.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/12/94	7.12	2.87	4.25	--	80	<0.5	<0.5	<0.5	<0.5	--	--	121	<5.0--<50	--
01/11/95	7.12	4.00	3.12	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	130	--	--
04/05/95	7.12	3.66	3.46	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	170	--	<5.0
07/13/95	7.12	3.13	3.99	--	<125	<1.2	<1.2	<1.2	<1.2	--	--	400	--	--
10/05/95	7.12	2.74	4.38	--	<50	<0.5	2.3	0.66	4.0	--	--	300	--	--
10/03/96	7.12	2.68	4.44	--	<50	0.63	<0.5	<0.5	<0.5	--	--	560	--	--
01/22/97	7.12	3.73	3.39	--	<200	<2.0	<2.0	<2.0	<2.0	--	--	530	--	--
01/22/97	7.12	3.73	3.39	Confirmation run	--	--	--	--	--	--	--	880	--	--
04/09/97	6.92*	3.22	3.70	--	<125	<1.2	<1.2	<1.2	<1.2	--	--	610	--	--
07/09/97	6.92	3.05	3.87	--	240	47	<2.0	<2.0	<2.0	--	--	990	--	--

* Wellhead elevation altered due to maintenance.

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TOG	TPH-Diesel	MTBE	Other VOCs	PNAs
MW-2														
08/21/91	7.43	1.03	6.40	--	430	170	0.9	1.0	3.6	--	--	--	--	--
01/09/92	7.43	3.20	4.23	--	58	16	<0.5	<0.5	<0.5	<5000	--	--	--	--
04/20/92	7.43	3.26	4.17	--	180	9.6	<0.5	0.8	<0.5	--	--	--	--	--
07/25/92	7.43	2.96	4.47	--	220	8.0	0.7	4.0	8.6	--	--	--	--	--
11/24/92	7.43	1.61	5.82	--	72	3.2	<0.5	0.5	0.6	--	--	--	--	--
01/21/93	7.43	4.08	3.35	--	<50	0.8	<0.5	<0.5	<0.5	--	--	--	--	--
04/13/93	7.43	3.41	4.02	--	78	<0.5	<0.5	<0.5	0.6	--	--	--	--	--
07/14/93	7.43	2.94	4.49	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/26/93	7.43	2.87	4.56	--	<50	<0.5	0.9	<0.5	0.6	--	--	--	--	--
01/11/94	7.43	3.04	4.39	--	<50	<0.5	1.0	<0.5	<0.5	--	--	--	--	--
03/31/94	7.43	3.25	4.18	--	<50	0.5	<0.5	<0.5	0.8	--	--	--	--	--
07/14/94	7.43	2.53	4.90	--	<50	<0.5	<0.5	<0.5	0.6	--	--	--	--	--
10/12/94	7.43	2.89	4.54	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	2900	<50--<500	--
01/11/95	7.43	4.17	3.26	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	2500	--	--
04/05/95	7.43	3.78	3.65	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.0	--	<5.0
07/13/95	7.43	3.12	4.31	--	<250	<2.5	<2.5	<2.5	<2.5	--	--	1100	--	--
10/05/95	7.43	2.75	4.68	--	<50	<0.5	1.9	0.54	3.4	--	--	280	--	--
10/03/96	7.43	2.63	4.80	--	<500	<5.0	<5.0	<5.0	<5.0	--	--	1000	--	--
01/22/97	7.43	4.07	3.36	--	540*	<5.0	<5.0	<5.0	<5.0	--	--	1300	--	--
01/22/97	7.43	4.07	3.36	Confirmation run	--	--	--	--	--	--	--	1600	--	--
04/09/97	7.43	3.18	4.25	--	<500	<5.0	<5.0	<5.0	<5.0	--	--	970	--	--
07/09/97	7.43	2.95	4.48	--	<125	<1.2	<1.2	<1.2	<1.2	--	--	710	--	--

* Chromatogram pattern indicates an unidentified hydrocarbon

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TOG	TPH-Diesel	MTBE	Other VOCs	PNAs
MW-3														
08/21/91	8.07	0.97	7.10	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/09/92	8.07	3.04	5.03	--	<50	<0.5	<0.5	<0.5	<0.5	<5000	--	--	--	--
04/20/92	8.07	3.16	4.91	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
07/25/92	8.07	2.73	5.34	--	<50	1.0	1.0	1.0	3.4	--	--	--	--	--
11/24/92	8.07	3.07	5.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/21/93	8.07	3.73	4.34	--	<50	<0.5	0.5	<0.5	1.0	--	--	--	--	--
04/13/93	8.07	3.23	4.84	--	<50	<0.5	<0.5	<0.5	0.6	--	--	--	--	--
07/14/93	8.07	2.78	5.29	--	<50	<0.5	<0.5	<0.5	2.0	--	--	--	--	--
10/26/93	8.07	2.71	5.36	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/11/94	8.07	2.85	5.22	--	<50	<0.5	1.0	<0.5	<0.5	--	--	--	--	--
03/31/94	8.07	3.08	4.99	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
07/14/94	8.07	2.71	5.36	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/12/94	8.07	3.05	5.02	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/11/95	8.07	3.72	4.35	--	<50	<0.5	<0.5	<0.5	0.7	--	--	<5.0	--	--
04/05/95	8.07	5.43	2.64	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<5.0	--	<5.0
07/13/95	8.07	2.94	5.13	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/05/95	8.07	2.61	5.46	--	<50	<0.5	1.2	<0.5	<0.5	--	--	--	--	--
10/03/96	8.07	2.54	5.53	--	<50	0.98	1.2	0.53	2.5	--	--	<2.5	--	--
01/22/97	8.07	3.45	4.62	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
04/09/97	8.00*	2.95	5.05	Sampled annually	--	--	--	--	--	--	--	--	--	--
07/09/97	8.00	2.86	5.14	--	--	--	--	--	--	--	--	--	--	--

* Wellhead elevation altered due to maintenance.

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TOG	TPH-Diesel	MTBE	Other VOCs	PNAs
MW-4														
08/21/91	7.85	1.00	6.85	--	<50	0.6	<0.5	<0.5	<0.5	<5000	--	--	--	--
01/09/92	7.85	3.15	4.70	--	<50	<0.5	<0.5	<0.5	<0.5	<5000	--	--	--	--
04/20/92	7.85	3.21	4.64	--	<50	<0.5	<0.5	<0.5	<0.5	<5000	--	--	--	--
07/25/92	7.85	2.90	4.95	--	<50	0.5	1.1	<0.5	0.8	--	78	--	--	--
11/24/92	7.85	2.43	5.42	--	<50	<0.5	<0.5	<0.5	1.0	<5000	--	--	--	--
01/21/93	7.85	3.78	4.07	--	<50	<0.5	0.5	<0.5	0.7	--	<10	--	--	--
04/13/93	7.85	3.40	4.45	--	<50	<0.5	<0.5	<0.5	1.0	--	<10	--	--	--
07/14/93	7.85	2.95	4.90	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/26/93	7.85	2.90	4.95	--	<50	2.0	3.0	2.0	3.0	--	--	--	--	--
01/11/94	7.85	3.08	4.77	--	<50	<0.5	0.5	<0.5	<0.5	--	--	--	--	--
03/31/94	7.85	3.20	4.65	--	<50	<0.5	<0.5	<0.5	1.0	--	--	--	--	--
07/14/94	7.85	2.80	5.05	--	<50	0.9	1.2	<0.5	2.0	--	--	--	--	--
10/12/94	7.85	2.97	4.88	--	<50	<0.5	0.9	<0.5	0.7	--	--	--	--	--
01/11/95	7.85	3.85	4.00	--	<50	<0.5	0.8	0.7	1.5	--	--	<5.0	--	--
04/05/95	7.85	3.63	4.22	--	<50	<0.5	<0.5	<0.5	<0.5	<5000	--	<2.0	<5.0	--
07/13/95	7.85	3.14	4.71	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/05/95	7.85	2.83	5.02	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/03/96	7.85	2.77	5.08	--	100	5.5	5.6	2.5	12	--	--	<2.5	--	--
01/22/97	7.85	3.57	4.28	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
04/09/97	7.85	3.25	4.60	Sampled annually	--	--	--	--	--	--	--	--	--	--
07/09/97	7.85	3.06	4.79	--	--	--	--	--	--	--	--	--	--	--

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TOG	TPH-Diesel	MTBE	Other VOCs	PNAs
TRIP BLANK														
01/21/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
04/13/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
07/14/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/26/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/11/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
03/31/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
07/14/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/12/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/11/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
04/05/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
07/13/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/05/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
10/03/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/22/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
04/09/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
07/09/97	--	--	--	--	<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 April 5, 1995.

Earlier field data and analytical results provided by Sierra Environmental.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

TOG = Total Oil and Grease

MTBE = Methyltertiary butylether

VOC = Volatile Organic Compound

Analytical Appendix



**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 9-6607/970709X2
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9707533-01

Sampled: 07/09/97
Received: 07/10/97

Analyzed: 07/16/97
Reported: 07/21/97

QC Batch Number: GC071697BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	240
Methyl t-Butyl Ether	10	990
Benzene	2.0	47
Toluene	2.0	N.D.
Ethyl Benzene	2.0	N.D.
Xylenes (Total)	2.0	N.D.
Chromatogram Pattern:		
Unidentified HC	C6-C8
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 107

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
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

(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 9-6607/970709X2
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9707533-02

Sampled: 07/09/97
Received: 07/10/97
Analyzed: 07/15/97
Reported: 07/21/97

QC Batch Number: GC071597BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	125	N.D.
Methyl t-Butyl Ether	6.2	710
Benzene	1.2	N.D.
Toluene	1.2	N.D.
Ethyl Benzene	1.2	N.D.
Xylenes (Total)	1.2	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 88

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Pehner
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Chevron 9-6607/970709X2
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9707533-03

Sampled: 07/09/97
Received: 07/10/97
Analyzed: 07/14/97
Reported: 07/21/97

QC Batch Number: GC071497BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 89

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager



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Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
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Blaine Tech Services, Inc.
 1680 Rogers Avenue
 San Jose, CA 95112
 Attention: Fran Thie

Client Project ID: Chevron 9-6607 / 970709X2
 Matrix: Liquid

Work Order #: 9707533 -01

Reported: Jul 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC071697BTEX06A	GC071697BTEX06A	GC071697BTEX06A	GC071697BTEX06A	GC071697BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030				

Analyst:	A. Porter				
MS/MSD #:	970753607	970753607	970753607	970753607	970753607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/16/97	7/16/97	7/16/97	7/16/97	7/16/97
Analyzed Date:	7/16/97	7/16/97	7/16/97	7/16/97	7/16/97
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:	8.4	7.8	7.8	22	56
MS % Recovery:	84	78	78	73	93
Dup. Result:	8.9	8.2	8.3	24	60
MSD % Recov.:	89	82	83	80	100
RPD:	5.8	5.0	6.2	8.7	6.9
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK071697	BLK071697	BLK071697	BLK071697	BLK071697
Prepared Date:	7/16/97	7/16/97	7/16/97	7/16/97	7/16/97
Analyzed Date:	7/16/97	7/16/97	7/16/97	7/16/97	7/16/97
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:	8.8	8.3	8.4	24	60
LCS % Recov.:	88	83	84	80	100

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.



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Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Client Project ID: Chevron 9-6607 / 970709X2
 Matrix: Liquid

Work Order #: 9707533-02

Reported: Jul 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC071597BTEX07A	GC071597BTEX07A	GC071597BTEX07A	GC071597BTEX07A	GC071597BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030				

Analyst:	A. Porter				
MS/MSD #:	970749004	970749004	970749004	970749004	970749004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97
Analyzed Date:	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97
Instrument I.D. #:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.3	8.8	9.0	27	64
MS % Recovery:	93	88	90	90	107
Dup. Result:	9.7	9.2	9.4	28	67
MSD % Recov.:	97	92	94	93	112
RPD:	4.2	4.4	4.3	3.6	4.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK071597	BLK071597	BLK071597	BLK071597	BLK071597
Prepared Date:	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97
Analyzed Date:	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97
Instrument I.D. #:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.2	8.9	9.0	27	63
LCS % Recov.:	92	89	90	90	105

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

Please Note:

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



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

Client Project ID: Chevron 9-6607 / 970709X2
 Matrix: Liquid

Work Order #: 9707533-03

Reported: Jul 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC071497BTEX22A	GC071497BTEX22A	GC071497BTEX22A	GC071497BTEX22A	GC071497BTEX22A
Anal. 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				
MS/MSD #:	970704218	970704218	970704218	970704218	970704218
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97
Analyzed Date:	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97
Instrument I.D. #:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.3	9.3	9.6	27	54
MS % Recovery:	93	93	96	90	90
Dup. Result:	9.1	9.4	10	28	59
MSD % Recov.:	91	94	100	93	98
RPD:	2.2	1.1	4.1	3.6	8.8
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK071497	BLK071497	BLK071497	BLK071497	BLK071497
Prepared Date:	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97
Analyzed Date:	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97
Instrument I.D. #:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	7.7	7.6	8.0	22	44
LCS % Recov.:	77	76	80	73	73

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

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.

Peggy Penner
 Project Manager

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

9707533.BLA <3>



**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 9-6607/970709X2

Received: 07/10/97

Lab Proj. ID: 9707533

Reported: 07/21/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 7 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH Note: Sample 9707533-01 was diluted 4-fold.
Sample 9707533-02 was diluted 2.5-fold.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Field Data Sheets

WELL GAUGING DATA

Project # 970708X2 Date 7/9 Client 9-10607

Site 2340 Otis Rd Alameda CA

CHEVRON WELL MONITORING DATA SHEET

Project #:	970709X2		Station #:	9-6607					
Sampler:	KW		Date:	7/9					
Well I.D.:	MW-1		Well Diameter:	2	3	4	6	8	
Total Well Depth:	2281		Depth to Water:	387					
Depth to Free Product:			Thickness of Free Product (feet):						
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH				

Well Diameter	Multipier	Well Diameter	Multipier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer
 Disposable Bailer
 Middleburg
 Electric Submersible
 Extraction Pump
 Other: _____

Sampling Method: Bailer
 Disposable Bailer X
 Extraction Port
 Other: _____

12.3	x	3	=	36.9	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
13:24	71.6	7.0	1600	16	
13:26	70.4	6.8	1400	32	
13:28	69.8	6.8	1400	48	

Did well dewater?	Yes	No	Gallons actually evacuated:	148				
Sampling Time:	13:33		Sampling Date:	7/9				
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 #:	970909X2	Station #:	9-6607				
Sampler:	KW	Date:	7/9				
Well I.D.:	MW-2	Well Diameter:	2	3	4	6	8
Total Well Depth:	23.34	Depth to Water:	4.48				
Depth to Free Product:		Thickness of Free Product (feet):					
Referenced to:	(PVO)	Grade	D.O. Meter (if req'd):	YSI	HACH		

Well Diameter	Multiplicator	Well Diameter	Multiplicator
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Sampling Method: Bailer
 Disposable Bailer Disposable Bailer
 Middleburg Extraction Port
 Electric Submersible Other: _____
 Extraction Pump
 Other: _____

$$\frac{12.2}{\text{1 Case Volume (Gals.)}} \times \frac{3}{\text{Specified Volumes}} = \frac{36.6}{\text{Calculated Volume}} \text{ Gals.}$$

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1323	73.6	7.0	800	14	
1325	74.4	6.9	800	28	
1327	74.2	6.9	800	42	

Did well dewater? Yes No Gallons actually evacuated: 42

Sampling Time: Sampling Date: 7/9

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