

LS 5101699



Chevron

June 5, 1999

Chevron Products Company
6001 Bollinger Canyon Road
Building L, Room 1080
PO Box 6004
San Ramon, CA 94583-0904

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

Philip R. Briggs
Project Manager
Site Assessment & Remediation
Phone 925 842-9136
Fax 925 842-8370

STED 1699

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

Dear Mr. Peacock:

Enclosed is the Second Quarter Groundwater Monitoring Report for 1999 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.

The benzene constituent increased in wells MW-1 and MW-2 from the previous sampling event, however this could be anomaly, and further monitoring will be required to confirm this. The concentrations were below method detection limits for the ETX constituents in well MW-1, while the MtBE concentration declined in this well from the previous sampling event.

Depth to groundwater varied from 2.71 feet to 4.38 feet below grade, with a direction of flow southerly from well MW-1.

If you have any questions or comments, call me at (925) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manger

99 JUN - 8 PM 3: 27

ENVIRONMENTAL PROTECTION

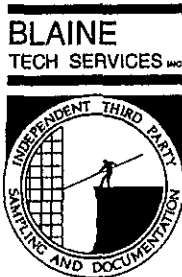
June 5, 1999
Mr. Thomas Peacock
Chevron Service Station #9-6607
Page 2

Enclosure

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

Harsh Investment Corp.
523 West Plaza
South Shore Center
Alameda, CA 94501

Mr. Bill Scudder, Chevron



1880 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
(408) 573-7771 FAX
(408) 573-0556 PHONE

May 25, 1999

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

2nd Quarter 1999 Monitoring at 9-6607

Second Quarter 1999 Groundwater Monitoring at
Chevron Service Station Number 9-6607
2340 Otis Drive
Alameda, CA

Monitoring Performed on April 19, 1999

Groundwater Sampling Report 990419-Y-4

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 black ink that reads "Christine Lillie". The signature is written in a cursive, flowing style.

Christine Lillie
Project Coordinator

CAL/sb

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

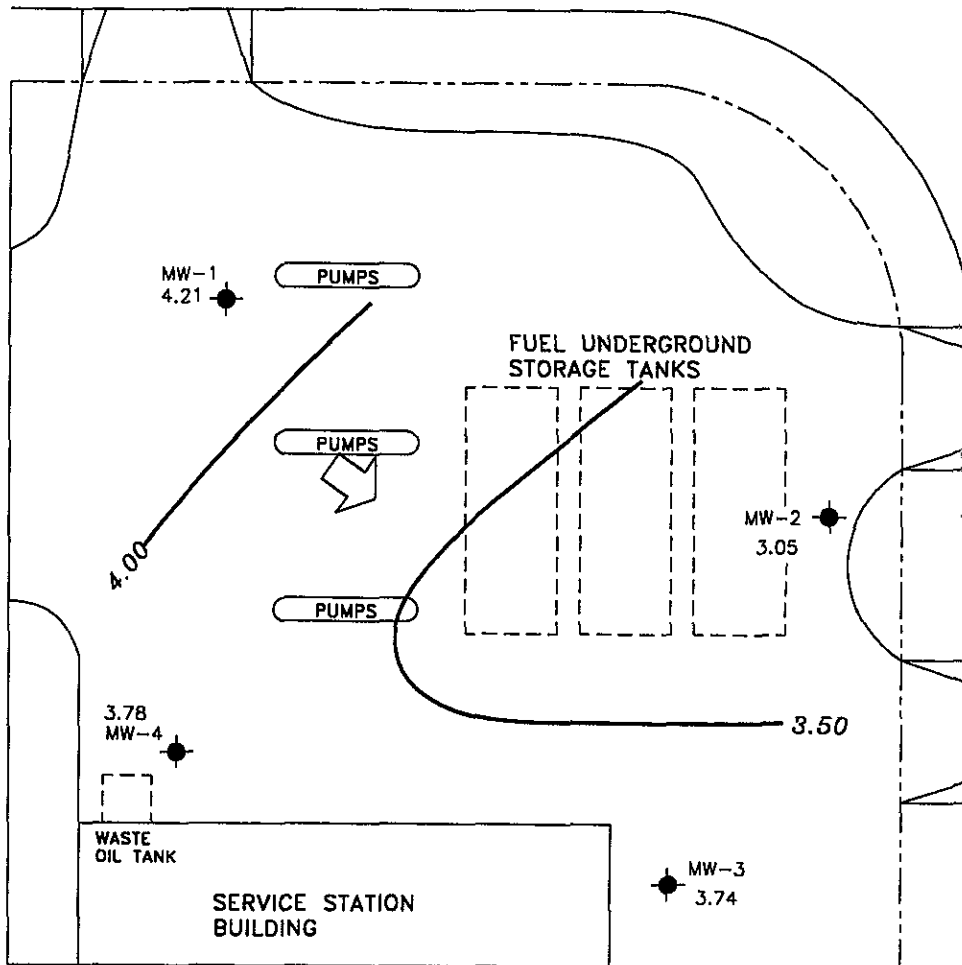
Professional Engineering Appendix

OTIS DRIVE

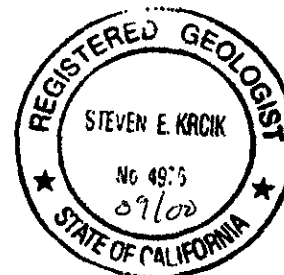
PARK STREET



SCALE (ft)



- EXPLANATION**
- MONITORING WELL
 - 3.78 GROUNDWATER ELEVATION (FT. MSL)
 - 4.00 GROUNDWATER ELEVATION CONTOUR (FT. MSL)
 - APPROXIMATE GROUNDWATER FLOW DIRECTION;
APPROXIMATE GRADIENT = 0.01



Basemap from Combric Environmental Technology, Inc.

PREPARED BY

RRM
engineering contracting firm

Chevron Station 9-6607
2340 Otis Drive
Alameda, California

GROUNDWATER ELEVATION CONTOUR MAP,
APRIL 19, 1999

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	PNA's
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	--	--
10/16/97	6.92	2.95	3.97	--	250	<2.0	<2.0	<2.0	<2.0	--	--	1000	--	--
01/08/98	6.92	3.47	3.45	--	<200	<2.0	<2.0	<2.0	<2.0	--	--	**	--	--
04/24/98	6.92	3.31	3.61	--	170	20	<0.5	<0.5	<0.5	--	--	1700	--	--
07/15/98	6.92	3.07	3.85	--	160	58	1.1	<0.5	0.59	--	--	1500	--	--
07/15/98	6.92	3.07	3.85	Confirmation run	--	--	--	--	--	--	--	1600	--	--
10/27/98	6.92	2.80	4.12	--	140	<0.5	<0.5	<0.5	<0.5	--	--	1200	--	--
01/20/99	6.92	2.44	4.48	--	<250	<2.5	<2.5	<2.5	<2.5	--	--	1330	--	--
04/19/99	6.92	4.21	2.71	--	150	73	<0.5	<0.5	<0.5	--	--	620	--	--

* Wellhead elevation altered due to maintenance.

** No value for MTBE could be determined; see lab report.

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	--	--
10/16/97	7.43	2.99	4.44	--	<100	<1.0	<1.0	<1.0	<1.0	--	--	1000	--	--
01/08/98	7.43	3.64	3.79	--	68	<0.5	<0.5	<0.5	<0.5	--	--	**	--	--
04/24/98	7.43	3.48	3.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	490	--	--
07/15/98	7.43	3.13	4.30	--	51	1.2	1.2	<0.5	<0.5	--	--	480	--	--
10/27/98	7.43	2.98	4.45	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	180	--	--
01/20/99	7.43	3.22	4.21	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	388	--	--
04/19/99	7.43	3.05	4.38	--	620	13	35	11	78	--	--	510	--	--

* Chromatogram pattern indicates an unidentified hydrocarbon.

** No value for MTBE could be determined; see lab report.

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	PNAAs
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	--	--	--	--	--	--	--	--	--	--	--
10/16/97	8.00	2.80	5.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
01/08/98	8.00	3.25	4.75	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	9.3	--	--
04/24/98	8.00	3.27	4.73	--	--	--	--	--	--	--	--	--	--	--
07/15/98	8.00	2.93	5.07	--	--	--	--	--	--	--	--	--	--	--
10/27/98	8.00	2.76	5.24	--	--	--	--	--	--	--	--	--	--	--
01/20/99	8.00	2.82	5.18	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	42.2	--	--
04/19/99	8.00	3.74	4.26	--	--	--	--	--	--	--	--	--	--	--

* 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	--	--	--	--	--	--	--	--	--	--	--
10/16/97	7.85	3.04	4.81	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	2.7	--	--
01/08/98	7.85	3.48	4.37	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
04/24/98	7.85	3.51	4.34	--	--	--	--	--	--	--	--	--	--	--
07/15/98	7.85	3.39	4.46	--	--	--	--	--	--	--	--	--	--	--
10/27/98	7.85	3.33	4.52	--	--	--	--	--	--	--	--	--	--	--
01/20/99	7.85	3.53	4.32	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.0	--	--
04/19/99	7.85	3.78	4.07	--	--	--	--	--	--	--	--	--	--	--

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	--	--
10/16/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
01/08/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
04/24/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
07/15/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
10/27/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--	--
01/20/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.0	--	--
04/19/99	--	--	--	--	<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
1455 McDowell Blvd. North, Ste. D
1551 Industrial Road

Redwood City, CA 94063
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Petaluma, CA 94954
San Carlos, CA 94070-4111

(650) 364-9600
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FAX (916) 921-0100
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Sequoia Analytical
1551 Industrial Blvd.
San Carlos, CA. 94070
Attention: Mike Gregory

Client Project ID: L904275- Blaine Tech Service, Inc.
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 904-2364

Sampled: Apr 19, 1999
Received: Apr 23, 1999
Reported: May 4, 1999

QC Batch Number: GC043099 GC043099 GC043099 GC043099
802002A 802002A 802002A 802002A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 904-2364 MW1	Sample I.D. 904-2365 MW2	Sample I.D. 904-2366 TB	Sample I.D. Method Blank
Purgeable Hydrocarbons	50	150	620	N.D.	N.D.
Benzene	0.50	73	13	N.D.	N.D.
Toluene	0.50	N.D.	35	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	11	N.D.	N.D.
Total Xylenes	0.50	N.D.	78	N.D.	N.D.
MTBE	2.5	620	510	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	4.0	1.0	1.0
Date Analyzed:	4/30/99	4/30/99	4/30/99	4/30/99
Instrument Identification:	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	97	102	98	101

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL #1271

Charlie Westwater
Project Manager





Sequoia Analytical

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Sequoia Analytical
1551 Industrial Blvd.
San Carlos, CA. 94070
Attention: Mike Gregory

Client Project ID: L904275- Blaine Tech Service, Inc.
Matrix: Liquid

QC Sample Group: 9042364-366

Reported: May 4, 1999

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC043099 802002A	GC043099 802002A	GC043099 802002A	GC043099 802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	8042151	8042151	8042151	8042151
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/30/99	4/30/99	4/30/99	4/30/99
Analyzed Date:	4/30/99	4/30/99	4/30/99	4/30/99
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	18	17	18	56
MS % Recovery:	90	85	90	93
Dup. Result:	17	17	16	54
MSD % Recov.:	85	85	80	90
RPD:	5.7	0.0	12	3.6
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS043099	2LCS043099	2LCS043099	2LCS043099
Prepared Date:	4/30/99	4/30/99	4/30/99	4/30/99
Analyzed Date:	4/30/99	4/30/99	4/30/99	4/30/99
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	18	17	18	58
LCS % Recov.:	90	85	90	97

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

Charlie Westwater
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



Field
Data
Sheets

CHEVRON WELL MONITORING DATA SHEET

Project #: 990419 44	Station #: 9-6607
Sampler: B. TAYLOR	Date: 4/19
Well I.D.: MW2	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: 23.25	Depth to Water: 4.38
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 ² * 0.163

Purge Method: Bailer
 Disposable Bailer
 Middleburg
Electric Submersible
 Extraction Pump

Other: _____

Sampling Method: Bailer
Disposable Bailer
 Extraction Port

Other: _____

<u>13</u>	x	<u>3</u>	=	<u>39</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1413	62.7	8.1	828	13	
1414	68.9	7.9	803	26	
1416	68.9	7.9	802	39	

Did well dewater? Yes No Gallons actually evacuated: 37

Sampling Time: 1417 Sampling Date: 4/19

Sample I.D.: MW2 Laboratory: Sequoia CORE 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