



Chevron

19 452-40 09 12 11

March 30, 1998

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

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

**Re: Former Chevron Service Station #9-4930
3369 Castro Valley Blvd., Castro Valley, California**

Dear Mr. Seery:

Enclosed is the First Quarter Groundwater Monitoring Report for 1998 that was prepared by Blaine Tech Services Inc., for the above noted site. The groundwater samples were analyzed for TPH-g, BTEX and MtBE constituents. Monitoring wells MW-1, MW-2 and MW-4 are sampled quarterly while well MW-3 is sampled semi-annually (1st and 3rd quarters).

The benzene concentration increased slightly in monitoring well MW-2 to 0.52 ppb while decreasing in wells MW-1 and MW-4 from the previous sampling event. The concentrations for all constituents were below method detection limits in well MW-3.

The concentration of benzene continually decreasing in well MW-4 for the third consecutive sampling event appears to indicate that the high benzene concentration detected in the second quarter of 1997 was an anomaly.

Depth to ground water varied from 3.00 feet to 6.01 feet below grade with a direction of flow to the west southwest. The direction of flow has changed back to the normal pattern.



March 30, 1998
Mr. Scott Seery
Former Chevron Service Station #9-4930
Page 2

Chevron will continue to monitor the site as noted above and as outlined in our letter of June 26, 1996. If you have any questions call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY



Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Ms. Bette Owen, Chevron Products Co.

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

Anna Counelis & Tula Gallanes
109 Casa Vieja
Orinda, CA 94563

BLAINE
TECH SERVICES INC.

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



March 25, 1998

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

1st Quarter 1998 Monitoring at 9-4930

First Quarter 1998 Groundwater Monitoring at
Former Chevron Service Station Number 9-4930
3369 Castro Valley Blvd.
Castro Valley, CA

Monitoring Performed on February 11, 1998

Groundwater Sampling Report 980211-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 black ink, appearing to read "Francis Thie" followed by a flourish.

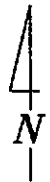
Francis Thie
Vice President

FPT/ew

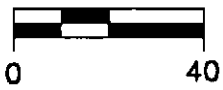
attachments: Professional Engineering Appendix
Cumulative Table of Well Data and Analytical Results
Analytical Appendix
Field Data Sheets

Professional Engineering Appendix

CASTRO VALLEY BLVD.



FORMER PUMP ISLANDS (APPROX)
SCALE (ft)



WILBEAM AVE.

MW-4
167.16

EXISTING BUILDING

MW-1
167.52

FORMER PUMP ISLANDS (APPROX)

FORMER UNDERGROUND STORAGE TANKS (APPROX)

MW-2
167.95

FORMER WASTE OIL TANK (APPROX)

167.25

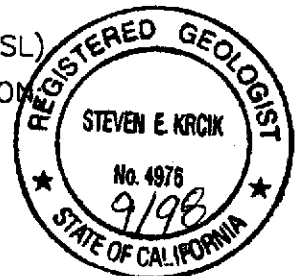
167.75

MW-3
167.47

FORMER UNDERGROUND STORAGE TANKS (APPROX)

EXPLANATION

- ⊙ MONITORING WELL
- 167.47 GROUNDWATER ELEVATION (FT, MSL)
- 167.50 — GROUNDWATER ELEVATION CONTOUR (FT, MSL)
- ↖ APPROXIMATE GROUNDWATER FLOW DIRECTION
- APPROXIMATE GRADIENT = 0.005



Basemap from Geoconsultants, Inc.

PREPARED BY



Former Chevron Station 9-4930
3369 Castro Valley Boulevard
Castro Valley, California

GROUNDWATER ELEVATION CONTOUR MAP,
FEBRUARY 11, 1998

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	1,2-DCE	TCE	DCFM	PCE	MTBE
MW-1														
10/29/93	172.90	166.15	6.75	--	1000	11	17	32	110	--	--	--	--	--
02/25/94	172.90	166.80	6.10	--	250	6.0	1.0	5.0	3.0	--	--	--	--	--
04/04/94	172.90	166.14	6.76	--	--	--	--	--	--	--	--	--	--	--
04/29/94	172.90	166.35	6.55	--	--	--	--	--	--	--	--	--	--	--
06/13/94	172.90	166.12	6.78	--	670	35	3.5	43	3.9	0.8	16	14	47	--
06/30/94	172.90	166.06	6.84	--	--	--	--	--	--	--	--	--	--	--
07/28/94	172.90	166.03	6.87	--	--	--	--	--	--	--	--	--	--	--
08/31/94	172.90	166.00	6.90	--	560	43	9.5	25	5.0	1.3	19	13	65	--
11/11/94	172.90	167.00	5.90	--	460	53	4.0	50	3.4	--	--	--	--	--
02/01/95	172.90	166.88	6.02	--	240	25	0.60	4.0	<0.5	--	--	--	--	--
05/18/95	172.90	166.82	6.08	--	580	42	1.0	53	2.6	--	--	--	--	--
08/22/95	172.90	166.52	6.38	--	840	73	1.2	110	1.6	--	--	--	--	--
11/01/95	172.90	166.40	6.50	--	350	36	<0.5	30	<0.5	--	--	--	--	15
01/26/96	172.90	166.85	6.05	--	210	23	<0.5	12	<0.5	--	--	--	--	4.7
05/08/96	172.90	166.50	6.40	--	310	42	2.3	56	1.1	--	--	--	--	52
10/03/96	173.53	166.61	6.92	--	240	31	<0.5	1.7	<0.5	--	--	--	--	18
02/04/97	173.53	167.02	6.51	--	200	9.9	<0.5	3.7	<0.5	--	--	--	--	16
04/30/97	173.53	166.64	6.89	--	260	11	<0.5	17	<0.5	--	--	--	--	13
07/22/97	173.53	166.49	7.04	--	170	5.0	<0.5	<0.5	<0.5	--	--	--	--	<2.5
11/03/97	173.53	166.55	6.98	--	230	13	<0.5	7.8	0.68	--	--	--	--	*
02/11/98	173.53	167.52	6.01	--	110	3.1	0.63	<0.5	<0.5	--	--	--	--	<2.5

* 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	Ground	Depth	Notes	Analytical results are in parts per billion (ppb)									
	Head Elev.	Water Elev.	To Water		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	1,2-DCE	TCE	DCFM	PCE	MTBE
MW-2														
10/29/93	173.91	166.05	7.86	--	5600	140	3.2	17	330	--	--	--	--	--
02/25/94	173.91	166.96	6.95	--	820	41	<0.5	17	5.0	--	--	--	--	--
04/04/94	173.91	166.18	7.73	--	--	--	--	--	--	--	--	--	--	--
04/29/94	173.91	166.23	7.68	--	--	--	--	--	--	--	--	--	--	--
06/13/94	173.91	166.20	7.71	--	1100	160	0.8	64	2.0	<0.5	0.9	<0.5	2.0	--
06/30/94	173.91	165.87	8.04	--	--	--	--	--	--	--	--	--	--	--
07/28/94	173.91	165.99	7.92	--	--	--	--	--	--	--	--	--	--	--
08/31/94	173.91	165.98	7.93	--	190	7.1	4.1	3.1	1.2	<0.5	1.1	<0.5	4.5	--
11/11/94	173.91	167.08	6.83	--	440	120	<1.0	18	<1.0	--	--	--	--	--
02/01/95	173.91	167.77	6.14	--	240	81	<1.0	<1.0	<1.0	--	--	--	--	--
05/18/95	173.91	166.91	7.00	--	330	74	<0.5	26	1.3	--	--	--	--	--
08/22/95	173.91	166.58	7.33	--	390	84	<1.0	2.1	<1.0	--	--	--	--	--
11/01/95	173.91	166.54	7.37	--	190	46	<0.5	1.6	<0.5	--	--	--	--	--
01/26/96	173.91	168.13	5.78	--	<50	13	<0.5	<0.5	<0.5	--	--	--	--	<2.5
05/08/96	173.91	166.76	7.15	--	<50	4.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
10/03/96	172.67	166.66	6.01	--	63	4.3	<0.5	<0.5	<0.5	--	--	--	--	<2.5
02/04/97	172.67	167.40	5.27	--	<50	1.6	<0.5	<0.5	<0.5	--	--	--	--	<2.5
04/30/97	172.67	166.74	5.93	--	<50	5.4	<0.5	0.80	<0.5	--	--	--	--	<2.5
07/22/97	172.67	166.53	6.14	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
11/03/97	172.67	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--
02/11/98	172.67	167.95	4.72	--	<50	0.52	0.63	<0.5	<0.5	--	--	--	--	<2.5

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	1,2-DCE	TCE	DCFM	PCE	MTBE
MW-3														
10/29/93	172.60	164.96	7.64	--	110	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
02/25/94	172.60	166.22	6.38	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
04/04/94	172.60	165.21	7.39	--	--	--	--	--	--	--	--	--	--	--
04/29/94	172.60	165.62	6.98	--	--	--	--	--	--	--	--	--	--	--
06/13/94	172.60	165.15	7.45	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	220	--
06/30/94	172.60	165.05	7.55	--	--	--	--	--	--	--	--	--	--	--
07/28/94	172.60	164.93	7.67	--	--	--	--	--	--	--	--	--	--	--
08/31/94	172.60	164.81	7.79	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	320	--
11/11/94	172.60	165.73	6.87	Sampled biannually	--	--	--	--	--	--	--	--	--	--
02/01/95	172.60	167.03	5.57	--	89	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
05/18/95	172.60	165.79	6.81	--	--	--	--	--	--	--	--	--	--	--
08/22/95	172.60	165.35	7.25	--	190	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
11/01/95	172.60	165.70	6.90	--	--	--	--	--	--	--	--	--	--	--
01/26/96	172.60	167.35	5.25	--	160	<2.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
05/08/96	172.60	165.55	7.05	--	--	--	--	--	--	--	--	--	--	--
10/03/96	170.47	165.29	5.18	--	150	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
02/04/97	170.47	166.27	4.20	--	88	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
04/30/97	170.47	165.37	5.10	--	--	--	--	--	--	--	--	--	--	--
07/22/97	170.47	165.15	5.32	--	180	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
11/03/97	170.47	165.12	5.35	--	--	--	--	--	--	--	--	--	--	--
02/11/98	170.47	167.47	3.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Notes	Analytical results are in parts per billion (ppb)									
	Head Elev.	Water Elev.	To Water		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	1,2-DCE	TCE	DCFM	PCE	MTBE
MW-4														
10/29/93	170.68	165.18	5.50	--	640	6.7	3.3	0.6	6.7	--	--	--	--	--
02/25/94	170.68	165.86	4.82	--	450	20	0.8	12	6.0	--	--	--	--	--
04/04/94	170.68	165.23	5.45	--	--	--	--	--	--	--	--	--	--	--
04/29/94	170.68	165.45	5.23	--	--	--	--	--	--	--	--	--	--	--
06/13/94	170.68	165.14	5.54	--	1700	130	1.4	100	11	22	59	13	180	--
06/30/94	170.68	165.13	5.55	--	--	--	--	--	--	--	--	--	--	--
07/28/94	170.68	165.06	5.62	--	--	--	--	--	--	--	--	--	--	--
08/31/94	170.68	165.00	5.68	--	800	17	3.5	9.3	4.4	25	53	22	510	--
11/11/94	170.68	165.46	5.22	--	500	26	<0.5	30	4.3	--	--	--	--	--
02/01/95	170.68	165.12	5.56	--	1600	180	<2.0	31	42	--	--	--	--	--
05/18/95	170.68	165.70	4.98	--	1300	130	<2.0	140	5.5	--	--	--	--	--
08/22/95	170.68	165.35	5.33	--	970	50	<1.2	75	<1.2	--	--	--	--	--
11/01/95	170.68	165.28	5.40	--	320	3.3	<0.5	4.1	<0.5	--	--	--	--	27
01/26/96	170.68	166.40	4.28	--	1400	65	<2.5	98	71	--	--	--	--	100
05/08/96	170.68	165.33	5.35	--	610	28	1.2	58	4.4	--	--	--	--	70
10/03/96	171.70	165.48	6.22	--	210	4.2	<0.5	<0.5	<0.5	--	--	--	--	12
02/04/97	171.70	166.57	5.13	--	60	4.4	<0.5	<0.5	<0.5	--	--	--	--	--
04/30/97	171.70	165.60	6.10	--	870	49	<2.0	100	<2.0	--	--	--	--	18
07/22/97	171.70	165.36	6.34	--	420	16	<0.5	23	<0.5	--	--	--	--	9.4
11/03/97	171.70	165.35	6.35	--	370	6.1	0.54	10	7.6	--	--	--	--	30
02/11/98	171.70	167.16	4.54	--	<50	2.0	0.58	<0.5	<0.5	--	--	--	--	<2.5

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	1,2-DCE	TCE	DCFM	PCE	MTBE
TRIP BLANK														
02/25/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
06/13/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
08/31/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
11/11/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
02/01/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
05/18/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
08/22/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
11/01/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/26/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
05/08/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
10/03/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
02/04/97	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
04/30/97	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
07/22/97	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5
02/11/98	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<2.5

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on November 1, 1994.
 Earlier field data and analytical results are drawn from the September 27, 1994 Groundwater Technology, Inc. report.
 New survey information drawn from the October 11, 1996 Ron Archer Civil Engineer Inc. report.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons
 1,2-DCE = 1,2-Dichloroethene
 TCE = Trichloroethene
 DCFM = Dichlorodifluoromethane
 PCE = Tetrachloroethene
 MTBE = Methyl t-Butyl Ether

Analytical Appendix



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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-4930/980211-H2 Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802717-01	Sampled: 02/11/98 Received: 02/12/98 Analyzed: 02/23/98 Reported: 03/02/98
--	---	---

QC Batch Number: GC022398BTEX04A
Instrument ID: GCHP4

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	110
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	3.1
Toluene	0.50	0.63
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	104

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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

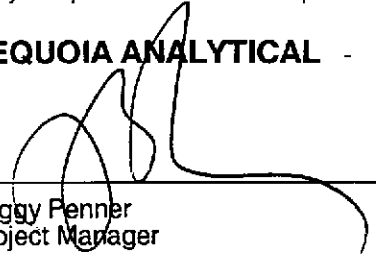
Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Chevron 9-4930/980211-H2 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802717-02	Sampled: 02/11/98 Received: 02/12/98 Analyzed: 02/23/98 Reported: 03/02/98
--	---	---

QC Batch Number: GC022398BTEX04A
Instrument ID: GCHP4

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	0.52
Toluene	0.50	0.63
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	81

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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100


Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-4930/980211-H2 Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802717-03	Sampled: 02/11/98 Received: 02/12/98 Analyzed: 02/23/98 Reported: 03/02/98
--	---	---

QC Batch Number: GC022398BTEX04A
Instrument ID: GCHP4

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	Control Limits %	% Recovery
Trifluorotoluene	70 130	81

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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-4930/980211-H2 Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802717-04	Sampled: 02/11/98 Received: 02/12/98 Analyzed: 02/23/98 Reported: 03/02/98
--	---	---

QC Batch Number: GC022398BTEX04A
Instrument ID: GCHP4

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	2.0
Toluene	0.50	0.58
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	83

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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-4930/980211-H2 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9802717-05	Sampled: 02/11/98 Received: 02/12/98 Analyzed: 02/23/98 Reported: 03/02/98
Attention: Fran Thie		

QC Batch Number: GC022398BTEX04A
Instrument ID: GCHP4

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	Control Limits %	% Recovery
Trifluorotoluene	70 130	81

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 Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Chevron 9-4930 / 980211-H2
Matrix: Liquid

Work Order #: 9802717 -01-05

Reported: Mar 5, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC022398802004A	GC022398802004A	GC022398802004A	GC022398802004A	GC022398802004A
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:	S.L.	S.L.	S.L.	S.L.	S.L.
MS/MSD #:	98020546	98020546	98020546	98020546	-
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	-
Prepared Date:	2/23/98	2/23/98	2/23/98	2/23/98	-
Analyzed Date:	2/23/98	2/23/98	2/23/98	2/23/98	-
Instrument I.D.#:	GC4	GC4	GC4	GC4	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	-
Result:	19.8	20.7	21.5	64.7	-
MS % Recovery:	99	104	108	108	-
Dup. Result:	19.8	20.8	21.8	65.6	-
MSD % Recov.:	99	104	109	109	-
RPD:	0.0	0.48	1.4	1.4	-
RPD Limit:	0-25	0-25	0-25	0-25	-

LCS #:	LCS022398	LCS022398	LCS022398	LCS022398	LCS022398
Prepared Date:	2/23/98	2/23/98	2/23/98	2/23/98	2/23/98
Analyzed Date:	2/23/98	2/23/98	2/23/98	2/23/98	2/23/98
Instrument I.D.#:	GC4	GC4	GC4	GC4	GC4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 µg/L
LCS Result:	18.6	19.4	20.5	62	450
LCS % Recov.:	93	97	103	103	90

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
Elap #2142

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

9802717.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

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 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 9-4930/980211-H2

Received: 02/12/98

Lab Proj. ID: 9802717

Reported: 03/02/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 8 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL


Peggy Renner
Project Manager



Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

Project #: 980211-H2	Station #: 9-4930
Sampler: MH	Date: 2/11/98
Well I.D.: MW-1	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth: 18.36	Depth to Water: 6.01
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 Sampling Method: Bailer
 Disposable Bailer Disposable Bailer
 Middleburg Extraction Port
 Electric Submersible Other: _____
 Extraction Pump
 Other: _____

<u>1.9</u>	x	<u>3</u>	=	<u>5.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1237	65.0	7.7	1200	2	
1241	65.8	7.5	1000	4	
1245	65.8	7.5	1000	6	

Did well dewater? Yes No Gallons actually evacuated: 6

Sampling Time: 1248 Sampling Date: 2/11

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 #: 980211-H2	Station #: 9-4930
Sampler: MH	Date: 2/11/98
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 16.94	Depth to Water: 4.72
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 ² * 0.163

Purge Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer Middleburg <input type="checkbox"/> Electric Submersible Extraction Pump Other: _____	Sampling Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Other: _____
--	--

1.8	x	3	=	54	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1204	65.0	7.7	1100	2	
1206	65.2	7.8	1100	4	
1208	65.6	7.6	1100	6	

Did well dewater? Yes <input checked="" type="checkbox"/> No	Gallons actually evacuated: 6
Sampling Time: 1212	Sampling Date: 2/11
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

CHEVRON WELL MONITORING DATA SHEET

Project #: 980211-H2	Station #: 9-4930
Sampler: MH	Date: 2/11/98
Well I.D.: MW-3	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: 17.45	Depth to Water: 3.00
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: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Middleburg <input type="checkbox"/> Electric Submersible <input type="checkbox"/> Extraction Pump Other: _____	Sampling Method: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port Other: _____
--	---

$\frac{2.2}{1 \text{ Case Volume (Gals.)}} \times \frac{3}{\text{Specified Volumes}} = \frac{6.6}{\text{Calculated Volume}} \text{ Gals.}$
--

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1218	61.6	7.7	1100	2.5	
1223	63.8	7.6	1100	5.0	
1228	64.0	7.6	1100	7.5	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: 7.5
Sampling Time: 1230	Sampling Date: 2/11
Sample I.D.: MW-3	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: _____ mg/L Post-purge: _____ mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV Post-purge: _____ mV

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>980211-42</u>	Station #: <u>9-4930</u>
Sampler: <u>MH</u>	Date: <u>2/11/98</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>17.90</u>	Depth to Water: <u>4.54</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 ² * 0.163

Purge Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Other: _____
--	---

<u>2.0</u>	x	<u>3</u>	=	<u>6.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1259</u>	<u>65.0</u>	<u>8.0</u>	<u>600</u>	<u>2</u>	
<u>1304</u>	<u>65.8</u>	<u>7.6</u>	<u>520</u>	<u>4</u>	
<u>1309</u>	<u>66.0</u>	<u>7.5</u>	<u>500</u>	<u>6</u>	

Did well dewater? Yes <input type="checkbox"/> <u>No</u> <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>6</u>
Sampling Time: <u>1311</u>	Sampling Date: <u>2/11</u>
Sample I.D.: <u>MW-4</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: _____ mg/L Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV Post-purge: _____ mV