

ENVIRONMENTAL
PROTECTION



Chevron

99 MAR -3 PM 3:25

March 2, 1999

Chevron Products Company
6001 Bollinger Canyon Road
Building L, Room 1110
PO Box 6004
San Ramon, CA 94583-0904

Ms. Susan Hugo
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

**Re: Chevron Service Station #9-1740
9550 Moraga Avenue
Oakland, California**

Dear Ms. Hugo:

Enclosed is the Fourth Quarter Groundwater Monitoring report for 1998 prepared by our consultant Blaine Tech Services Inc. for the above noted facility. Ground water samples were analyzed for TPH-g, BTEX, and MtBE constituents.

Monitoring wells C-2 and C-4 showed an increase in the benzene constituent from the previous sampling event while well C-3 was below method detection limits for all the constituents. EPA Method 8260 confirmed MtBE in wells C-2 and C-4.

The depth to groundwater varied from 4.80 feet to 6.55 feet below grade with a direction of flow southeasterly.

Chevron believes that residual petroleum hydrocarbons remain around wells C-2 and C-4, which continue to leach into the groundwater. Therefore, Chevron will introduce Oxygen Releasing Compound's (ORC's) into both wells within the next thirty days. This is expected to assist in the natural attenuation process.

Chevron also proposes that the monitoring frequency for well C-3 be changed to annually (1st quarter) and wells C-2 and C-4 to semi-annually (1st and 3rd quarters). This frequency change will be initiated after the next sampling event.

Well C-3 is upgradient of the tanks and pump islands and continued quarterly sampling will not add any additional information to the sampling events. No TPH-g and BTEX constituents have been detected in the last twelve sampling events. MtBE has only been

March 2, 1999
Ms. Susan Hugo
Chevron Service Station #9-1740
Page 2

detected in one of nine sampling events at less than 5.0 ppb. Chevron would continue to measure this well for water depth to establish ground water gradient for the site. Reducing the sampling frequency for wells C-2 and C-4 will not compromise the sampling program.

If you have any questions or comments in introducing ORC's or changing the monitoring frequency, call me within thirty days at (925) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY



Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Mr. Bill Scudder, Chevron

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

BLAINE
TECH SERVICES INC.



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

February 23, 1999

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

4th Quarter 1998 Monitoring at 9-1740

Fourth Quarter 1998 Groundwater Monitoring at
Chevron Service Station Number 9-1740
6550 Moraga Avenue
Oakland, CA

Monitoring Performed on December 29, 1998

Groundwater Sampling Report 981229-Z-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,



Christine Lillie
Project Coordinator

FPT/sb

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

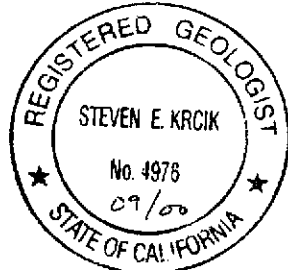
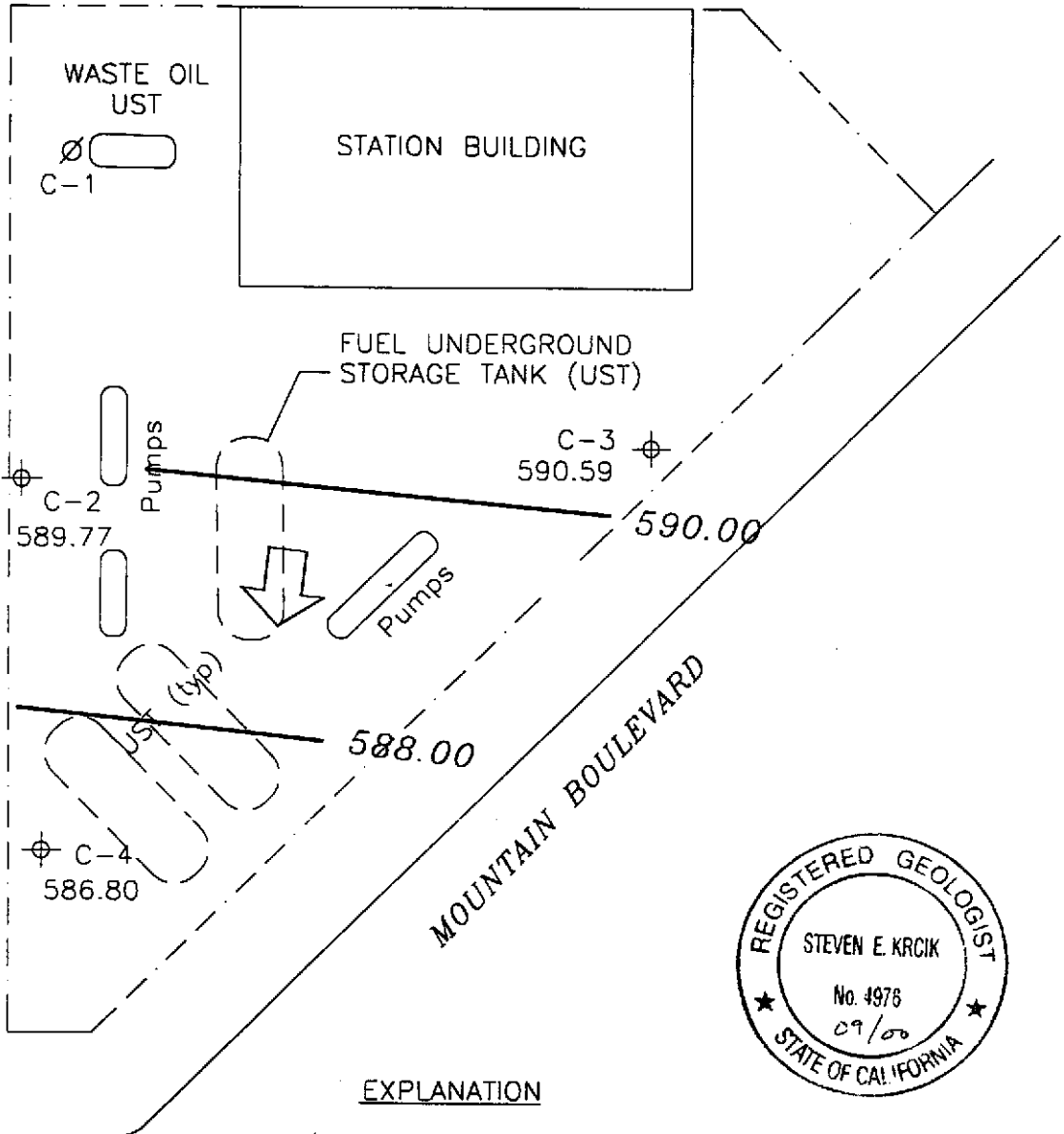
Professional Engineering Appendix



SCALE (ft)



MORAGA AVENUE



EXPLANATION

- MONITORING WELL
- ABANDONED MONITORING WELL
- 586.80 GROUNDWATER ELEVATION (FT, MSL)
- 590.00 — GROUNDWATER ELEVATION CONTOUR (FT, MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION;
APPROXIMATE GRADIENT = 0.05

Basemap from Cambria Environmental Technology, Inc.

PREPARED BY

RRM
engineering contracting firm

Chevron Station 9-1740
6550 Moraga Avenue
Oakland, California

**GROUNDWATER ELEVATION CONTOUR MAP,
DECEMBER 29, 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	MTBE
C-1										
03/25/91	595.82	592.54	3.28	--	54	0.7	<0.5	<0.5	2.0	--
07/01/91	595.82	592.39	3.43	--	730	250	3.0	16	4.8	--
09/25/91	595.82	591.67	4.15	--	160	68	1.3	6.1	1.3	--
12/23/91	595.82	592.11	3.71	--	170	70	1.6	3.5	2.4	--
03/24/92	595.82	592.80	3.02	--	60	39	4.4	3.9	9.1	--
06/23/92	595.82	592.06	3.76	--	60	19	1.1	1.1	1.0	--
NO LONGER MONITORED OR SAMPLED										
C-2										
03/25/91	594.57	571.68	22.89	--	<50	1.0	<0.5	<0.5	2.0	--
07/01/91	594.57	587.20	7.37	--	660	190	2.5	28	22	--
09/25/91	594.57	587.59	6.98	--	110	200	1.9	21	1.7	--
12/23/91	594.57	589.56	5.01	--	<50	1.2	1.2	<0.5	1.8	--
03/24/92	594.57	577.30	17.27	--	100	5.9	7.9	4.0	14	--
06/23/92	594.57	590.75	3.82	--	190	45	4.5	9.5	10	--
09/30/92	594.57	580.56	14.01	--	240	99	2.3	11	6.1	--
12/16/92	594.57	580.05	14.52	--	280	160	6.2	7.4	5.0	--
03/30/93	594.57	583.49	11.08	--	110	21	<0.5	0.8	<1.5	--
06/10/93	594.57	583.08	11.49	--	180	53	2.6	8.0	5.8	--
09/02/93	594.57	580.49	14.08	--	51	18	0.8	4.4	<1.5	--
12/06/93	594.57	579.87	14.70	--	<50	20	1.3	2.7	<0.5	--
03/02/94	594.57	579.70	14.87	--	<50	9.9	1.6	<0.5	0.8	--
06/03/94	594.57	579.35	15.22	--	440	300	2.7	61	2.1	--
09/07/94	594.57	587.27	7.30	--	80	30	<0.5	1.6	<0.5	--
12/06/94	594.57	589.29	5.28	--	120	51	<0.5	4.7	<0.5	--
03/31/95	594.57	589.13	5.44	--	770	250	<5.0	74	<5.0	--
06/15/95	594.57	589.62	4.95	--	240	76	<1.0	26	<1.0	--
09/25/95	594.57	587.78	6.79	--	<50	1.2	<0.5	<0.5	<0.5	--
12/19/95	594.57	588.94	5.63	--	<250	23	<2.5	<2.5	<2.5	860
03/31/97	594.57	589.74	4.83	--	<500	48	<5.0	<5.0	<5.0	2900
06/23/97	594.57	589.98	4.59	--	1200	240	<10	<10	<10	4900

CONTINUED ON NEXT PAGE

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	MTBE
C-2 (CONT'D)										
09/02/97	594.57	590.02	4.55	--	1400	340	<5.0	54	6.9	2500
12/15/97	594.57	590.26	4.31	--	540	100	<2.5	8.7	<2.5	2400
03/10/98	594.57	590.00	4.57	--	<500	<5.0	<5.0	<5.0	<5.0	3000
06/16/98	594.57	589.99	4.58	--	120	6.6	<1.0	<1.0	<1.0	2500
08/25/98	594.57	589.67	4.90	--	140	<0.5	<0.5	<0.5	<0.5	2600
12/29/98	594.57	589.77	4.80	--	1830	17.7	<10.0	<10.0	14.9	4600
12/29/98	594.57	589.77	4.80	Confirmation Run	--	--	--	--	--	4890
C-3										
03/25/91	597.14	591.98	5.16	--	<50	<0.5	<0.5	<0.5	0.5	--
07/01/91	597.14	591.30	5.84	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/25/91	597.14	591.20	5.94	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/23/91	597.14	591.20	5.94	--	<50	1.0	<0.5	<0.5	1.5	--
03/24/92	597.14	592.37	4.77	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/23/92	597.14	591.47	5.67	--	<50	0.9	1.1	0.5	1.6	--
09/30/92	597.14	590.84	6.30	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	597.14	591.57	5.57	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/30/93	597.14	592.08	5.06	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/10/93	597.14	591.85	5.29	--	<50	0.6	1.9	0.6	3.5	--
09/02/93	597.14	591.22	5.92	--	<50	<0.5	<0.5	<0.5	<1.5	--
12/06/93	597.14	591.38	5.76	--	<50	<0.5	0.6	<0.5	<0.5	--
03/02/94	597.14	591.97	5.17	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/03/94	597.14	591.74	5.40	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/07/94	597.14	591.14	6.00	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/06/94	597.14	591.95	5.19	--	<50	<0.5	0.8	<0.5	<0.5	--
03/31/95	597.14	592.04	5.10	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/15/95	597.14	591.78	5.36	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/25/95	597.14	591.04	6.10	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	597.14	591.46	5.68	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

CONTINUED ON NEXT PAGE

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	MTBE
C-3(CONT'D)										
03/31/97	597.14	590.65	6.49	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/23/97	597.14	590.63	6.51	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/02/97	597.14	591.07	6.07	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/15/97	597.14	590.86	6.28	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/10/98	597.14	590.89	6.25	--	<50	<0.5	<0.5	<0.5	<0.5	3.5
06/16/98	597.14	590.80	6.34	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/25/98	597.14	590.61	6.53	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
12/29/98	597.14	590.59	6.55	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0

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	MTBE
C-4										
03/25/91	593.10	588.65	4.45	--	2700	240	16	<0.5	350	--
07/01/91	593.10	587.77	5.33	--	7900	1500	230	340	350	--
09/25/91	593.10	587.60	5.50	--	3200	850	160	150	220	--
12/23/91	593.10	588.18	4.92	--	4100	390	52	42	340	--
03/24/92	593.10	589.06	4.19	Free Product (0.19')	--	--	--	--	--	--
06/23/92	593.10	588.43	4.91	Free Product (0.30')	--	--	--	--	--	--
09/30/92	593.10	584.44	8.66	--	450	97	14	12	29	--
12/16/92	593.10	583.30	9.80	--	590	130	18	5.6	29	--
03/30/93	593.10	583.20	10.00	Free Product (0.12')	--	--	--	--	--	--
06/10/93	593.10	583.46	9.64	--	1300	290	36	17	73	--
09/02/93	593.10	583.02	10.08	--	630	97	12	6.6	21	--
12/06/93	593.10	582.85	10.25	--	1900	600	68	27	130	--
03/02/94	593.10	584.36	8.74	--	2600	1200	110	43	180	--
06/03/94	593.10	583.27	9.83	--	780	180	13	8.5	26	--
09/07/94	593.10	582.80	10.30	--	<50	14	<0.5	0.7	<0.5	--
12/06/94	593.10	583.90	9.20	--	980	270	21	12	38	--
03/31/95	593.10	582.86	10.24	--	1500	450	25	11	49	--
06/15/95	593.10	582.78	10.32	--	960	250	15	4.5	37	--
09/25/95	593.10	584.72	8.38	--	<500	18	<5.0	<5.0	<5.0	--
12/19/95	593.10	582.94	10.16	--	<500	32	<5.0	<5.0	<5.0	2400
03/31/97	593.10	588.42	4.68	--	3400	960	51	64	140	2100
06/23/97	593.10	588.36	4.74	--	1600	580	19	8.2	27	2300
09/02/97	593.10	588.33	4.77	--	6900	1400	59	130	410	3100
12/15/97	593.10	588.60	4.50	--	3300	1200	37	74	130	3700
03/10/98	593.10	588.92	4.18	--	1100	250	19	13	62	4000
06/16/98	593.10	586.53	6.57	--	1200	350	<10	12	39	4500
08/25/98	593.10	586.30	6.80	--	290	24	0.72	0.87	1.9	3600
12/29/98	593.10	586.80	6.30	--	3190	957	<25	<25	<25	8100
12/29/98	593.10	586.80	6.30	Confirmation Run	--	--	--	--	--	8500

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	MTBE
TRIP BLANK										
03/25/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/01/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/25/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/23/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/24/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/23/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/30/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/30/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/10/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/02/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
12/06/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/02/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/03/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/07/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/06/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/31/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/15/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/25/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/31/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/23/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/02/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/15/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/10/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/16/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/25/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
12/29/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on March 31, 1995.

Earlier field data and analytical results provided by Sierra Environmental.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl t-Butyl Ether

Analytical Appendix



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

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(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

January 15, 1999

Christine Lillie
Blaine Tech/Chevron
1680 Rogers Ave.
San Jose, CA 95112

RE: Chevron/P901010

Dear Christine Lillie

Enclosed are the results of analyses for sample(s) received by the laboratory on December 31, 1998. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Sakai
Project Manager

CA ELAP Certificate Number 2245





Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

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Blaine Tech/Chevron
1680 Rogers Ave.
San Jose, CA 95112

Project: Chevron
Project Number: 9-1740/981229-Z2
Project Manager: Christine Lillie

Sampled: 12/29/98
Received: 12/31/98
Reported: 1/15/99

ANALYTICAL REPORT FOR P901010

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
C-2	P901010-01	Water	12/29/98
C-3	P901010-02	Water	12/29/98
C-4	P901010-03	Water	12/29/98
TB	P901010-04	Water	12/29/98





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiger Lane
819 Striker Avenue, Suite 8
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Blaine Tech/Chevron 1680 Rogers Ave. San Jose, CA 95112	Project: Chevron Project Number: 9-1740/981229-Z2 Project Manager: Christine Lillie	Sampled: 12/29/98 Received: 12/31/98 Reported: 1/15/99
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Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
				<u>P901010-01</u>		<u>Water</u>		
C-2								
Gasoline	9010074	1/6/99	1/6/99		1000	1830	ug/l	
Benzene	"	"	"		10.0	17.7	"	
Toluene	"	"	"		10.0	ND	"	
Ethylbenzene	"	"	"		10.0	ND	"	
Xylenes (total)	"	"	"		10.0	14.9	"	
Methyl tert-butyl ether	"	"	"		40.0	4600	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	65.0-135		105	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		93.3	"	
				<u>P901010-02</u>		<u>Water</u>		
C-3								
Gasoline	9010074	1/6/99	1/6/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	65.0-135		109	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		98.7	"	
				<u>P901010-03</u>		<u>Water</u>		
C-4								
Gasoline	9010074	1/6/99	1/6/99		2500	3190	ug/l	
Benzene	"	"	"		25.0	957	"	
Toluene	"	"	"		25.0	ND	"	
Ethylbenzene	"	"	"		25.0	ND	"	
Xylenes (total)	"	"	"		25.0	ND	"	
Methyl tert-butyl ether	"	"	"		100	8100	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	65.0-135		108	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		95.7	"	
				<u>P901010-04</u>		<u>Water</u>		
TB								
Gasoline	9010074	1/6/99	1/6/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	65.0-135		107	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		98.0	"	





Blaine Tech/Chevron 1680 Rogers Ave. San Jose, CA 95112	Project: Chevron Project Number: 9-1740/981229-Z2 Project Manager: Christine Lillie	Sampled: 12/29/98 Received: 12/31/98 Reported: 1/15/99
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**Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
C-2				<u>P901010-01</u>			<u>Water</u>	
Methyl tert-butyl ether	9010082	1/7/99	1/7/99		100	4890	ug/l	
Surrogate: Dibromofluoromethane	"	"	"	86.0-118		101	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	80.0-120		102	"	
Surrogate: Toluene-d8	"	"	"	88.0-110		102	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	86.0-115		99.4	"	
C-4				<u>P901010-03</u>			<u>Water</u>	
Methyl tert-butyl ether	9010082	1/7/99	1/7/99		250	8500	ug/l	
Surrogate: Dibromofluoromethane	"	"	"	86.0-118		101	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	80.0-120		103	"	
Surrogate: Toluene-d8	"	"	"	88.0-110		105	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	86.0-115		102	"	





Blaine Tech/Chevron 1680 Rogers Ave. San Jose, CA 95112	Project: Chevron Project Number: 9-1740/981229-Z2 Project Manager: Christine Lillie	Sampled: 12/29/98 Received: 12/31/98 Reported: 1/15/99
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**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9010074		Date Prepared: 1/6/99			Extraction Method: EPA 5030 waters					
Blank		9010074-BLK1								
Gasoline	1/6/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.00				
Surrogate: a,a,a-Trifluorotoluene	"	300		347	"	65.0-135	116			
Surrogate: 4-Bromofluorobenzene	"	300		303	"	65.0-135	101			
LCS		9010074-BS1								
Benzene	1/6/99	100		115	ug/l	65.0-135	115			
Toluene	"	100		112	"	65.0-135	112			
Ethylbenzene	"	100		107	"	65.0-135	107			
Xylenes (total)	"	300		333	"	65.0-135	111			
Surrogate: a,a,a-Trifluorotoluene	"	300		357	"	65.0-135	119			
Matrix Spike		9010074-MS1		P901010-02						
Benzene	1/6/99	100	ND	109	ug/l	65.0-135	109			
Toluene	"	100	ND	110	"	65.0-135	110			
Ethylbenzene	"	100	ND	104	"	65.0-135	104			
Xylenes (total)	"	300	ND	324	"	65.0-135	108			
Surrogate: a,a,a-Trifluorotoluene	"	300		313	"	65.0-135	104			
Matrix Spike Dup		9010074-MSD1		P901010-02						
Benzene	1/6/99	100	ND	107	ug/l	65.0-135	107	20.0	1.85	
Toluene	"	100	ND	107	"	65.0-135	107	20.0	2.76	
Ethylbenzene	"	100	ND	102	"	65.0-135	102	20.0	1.94	
Xylenes (total)	"	300	ND	318	"	65.0-135	106	20.0	1.87	
Surrogate: a,a,a-Trifluorotoluene	"	300		316	"	65.0-135	105			





Blaine Tech/Chevron 1680 Rogers Ave. San Jose, CA 95112	Project: Chevron Project Number: 9-1740/981229-Z2 Project Manager: Christine Lillie	Sampled: 12/29/98 Received: 12/31/98 Reported: 1/15/99
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**Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9010082			Date Prepared: 1/6/99			Extraction Method: EPA 5030 waters				
Blank			9010082-BLK1							
Methyl tert-butyl ether	1/6/99			ND	ug/l	1.00				
Surrogate: Dibromofluoromethane	"	5.00		4.95	"	86.0-118	99.0			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		4.95	"	80.0-120	99.0			
Surrogate: Toluene-d8	"	5.00		5.22	"	88.0-110	104			
Surrogate: 4-Bromofluorobenzene	"	5.00		5.09	"	86.0-115	102			
Blank			9010082-BLK2							
Methyl tert-butyl ether	1/7/99			ND	ug/l	1.00				
Surrogate: Dibromofluoromethane	"	5.00		4.71	"	86.0-118	94.2			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		4.81	"	80.0-120	96.2			
Surrogate: Toluene-d8	"	5.00		4.74	"	88.0-110	94.8			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.63	"	86.0-115	92.6			
Blank			9010082-BLK3							
Methyl tert-butyl ether	1/8/99			ND	ug/l	1.00				
Surrogate: Dibromofluoromethane	"	5.00		4.76	"	86.0-118	95.2			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		4.78	"	80.0-120	95.6			
Surrogate: Toluene-d8	"	5.00		5.09	"	88.0-110	102			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.91	"	86.0-115	98.2			
LCS			9010082-BS1							
Surrogate: Dibromofluoromethane	1/6/99	5.00		5.04	ug/l	86.0-118	101			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.14	"	80.0-120	103			
Surrogate: Toluene-d8	"	5.00		5.09	"	88.0-110	102			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.92	"	86.0-115	98.4			
LCS			9010082-BS2							
Surrogate: Dibromofluoromethane	1/7/99	5.00		5.06	ug/l	86.0-118	101			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.22	"	80.0-120	104			
Surrogate: Toluene-d8	"	5.00		5.02	"	88.0-110	100			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.95	"	86.0-115	99.0			
LCS			9010082-BS3							
Surrogate: Dibromofluoromethane	1/8/99	5.00		4.73	ug/l	86.0-118	94.6			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.04	"	80.0-120	101			
Surrogate: Toluene-d8	"	5.00		4.89	"	88.0-110	97.8			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.69	"	86.0-115	93.8			
Matrix Spike			9010082-MS1		P901028-04					
Surrogate: Dibromofluoromethane	1/6/99	5.00		5.04	ug/l	86.0-118	101			





Blaine Tech/Chevron 1680 Rogers Ave. San Jose, CA 95112	Project: Chevron Project Number: 9-1740/981229-Z2 Project Manager: Christine Lillie	Sampled: 12/29/98 Received: 12/31/98 Reported: 1/15/99
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**Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)		9010082-MS1	P901028-04							
Surrogate: 1,2-Dichloroethane-d4	1/6/99	5.00		5.38	ug/l	80.0-120	108			
Surrogate: Toluene-d8	"	5.00		5.24	"	88.0-110	105			
Surrogate: 4-Bromofluorobenzene	"	5.00		5.15	"	86.0-115	103			
Matrix Spike Dup		9010082-MSD1	P901028-04							
Surrogate: Dibromofluoromethane	1/7/99	5.00		5.39	ug/l	86.0-118	108			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.55	"	80.0-120	111			
Surrogate: Toluene-d8	"	5.00		5.30	"	88.0-110	106			
Surrogate: 4-Bromofluorobenzene	"	5.00		5.15	"	86.0-115	103			





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Blaine Tech/Chevron 1680 Rogers Ave. San Jose, CA 95112	Project: Chevron Project Number: 9-1740/981229-Z2 Project Manager: Christine Lillie	Sampled: 12/29/98 Received: 12/31/98 Reported: 1/15/99
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Notes and Definitions

#	Note
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference



Fax Copy of Lab Report and COC to Chevron Contact: Yes No

Chain-of-Custody-Record

Chevron Products Co. P.O. BOX 6004 San Ramon, CA 94583 FAX (925)842-8370	Chevron Facility Number <u>9-1740</u> Facility Address <u>6550 Moraga Ave., Oakland</u> Consultant Project Number <u>981229-72</u> Consultant Name <u>BLAINE TECH SERVICE, INC.</u> Address <u>1680. ROGERS AVE., SAN JOSE</u> Project Contact (Name) <u>CHRISTINE LILLIE</u> (Phone) <u>408-573-0555</u> (Fax Number) <u>408-573-7771</u>	Chevron Contact (Name) <u>PHIL BRIGGS</u> (Phone) <u>(925) 842-9136</u> Laboratory Name <u>SEQUOIA</u> Laboratory Service Order <u>9144488</u> Laboratory Service Code <u>ZZ02800</u> Samples Collected by (Name) <u>Jerry</u> Signature <u>[Signature]</u>
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Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Sample Preservation	Date/Time	State Method: <input type="checkbox"/> CA <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> KW Series <input type="checkbox"/> CO <input type="checkbox"/> UT													Remarks	
					BTEX/MTBE+TPH GAS (8020 + 8015)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oxygenates (8280)	Purgeable Halocarbons (8010)	Purgeable Organics (8260)	Extractable Organics (8270)	Oil and Grease (8520)	Metals (ICAP or AA) Cd,Cr,Pb,Zn,Ni	BTEX (8020)	BTEX/MTBE/Naph. (8020)	TPH - HCD	TPH-D Extended		Lab Sample No.
C-2	7	L	HCL	12/29 1430	X													X	P901010-01
C-3	3	↓	↓	1406	X														-02
C-4	7	↓	↓	1450	X													X	-03
TS	2	↓	↓	-	X														-04

COOLER CUSTODY SEALS INTACT NOT INTACT NA
 COOLER TEMPERATURE 6 °C

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>BTB</u>	Date/Time <u>12/30/98</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>12/30/98</u>	Iced Y/N	Turn Around Time (Circle Choice) <input type="checkbox"/> 24 hrs. <input type="checkbox"/> 48 hrs. <input type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days <input checked="" type="checkbox"/> As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>12/30</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Iced Y/N	
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>S. Adams</u>	Date/Time <u>12/6/11/25</u>	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>12/6/11/25</u>	Iced Y/N <input checked="" type="checkbox"/>	

Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

Project #: 981229-22	Station #: 9-1740
Sampler: JK	Date: 12-29-98
Well I.D.: C-2	Well Diameter: (2) 3 4 6 8
Total Well Depth: 26.85	Depth to Water: 4.80
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 <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: Bailer Disposable Bailer <input checked="" type="checkbox"/> Extraction Port Other: _____
--	---

3.5	x	3	=	10.5	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1420	71.0	6.9	1300	4	
1423	70.6	7.0	1300	8	
1426	70.2	6.9	1100	11	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: 11
Sampling Time: 1430	Sampling Date: 12-29-98
Sample I.D.: C-2	Laboratory: <u>Sequoia</u> CORE N. Creek Assoc. Labs
Analyzed for: <u>TPH-G BTEX MTBE</u> TPH-D	Other: <u>MTBE by 820 & 8260</u>
Duplicate I.D.:	Analyzed for: TPH-G BTEX MTBE TPH-D Other:
D.O. (if req'd):	Pre-purge: <input type="text"/> mg/L Post-purge: <input type="text"/> mg/L
O.R.P. (if req'd):	Pre-purge: <input type="text"/> mV Post-purge: <input type="text"/> mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 981229-22	Station #: 9-1740
Sampler: JK	Date: 12-29-98
Well I.D.: C-3	Well Diameter: (2) 3 4 6 8
Total Well Depth: 18.64	Depth to Water: 6.55
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: _____
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1.9	x	3	=	5.7	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1400	71.8	7.0	1100	3	
1402	71.6	7.0	1000	4	
1404	71.2	6.9	1000	6	

Did well dewater? Yes No Gallons actually evacuated: 6

Sampling Time: 1405 Sampling Date: 12-29-98

Sample I.D.: C-3 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
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O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
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CHEVRON WELL MONITORING DATA SHEET

Project #: 981229-22	Station #: 9-1740
Sampler: JK	Date: 12-29-98
Well I.D.: C-4	Well Diameter: (2) 3 4 6 8
Total Well Depth: 24.65	Depth to Water: 6.30
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: Bailer
 Disposable Bailer ✓
 Middleburg
 Electric Submersible
 Extraction Pump
 Other: _____

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

<u>2.9</u>	x	<u>3</u>	=	<u>8.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1441	70.8	7.1	1400	3	Odor, sheen
1444	70.6	7.0	1300	6	
1447	70.2	6.8	1200	9	

Did well dewater? Yes No Gallons actually evacuated: 9

Sampling Time: 1450 Sampling Date: 12-29-98

Sample I.D.: C-4 Laboratory: Sequoia CORE N. Creek Assoc. Labs

Analyzed for: TPH-G BTEX MTBE TPH-D Other: MTBE by 8020 t.8260

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