

ENVIRONMENTAL  
PROTECTION

00 MAY -4 AM 10: 03



**Chevron**

# 541

Chevron U.S.A. Products Company  
6001 Bollinger Canyon Rd. Bldg. L  
P. O. Box 5004  
San Ramon, CA 94583-0804

Site Assessment and  
Remediation Group  
Phone (510) 842-8250  
Fax (510) 842-8270

Date: 4-24-00  
To: Distribution  
Re: Groundwater Monitoring Report, 9-1851

The enclosed groundwater monitoring report has been properly reviewed by a Chevron authorized representative. Agency guidelines have been followed. Blaine Tech Services is authorized to distribute the report directly to interested parties.

If you have any questions, please call me at (510) 842-3695.

Sincerely,

Bret Hunter  
Site Assessment and Remediation  
Project Manager

**BLAINE**  
TECH SERVICES, INC.



1680 ROGERS AVENUE  
SAN JOSE, CA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE  
CONTRACTOR'S LICENSE #746684  
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April 24, 2000

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

### 1st Quarter 2000 Monitoring at 9-1851

First Quarter 2000 Groundwater Monitoring at  
Chevron Service Station Number 9-1851  
451 Hegenberger Rd.  
Oakland, CA

Monitoring Performed on March 1, 2000

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### Groundwater Sampling Report 000301-C-3

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,



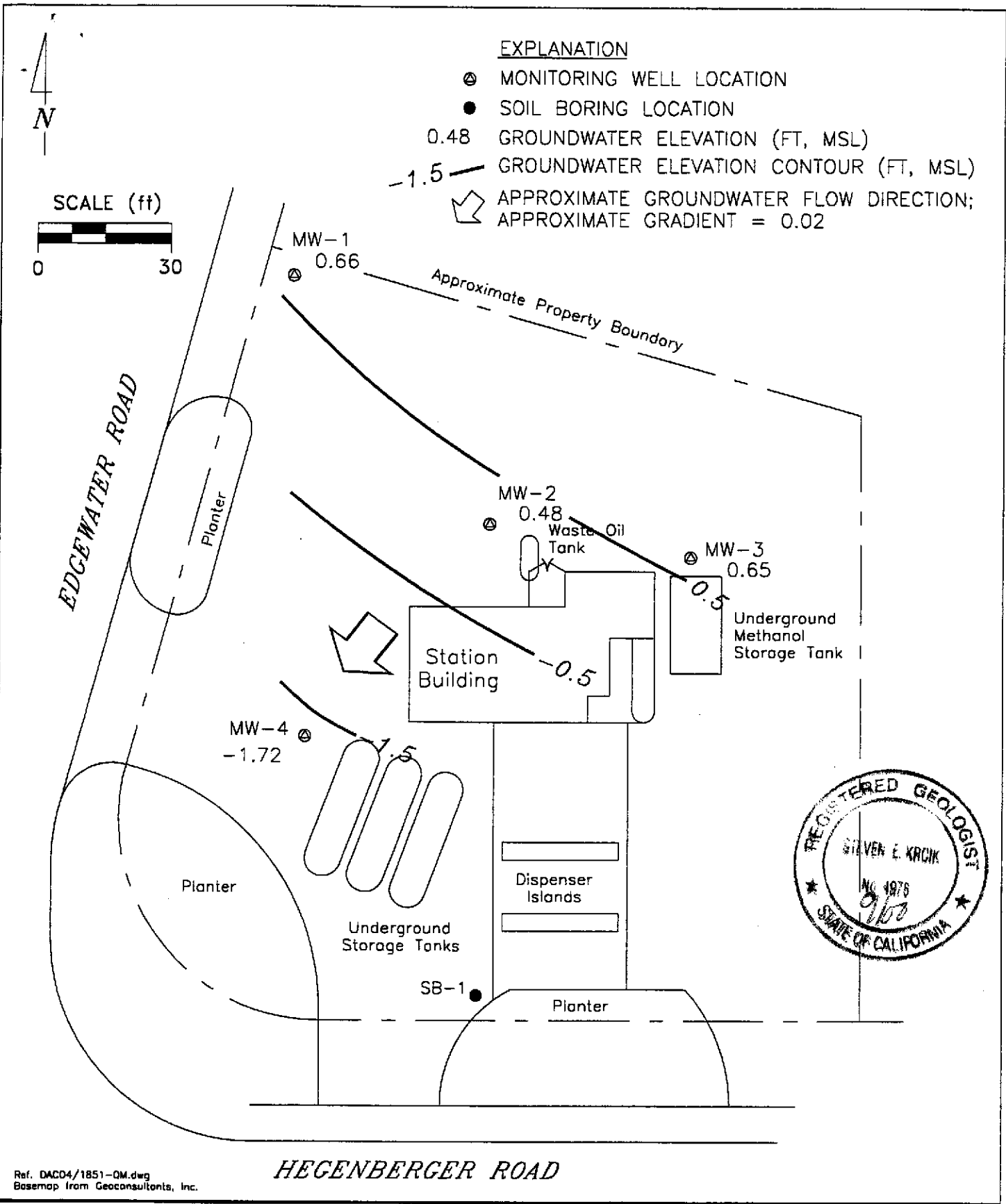
Scott Boor  
Project Coordinator

SDB/pb

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

cc: **Barney Chan, Alameda County Health Care Services, Dept. of  
Environmental Health**  
Ben Shimek  
Greg Gurss, Gettler-Ryan, Inc.

# **Professional Engineering Appendix**



PREPARED BY

**RRM**  
engineering contracting firm

**Chevron Station 9-1851**  
451 Hegenberger Road  
Oakland, California

**GROUNDWATER ELEVATION CONTOUR MAP,**  
MARCH 1, 2000

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	Benzene by (EPA 8240)	Xylene by (EPA 8240)	C-1,2- DCE	Carbon Disulfide	Vinyl Chloride	MTBE
<b>MW-1</b>																	
10/17/95	2.61	-1.51	4.12	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/29/96	2.61	-0.72	3.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	9.5
06/26/96	2.61	-1.23	3.84	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	46
09/25/96	2.61	-1.41	4.02	--	<250	<2.5	<2.5	<2.5	<2.5	--	--	--	--	--	--	--	940
12/17/96	2.61	-0.96	3.57	--	<50	0.86	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	260
03/20/97	2.61	-1.54	4.15	--	<50	<2.0	<2.0	<2.0	<2.0	--	--	--	--	--	--	--	76
06/20/97	2.61	-1.72	4.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	64
09/09/97	2.61	-1.74	4.35	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	110
12/12/97	2.61	-0.39	3.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	27
02/19/98	2.61	0.78	1.83	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	14
06/23/98	2.61	-0.73	3.34	*	210	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	3400
08/31/98	2.61	-0.88	3.49	*	1400	630	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	16,000
12/29/98	2.61	-1.22	3.83	--	<500	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	1090
03/11/99	2.61	-0.43	3.04	*	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	33.9
06/24/99	2.61	-0.77	3.38	*	<500	65.7	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	1160
09/29/99	2.61	-1.01	3.62	--	81.7	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	1130
12/08/99	2.61	-1.46	4.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	233
03/01/00	2.61	0.66	1.95	--	100	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	37.9

\* See Table of Additional Analyses

### 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	Benzene by (EPA 8240)	Xylene by (EPA 8240)	C-1,2- DCE	Carbon Disulfide	Vinyl Chloride	MTBE
<b>MW-2</b>																	
10/17/95	3.51	-1.82	5.33	*	170	3.5	<0.5	1.0	6.1	<5000	1600**	--	--	11	--	--	--
03/29/96	3.51	-0.44	3.95	--	89	4.7	<0.5	0.64	0.74	--	3000**	11	2.5	17	--	5.4	21
06/26/96	3.51	-1.09	4.60	--	80	8.7	<0.5	1.2	1.3	--	2000**	11	<2.0	15	--	12	31
09/25/96	3.51	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--
12/17/96	3.51	-0.41	3.92	--	110	<0.5	<0.5	0.75	2.1	--	2400**	10	<2.0	2.3	--	5.5	27
03/20/97	3.51	-1.32	4.83	--	140	8.2	<2.0	<2.0	<2.0	--	3400**	--	--	<2.0	--	3.2	58
06/20/97	3.51	-1.53	5.04	--	62	7.7	<0.5	<0.5	<0.5	--	1600**	7.2	<2.0	4.6	2.2	5.2	38
09/09/97	3.51	-1.47	4.98	--	190	9.4	<0.5	<0.5	0.86	--	82**	11	<2.0	<2.0	<2.0	<2.0	48
12/12/97	3.51	-0.40	3.91	--	180	1.8	<0.5	<0.5	3.2	--	8500**	<2.0	<2.0	<2.0	<2.0	<2.0	34
02/19/98	3.51	0.55	2.96	--	<100	1.8	<1.0	<1.0	<1.0	--	3800**	<3.3	<3.3	<3.3	<3.3	<3.3	230
06/23/98	3.51	-0.54	4.05	***	60	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	55
08/31/98	3.51	-0.80	4.31	--	61	2.2	<0.5	<0.5	1.1	--	--	--	--	--	--	--	53
12/29/98	3.51	-1.12	4.63	--	54	1.32	<0.5	<0.5	0.752	--	--	--	--	--	--	--	38.1
03/11/99	3.51	-0.01	3.52	***	648	2.88	<2.0	<2.0	<2.0	--	--	--	--	--	--	--	73.2
06/24/99	3.51	-0.49	4.00	***	264	0.575	<0.5	1.01	<0.5	--	--	--	--	--	--	--	44.1
09/29/99	3.51	-0.93	4.44	--	54.3	0.662	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	35.7
12/08/99	3.51	-1.38	4.89	--	<50	1.27	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	56.9
03/01/00	3.51	0.48	3.03	--	68	1.57	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	110

\* Results of EPA 8010 test indicates that the detection of 1,1-Dichloroethane is 1.7 ppb.

\*\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\*\* See Table of Additional Analyses.



## 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	Benzene (EPA 8240)	Xylene (EPA 8240)	C-1,2-DCE	Carbon Disulfide	Vinyl Chloride	MTBE
<b>MW-3</b>																	
10/17/95	3.08	-1.34	4.42	***	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/29/96	3.08	0.08	3.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	26
06/26/96	3.08	-0.52	3.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	47
09/25/96	3.08	-1.06	4.14	--	<125	<1.2	<1.2	<1.2	<1.2	--	--	--	--	--	--	--	570
12/17/96	3.08	-0.12	3.20	--	<500	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	680
03/20/97	3.08	-0.22	3.30	--	<50	<5.7	<5.7	<5.7	<5.7	--	--	--	--	--	--	--	430
06/20/97	3.08	-0.78	3.86	--	<500	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	1400
09/09/97	3.08	-1.11	4.19	--	76**	22	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	920
12/12/97	3.08	0.12	2.96	--	52	15	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	710
02/19/98	3.08	0.86	2.22	--	<50	6.6	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	380
06/23/98	3.08	-0.17	3.25	*	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	390
08/31/98	3.08	-0.78	3.86	--	<50	19	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	830
12/29/98	3.08	-0.45	3.53	--	<250	<2.5	<2.5	<2.5	<2.5	--	--	--	--	--	--	--	416
03/11/99	3.08	-0.27	3.35	*	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	262
06/24/99	3.08	-0.53	3.61	*	<50	12.8	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	620
09/29/99	3.08	-0.87	3.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	2840
12/08/99	3.08	-0.46	3.54	--	73.4	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	1620
03/01/00	3.08	0.65	2.43	--	<200	<2.0	<2.0	<2.0	<2.0	--	--	--	--	--	--	--	1880

\* See Table of Additional Analyses

\*\* Chromatogram pattern indicates an unidentified hydrocarbon.

\*\*\* Results of EPA 8015 test indicates that levels of Methanol and Methyl ethyl ketone are respectively <1000 and <200 ppb.

## 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	Benzene (EPA 8240)	Xylene (EPA 8240)	C-1,2-DCE	Carbon Disulfide	Vinyl Chloride	MTBE
<b>MW-4</b>																	
10/17/95	3.48	-1.60	5.08	--	<125	<1.2	<1.2	<1.2	<1.2	--	--	--	--	--	--	--	--
03/29/96	3.48	-1.13	4.61	--	<1000	<10	<10	<10	<10	--	--	--	--	--	--	--	6700
06/26/96	3.48	-0.82	4.30	--	<2000	<20	<20	<20	<20	--	--	--	--	--	--	--	7200
09/25/96	3.48	-1.85	5.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
12/17/96	3.48	0.67	2.81	--	<2000	120	<20	<20	<20	--	--	--	--	--	--	--	11,000
03/20/97	3.48	-1.02	4.50	--	250**	<2.0	<2.0	<2.0	<2.0	--	--	--	--	--	--	--	10,000
03/20/97	3.48	-1.02	4.50	Conf. run	--	--	--	--	--	--	--	--	--	--	--	--	8600
06/20/97	3.48	-2.20	5.68	--	<2500	<25	<25	<25	<25	--	--	--	--	--	--	--	9300
09/09/97	3.48	-2.02	5.50	--	460**	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	6600
12/12/97	3.48	-1.55	5.03	--	430**	120	<2.5	<2.5	<2.5	--	--	--	--	--	--	--	7800
02/19/98	3.48	0.13	3.35	--	510**	130	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	6600
06/23/98	3.48	-1.50	4.98	*	550**	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	6800
08/31/98	3.48	-1.94	5.42	--	<500	450	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	14,000
12/29/98	3.48	-1.58	5.06	--	<5000	<50	<50	<50	<50	--	--	--	--	--	--	--	16,100
03/11/99	3.48	-0.30	3.78	*	979	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	15,100
06/24/99	3.48	-0.83	4.31	*	<2500	715	<25	<25	<25	--	--	--	--	--	--	--	12,400
09/29/99	3.48	-2.10	5.58	--	1380	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--	--	11,700
12/08/99	3.48	-1.85	5.33	--	318	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	11,100
03/01/00	3.48	-1.72	5.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	9940

\* See Table of Additional Analyses

\*\* 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	Benzene (EPA 8240)	Xylene (EPA 8240)	C-1,2-DCE	Carbon Disulfide	Vinyl Chloride	MTBE
<b>TRIP BLANK</b>																	
10/17/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/29/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
06/26/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
09/25/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
12/17/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
03/20/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
06/20/97	--	--	--	--	<50	<2.0	<2.0	<2.0	<2.0	--	--	--	--	--	--	--	--
09/09/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
12/12/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
02/19/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
06/23/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
08/31/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
12/29/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.0
03/11/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<5.0
06/24/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<5.0
09/29/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
12/08/99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<5.0
03/01/00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5

## Cumulative Table of Well Data and Analytical Results

### ADDITIONAL ANALYSES

Analytical values are in parts per billion (ppb)

DATE	Notes	Etanol	t- Butanol	MTBE	DIPE	ETBE	TAME
<b>MW-1</b>							
06/23/98	--	<50,000	<10,000	4500	<200	<200	<200
08/31/98	--	--	--	17,000	--	--	--
03/11/99	--	--	--	54.1	--	--	--
06/24/99	--	<10,000	<2000	1800	<20	<20	258
<b>MW-2</b>							
06/23/98	--	<500	<100	56	<2.0	<2.0	<2.0
03/11/99	--	--	--	101	--	--	--
06/24/99	--	<1000	<200	52.5	<2.0	<2.0	<2.0
<b>MW-3</b>							
06/23/98	--	<5000	<1000	420	<20	<20	26
03/11/99	--	--	--	580	--	--	--
06/24/99	--	<6670	<1330	900	<13.3	<13.3	<13.3
<b>MW-4</b>							
06/23/98	--	<50,000	<10,000	11,000	<200	<200	860
03/11/99	--	--	--	17,600	--	--	2600
06/24/99	--	<125,000	<25,000	17,000	<250	<250	2600
<b>TRIP BLANK</b>							
03/11/99	--	--	--	<2.0	--	--	--

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on March 29, 1996.  
Earlier field data and analytical results are drawn from the December 29, 1995 Gettler-Ryan, Inc. report.

#### ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons  
 ND = Not detected at or above the minimum quantitation limit. See laboratory reports for minimum quantitation limits.  
 TOG = Total Oil Grease  
 MTBE = Methyl t-butyl Ether  
 DIPE = Di-Isopropyl Ether  
 ETBE = Ethyl t-Butyl Ether  
 TAME = t-Amyl Methyl Ether  
 C-1,2 DCE = Cis-1,2-Dichloroethylene  
 Conf. run = Confirmation run

# Analytical Appendix



March 23, 2000

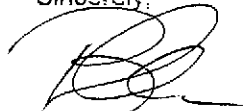
Scott Boor  
Blaine Tech Services (Chev)  
1680 Rogers Avenue  
San Jose, CA 95112

RE: Chevron 451 Hegenberger Rd. Oakland/MJC0070

Dear Scott Boor

Enclosed are the results of analyses for sample(s) received by the laboratory on March 2, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Wendy Bonnes  
Project Manager

CA ELAP Certificate Number 1210

Jeff Smiley - Chevron Project Mgr.

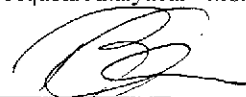




Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 451 Hegenberger Rd., Oakland. Project Number: 9-1851 Project Manager: Scott Boor	Sampled: 3/1/00 Received: 3/2/00 Reported: 3/23/00 19:05
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### ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	MJC0070-01	Water	3/1/00
MW-2	MJC0070-02	Water	3/1/00
MW-3	MJC0070-03	Water	3/1/00
MW-4	MJC0070-04	Water	3/1/00
TB	MJC0070-05	Water	3/1/00

  
Wendy Bonnes, Project Manager





Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 451 Hegenberger Rd., Oakland. Project Number: 9-1851 Project Manager: Scott Boor	Sampled: 3/1/00 Received: 3/2/00 Reported: 3/23/00 19:05
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
<b>MW-1</b>		<b>MJC0070-01</b>			<b>Water</b>			
<b>Purgeable Hydrocarbons</b>	0C10002	3/10/00	3/10/00	DHS LUFT	50.0	<b>100</b>	ug/l	P-01
Benzene	"	"	"	DHS LUFT	0.500	ND	"	
Toluene	"	"	"	DHS LUFT	0.500	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	"	DHS LUFT	2.50	<b>37.9</b>	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70-130		83.5	%	
<b>MW-2</b>		<b>MJC0070-02</b>			<b>Water</b>			
<b>Purgeable Hydrocarbons</b>	0C13001	3/13/00	3/13/00	DHS LUFT	50.0	<b>68.0</b>	ug/l	P-04
Benzene	"	"	"	DHS LUFT	0.500	<b>1.57</b>	"	
Toluene	"	"	"	DHS LUFT	0.500	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	"	DHS LUFT	2.50	<b>110</b>	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70-130		101	%	
<b>MW-3</b>		<b>MJC0070-03</b>			<b>Water</b>			
<b>Purgeable Hydrocarbons</b>	0C13001	3/13/00	3/13/00	DHS LUFT	200	ND	ug/l	
Benzene	"	"	"	DHS LUFT	2.00	ND	"	
Toluene	"	"	"	DHS LUFT	2.00	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	2.00	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	2.00	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	3/10/00	DHS LUFT	100	<b>1880</b>	"	M-03
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	3/13/00	70-130		98.0	%	
<b>MW-4</b>		<b>MJC0070-04</b>			<b>Water</b>			
<b>Purgeable Hydrocarbons</b>	0C10002	3/10/00	3/10/00	DHS LUFT	50.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.500	ND	"	
Toluene	"	"	"	DHS LUFT	0.500	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	3/15/00	DHS LUFT	125	<b>9940</b>	"	M-03
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	3/10/00	70-130		78.3	%	
<b>TB</b>		<b>MJC0070-05</b>			<b>Water</b>			
<b>Purgeable Hydrocarbons</b>	0C13003	3/13/00	3/13/00	DHS LUFT	50.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.500	ND	"	







Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 451 Hegenberger Rd., Oakland. Project Number: 9-1851 Project Manager: Scott Boor	Sampled: 3/1/00 Received: 3/2/00 Reported: 3/23/00 19:05
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
<b>TB (continued)</b>				<b>MJC0070-05</b>				
								<b>Water</b>
Toluene	0C13003	3/13/00	3/13/00	DHS LUFT	0.500	ND	ug/l	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
Methyl tert-butyl ether	"	"	"	DHS LUFT	2.50	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		105	%	





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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 0C10002</b>			<b>Date Prepared: 3/10/00</b>		<b>Extraction Method: EPA 5030B [P/T]</b>				
<b>Blank</b>			<b>0C10002-BLK1</b>						
Purgeable Hydrocarbons	3/10/00			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	"	2.50			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.64	"	70-130	86.4		
<b>LCS</b>			<b>0C10002-BS1</b>						
Benzene	3/10/00	10.0		9.75	ug/l	70-130	97.5		
Toluene	"	10.0		8.97	"	70-130	89.7		
Ethylbenzene	"	10.0		8.54	"	70-130	85.4		
Xylenes (total)	"	30.0		25.3	"	70-130	84.3		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.86	"	70-130	88.6		
<b>Matrix Spike</b>			<b>0C10002-MS1 MJB1013-28</b>						
Benzene	3/10/00	10.0	ND	10.1	ug/l	60-140	101		
Toluene	"	10.0	ND	9.24	"	60-140	92.4		
Ethylbenzene	"	10.0	ND	8.76	"	60-140	87.6		
Xylenes (total)	"	30.0	ND	26.0	"	60-140	86.7		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.99	"	70-130	89.9		
<b>Matrix Spike Dup</b>			<b>0C10002-MSD1 MJB1013-28</b>						
Benzene	3/10/00	10.0	ND	9.93	ug/l	60-140	99.3	25	1.70
Toluene	"	10.0	ND	9.22	"	60-140	92.2	25	0.217
Ethylbenzene	"	10.0	ND	8.88	"	60-140	88.8	25	1.36
Xylenes (total)	"	30.0	ND	26.1	"	60-140	87.0	25	0.384
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.80	"	70-130	88.0		
<b>Batch: 0C13001</b>			<b>Date Prepared: 3/13/00</b>		<b>Extraction Method: EPA 5030B [P/T]</b>				
<b>Blank</b>			<b>0C13001-BLK1</b>						
Purgeable Hydrocarbons	3/13/00			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	"	2.50			





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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Blank (continued) 0C13001-BLK1</b>										
Surrogate: a,a,a-Trifluorotoluene	3/13/00	10.0		10.2	ug/l	70-130	102			
<b>LCS 0C13001-BS1</b>										
Benzene	3/13/00	10.0		9.53	ug/l	70-130	95.3			
Toluene	"	10.0		9.20	"	70-130	92.0			
Ethylbenzene	"	10.0		9.67	"	70-130	96.7			
Xylenes (total)	"	30.0		28.9	"	70-130	96.3			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.4	"	70-130	104			
<b>Matrix Spike 0C13001-MS1 MJC0349-02</b>										
Benzene	3/13/00	10.0	ND	10.3	ug/l	60-140	103			
Toluene	"	10.0	ND	9.70	"	60-140	97.0			
Ethylbenzene	"	10.0	ND	10.0	"	60-140	100			
Xylenes (total)	"	30.0	ND	29.7	"	60-140	99.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.4	"	70-130	104			
<b>Matrix Spike Dup 0C13001-MSD1 MJC0349-02</b>										
Benzene	3/13/00	10.0	ND	10.1	ug/l	60-140	101	25	1.96	
Toluene	"	10.0	ND	9.37	"	60-140	93.7	25	3.46	
Ethylbenzene	"	10.0	ND	9.66	"	60-140	96.6	25	3.46	
Xylenes (total)	"	30.0	ND	27.0	"	60-140	90.0	25	9.52	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.1	"	70-130	101			
<b>Batch: 0C13003 Date Prepared: 3/13/00 Extraction Method: EPA 5030B [P/T]</b>										
<b>Blank 0C13003-BLK1</b>										
Purgeable Hydrocarbons	3/13/00			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	"	2.50				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.5	"	70-130	105			
<b>LCS 0C13003-BS1</b>										
Benzene	3/13/00	10.0		10.3	ug/l	70-130	103			
Toluene	"	10.0		10.3	"	70-130	103			
Ethylbenzene	"	10.0		10.3	"	70-130	103			
Xylenes (total)	"	30.0		31.0	"	70-130	103			





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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control  
Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b><u>LCS (continued)</u></b>		<b><u>0C13003-BS1</u></b>								
Surrogate: <i>a,a,a</i> -Trifluorotoluene	3/13/00	10.0		10.8	ug/l	70-130	108			
<b><u>Matrix Spike</u></b>		<b><u>0C13003-MS1 MJC0080-04</u></b>								
Benzene	3/13/00	10.0	ND	10.5	ug/l	60-140	105			
Toluene	"	10.0	ND	10.4	"	60-140	104			
Ethylbenzene	"	10.0	ND	10.6	"	60-140	106			
Xylenes (total)	"	30.0	ND	32.5	"	60-140	108			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.8	"	70-130	108			
<b><u>Matrix Spike Dup</u></b>		<b><u>0C13003-MSD1 MJC0080-04</u></b>								
Benzene	3/13/00	10.0	ND	10.1	ug/l	60-140	101	25	3.88	
Toluene	"	10.0	ND	10.3	"	60-140	103	25	0.966	
Ethylbenzene	"	10.0	ND	9.84	"	60-140	98.4	25	7.44	
Xylenes (total)	"	30.0	ND	31.5	"	60-140	105	25	3.13	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.1	"	70-130	101			





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**Notes and Definitions**

#	Note
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- M-03 Sample was analyzed at a second dilution per clients request.
- P-01 Chromatogram Pattern: Gasoline C6-C12
- P-04 Chromatogram Pattern: Weathered Gasoline C6-C12 + Unidentified Hydrocarbons C6-C12□□
- 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





# **Field Data Sheets**

WELL GAUGING DATA

Project # 000301C3 Date 3/1/00 Client Chevron

Site 451 Heegenberger

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW 1	2					1.95	14.46	TOC	2
MW 2	2					3.03	14.90		1
MW 3	2					2.43	14.60		3
MW 4	2					5.20	16.00		4



## CHEVRON WELL MONITORING DATA SHEET

Project #: 000301C1	Station #: 9-1851
Sampler: Jeff	Date: 3/1/00
Well I.D.: MW1	Well Diameter: (2) 3 4 6 8
Total Well Depth: 14.46	Depth to Water: 1.95
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- |                      |                 |
|----------------------|-----------------|
| Bailer               | Waterra         |
| Disposible Bailer    | Peristaltic     |
| Middleburg           | Extraction Pump |
| Electric Submersible | Other _____     |

Sampling Method:

- Bailer  
 Disposible Bailer  
 Extraction Port  
 Dedicated Tubing

Other: \_\_\_\_\_

2 (Gals.) X 3 = 6.0 Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1330	61.5	6.9	2137	2	
1335	62.2	6.5	1783	4	
1340	61.0	6.4	1645	6	

Did well dewater? Yes  No  Gallons actually evacuated: 6

Sampling Time: 1340      Sampling Date: 3/1/00

Sample I.D.: MW1      Laboratory: STL  Soyoia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	4 mg/L	Post-purge:	mg/L
	O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:

## CHEVRON WELL MONITORING DATA SHEET

Project #: 000301 C1	Station #: 9-1851
Sampler: Jeff	Date: 3/1/00
Well I.D.: mw2	Well Diameter: (2) 3 4 6 8
Total Well Depth: 14.90	Depth to Water: 8.03
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- |                      |                 |
|----------------------|-----------------|
| Bailer               | Waterra         |
| Disposable Bailer    | Peristaltic     |
| Middleburg           | Extraction Pump |
| Electric Submersible | Other _____     |

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing

Other: \_\_\_\_\_

1.9	(Gals.) X	3	=	5.7	Gals.
I Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1255	63.3	6.6	5126	2	
1300	62.1	6.6	5163	4	
1305	62.1	4.6	5040	6	

Did well dewater? Yes  No  Gallons actually evacuated: 6

Sampling Time: 1310 Sampling Date: 3/1/00

Sample I.D.: mw-1 Laboratory: STL Sequidia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	.4 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 #: 000301C1	Station #: 9-1851
Sampler: Jeff	Date: 3/1/00
Well I.D.: MW3	Well Diameter: (2) 3 4 6 8
Total Well Depth: 14.60	Depth to Water: 2.43
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVO</u> Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: \_\_\_\_\_

1.9	(Gals.) X	3	=	5.8	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1355	63.1	6.5	4236	2	
1400	62.3	6.5	4357	4	
1405	62.0	6.5	4338	6	

Did well dewater? Yes  No  Gallons actually evacuated: 6

Sampling Time: 1410 Sampling Date: 3/1/00

Sample I.D.: MW3 Laboratory: STL (circled) Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge: 0.2 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>000301C1</u>	Station #: <u>9-1851</u>
Sampler: <u>Jeff</u>	Date: <u>3/1/00</u>
Well I.D.: <u>mw4</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>16.00</u>	Depth to Water: <u>5.20</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:

Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

<u>1.7</u>	(Gals.) X	<u>3</u>	=	<u>5.1</u>	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1420	65.2	6.7	5956	2	
1425	67.0	6.7	8728	4	
1430	67.0	6.7	8180	5.5	

Did well dewater? Yes  No  Gallons actually evacuated: 6

Sampling Time: 1430 Sampling Date: 3/1/00

Sample I.D.: mw4 Laboratory: STL Sequoia Other

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

EB I.D. (if applicable): @ \_\_\_\_\_ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): 0. Pre-purge: 0.1 mg/L Post-purge: \_\_\_\_\_ mg/L

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV