



**Chevron**

ENVIRONMENTAL  
PROTECTION

99 DEC 30 PM 2:59

**Chevron U.S.A. Products Company**  
6001 Bollinger Canyon Rd. Bldg. L  
P. O. Box 6004  
San Ramon, CA 94583-0804

Site Assessment and  
Remediation Group  
Phone (510) 842-9500  
Fax (510) 842-8370

Date: December 17, 1999  
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) 842-8695.

Sincerely,

Brett Hunter  
Site Assessment and Remediation  
Project Manager

**BLAINE**  
TECH SERVICES, INC.



1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE

December 15, 1999

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

### 3rd Quarter 1999 Monitoring at 9-1851

Third Quarter 1999 Groundwater Monitoring at  
Chevron Service Station Number 9-1851  
451 Hegenberger Rd.  
Oakland, CA

Monitoring Performed on September 29, 1999

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### Groundwater Sampling Report 990929-I-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,



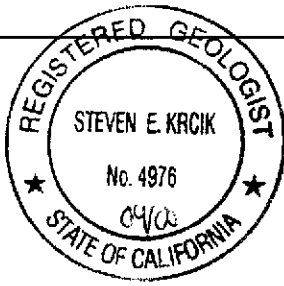
Scott Boor  
Project Coordinator

SDB/jh

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

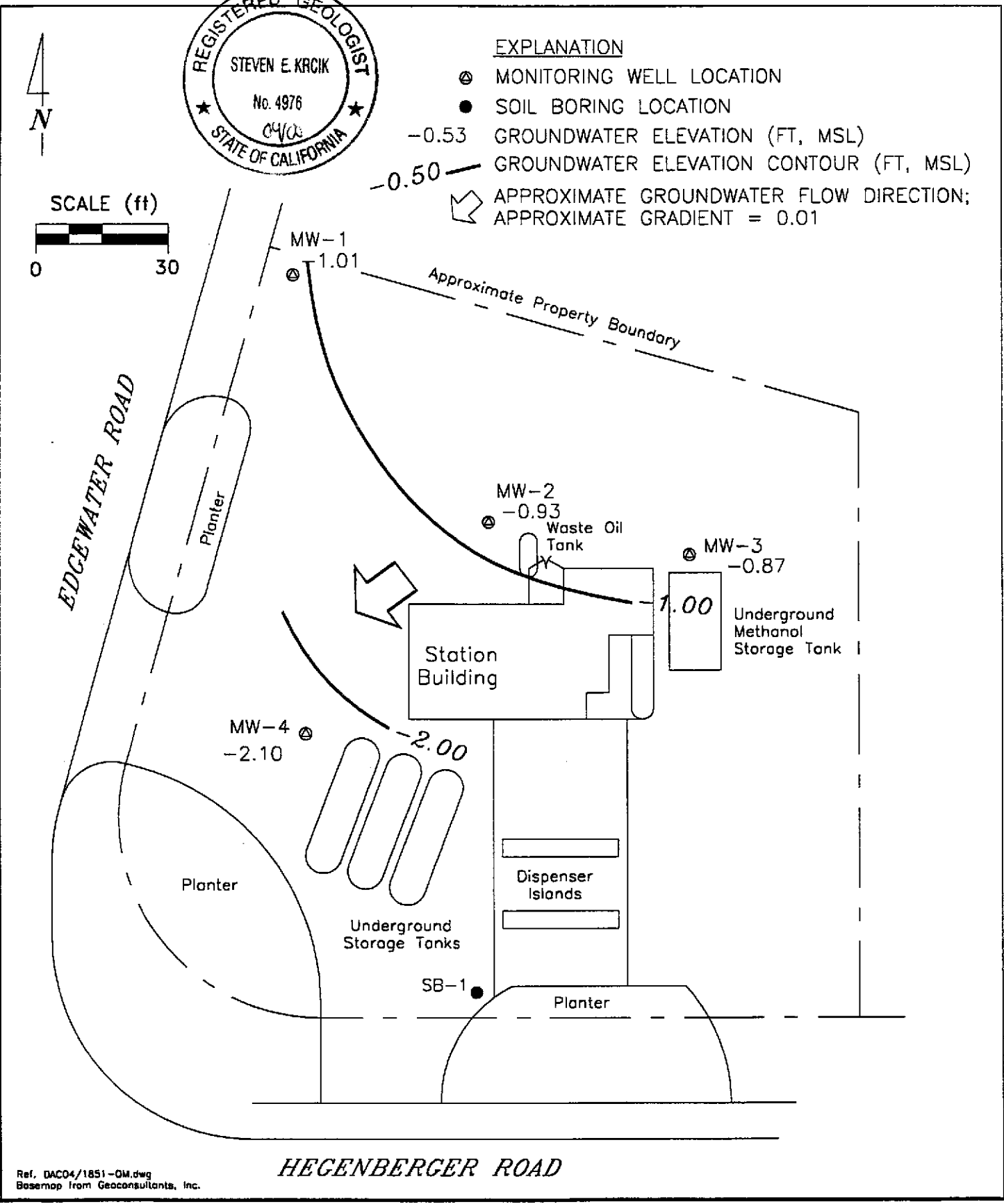
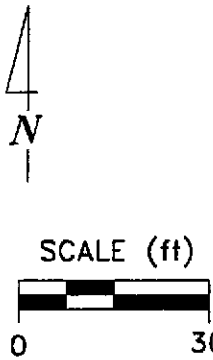
cc: **Barney Chan**, Alameda County Health Care Services, Dept. of  
**Environmental Health**  
Ben Shimek  
Greg Gurss, Gettler-Ryan, Inc.

# **Professional Engineering Appendix**



**EXPLANATION**

- ⊙ MONITORING WELL LOCATION
- SOIL BORING LOCATION
- 0.53 GROUNDWATER ELEVATION (FT. MSL)
- 0.50 — GROUNDWATER ELEVATION CONTOUR (FT. MSL)
- ⇨ APPROXIMATE GROUNDWATER FLOW DIRECTION; APPROXIMATE GRADIENT = 0.01



Ref. DAC04/1851-0M.dwg  
 Basemap from Geoconsultants, Inc.

**HEGENBERGER ROAD**

PREPARED BY 	<b>Chevron Station 9-1851</b> 451 Hegenberger Road Oakland, California	FIGURE: <b>1</b>
	<b>GROUNDWATER ELEVATION CONTOUR MAP,</b> <b>SEPTEMBER 29, 1999</b>	PROJECT: <b>DAC04</b>

# **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	

\* 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

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

\*\* 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)	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	
<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	--	--	--	--	--	--	--	6800	
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	

\* 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)	1, 2- DCE	Carbon Disulfide	Vinyl Chloride	MTBE	
<b>TRIP BLANK</b>																		
10/17/95																		
03/29/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--
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

## Cumulative Table of Well Data and Analytical Results

### ADDITIONAL ANALYSES

Vertical Measurements are in feet.

Analytical values are in parts per billion (ppb)

DATE	Notes	Ethanol	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	--	<50000	<10000	11,000	<200	<200	860
03/11/99	--	--	--	17,600	--	--	--
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**



October 19, 1999

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

RE: Chevron 9-1851/M909ACA

Dear Scott Boor

Enclosed are the results of analyses for sample(s) received by the laboratory on September 30, 1999. Chromatograms for unidentified hydrocarbons are included in this report. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wendy Bonnes  
Project Manager

CA ELAP Certificate Number 1210





Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 9-1851 (451 Hegenberger Rd., Oakland) Project Number: 990929-14 Project Manager: Scott Boor	Sampled: 9/29/99 Received: 9/30/99 Reported: 10/19/99
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**ANALYTICAL REPORT FOR M909ACA**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	M909ACA-01	Water	9/29/99
MW-2	M909ACA-02	Water	9/29/99
MW-3	M909ACA-03	Water	9/29/99
MW-4	M909ACA-04	Water	9/29/99
TB	M909ACA-05	Water	9/29/99





Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 9-1851 (451 Hegenberger Rd., Oakland) Project Number: 990929-14 Project Manager: Scott Boor	Sampled: 9/29/99 Received: 9/30/99 Reported: 10/19/99
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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	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>MW-1</b>			<b>M909ACA-01</b>			<b>Water</b>		
<b>Purgeable Hydrocarbons</b>	9100274	10/11/99	10/11/99		50.0	<b>81.7</b>	ug/l	1
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	10/13/99		12.5	<b>1130</b>	"	D
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	10/11/99	70.0-130		101	%	
<b>MW-2</b>			<b>M909ACA-02</b>			<b>Water</b>		
<b>Purgeable Hydrocarbons</b>	9100274	10/11/99	10/11/99		50.0	<b>54.3</b>	ug/l	1
Benzene	"	"	"		0.500	<b>0.662</b>	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	"		2.50	<b>35.7</b>	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70.0-130		104	%	
<b>MW-3</b>			<b>M909ACA-03</b>			<b>Water</b>		
<b>Purgeable Hydrocarbons</b>	9100274	10/11/99	10/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
<b>Methyl tert-butyl ether</b>	"	"	10/13/99		50.0	<b>2840</b>	"	D
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	10/11/99	70.0-130		98.6	%	
<b>MW-4</b>			<b>M909ACA-04</b>			<b>Water</b>		
<b>Purgeable Hydrocarbons</b>	9100345	10/12/99	10/12/99		500	<b>1380</b>	ug/l	1,D
Benzene	"	"	"		5.00	ND	"	D
Toluene	"	"	"		5.00	ND	"	D
Ethylbenzene	"	"	"		5.00	ND	"	D
Xylenes (total)	"	"	"		5.00	ND	"	D
<b>Methyl tert-butyl ether</b>	"	"	"		250	<b>11700</b>	"	D
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70.0-130		111	%	
<b>TB</b>			<b>M909ACA-05</b>			<b>Water</b>		
<b>Purgeable Hydrocarbons</b>	9100274	10/11/99	10/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	





Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 9-1851 (451 Hegenberger Rd., Oakland) Project Number: 990929-14 Project Manager: Scott Boor	Sampled: 9/29/99 Received: 9/30/99 Reported: 10/19/99
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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	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>TB (continued)</b>				<b>M909ACA-05</b>			<b>Water</b>	
Methyl tert-butyl ether	9100274	10/11/99	10/11/99		2.50	ND	ug/l	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70.0-130		84.0	%	







Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 9-1851 (451 Hegenberger Rd., Oakland) Project Number: 990929-14 Project Manager: Scott Boor	Sampled: 9/29/99 Received: 9/30/99 Reported: 10/19/99
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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>Batch: 9100274</b>			<b>Date Prepared: 10/11/99</b>			<b>Extraction Method: EPA 5030B (P/T)</b>				
<b>Blank</b>			<b>9100274-BLK1</b>							
Purgeable Hydrocarbons	10/11/99			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	"	2.50				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.6	"	70.0-130	106			
<b>LCS</b>			<b>9100274-BS1</b>							
Benzene	10/11/99	10.0		9.22	ug/l	70.0-130	92.2			
Toluene	"	10.0		9.25	"	70.0-130	92.5			
Ethylbenzene	"	10.0		9.45	"	70.0-130	94.5			
Xylenes (total)	"	30.0		27.6	"	70.0-130	92.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.2	"	70.0-130	102			
<b>Matrix Spike</b>			<b>9100274-MS1 M909ACA-02</b>							
Benzene	10/11/99	10.0	0.662	9.70	ug/l	60.0-140	90.4			
Toluene	"	10.0	ND	8.90	"	60.0-140	89.0			
Ethylbenzene	"	10.0	ND	9.09	"	60.0-140	90.9			
Xylenes (total)	"	30.0	ND	27.4	"	60.0-140	91.3			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.74	"	70.0-130	97.4			
<b>Matrix Spike Dup</b>			<b>9100274-MSD1 M909ACA-02</b>							
Benzene	10/11/99	10.0	0.662	10.9	ug/l	60.0-140	102	25.0	12.1	
Toluene	"	10.0	ND	9.23	"	60.0-140	92.3	25.0	3.64	
Ethylbenzene	"	10.0	ND	9.38	"	60.0-140	93.8	25.0	3.14	
Xylenes (total)	"	30.0	ND	27.6	"	60.0-140	92.0	25.0	0.764	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.28	"	70.0-130	92.8			
<b>Batch: 9100345</b>			<b>Date Prepared: 10/12/99</b>			<b>Extraction Method: EPA 5030B (P/T)</b>				
<b>Blank</b>			<b>9100345-BLK1</b>							
Purgeable Hydrocarbons	10/12/99			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	"	2.50				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.8	"	70.0-130	108			





Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 9-1851 (451 Hegenberger Rd., Oakland) Project Number: 990929-14 Project Manager: Scott Boor	Sampled: 9/29/99 Received: 9/30/99 Reported: 10/19/99
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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><u>LCS</u></b>		<b><u>9100345-BS1</u></b>								
Purgeable Hydrocarbons	10/12/99	250		243	ug/l	70.0-130	97.2			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		15.1	"	70.0-130	151			2
<b><u>Matrix Spike</u></b>		<b><u>9100345-MS1</u></b>		<b><u>M910040-06</u></b>						
Purgeable Hydrocarbons	10/12/99	250	ND	234	ug/l	60.0-140	93.6			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		12.8	"	70.0-130	128			
<b><u>Matrix Spike Dup</u></b>		<b><u>9100345-MSD1</u></b>		<b><u>M910040-06</u></b>						
Purgeable Hydrocarbons	10/12/99	250	ND	261	ug/l	60.0-140	104	25.0	10.5	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		12.6	"	70.0-130	126			





Blaine Tech Services (Chev) 1680 Rogers Avenue San Jose, CA 95112	Project: Chevron 9-1851 (451 Hegenberger Rd., Oakland) Project Number: 990929-I4 Project Manager: Scott Boor	Sampled: 9/29/99 Received: 9/30/99 Reported: 10/19/99
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**Notes and Definitions**

#	Note
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- D Data reported from a dilution.
- 1 Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
- 2 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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



# Chromatogram

Name : M909ACA-1

FileName : S:\GHP\_02\1017\011A006.raw

Method : TPH

Start Time : 0.00 min

Scale Factor: -1.0

End Time : 20.50 min

Plot Offset: 9 mV

Sample #: MW-1

Date : 10/11/99 11:19

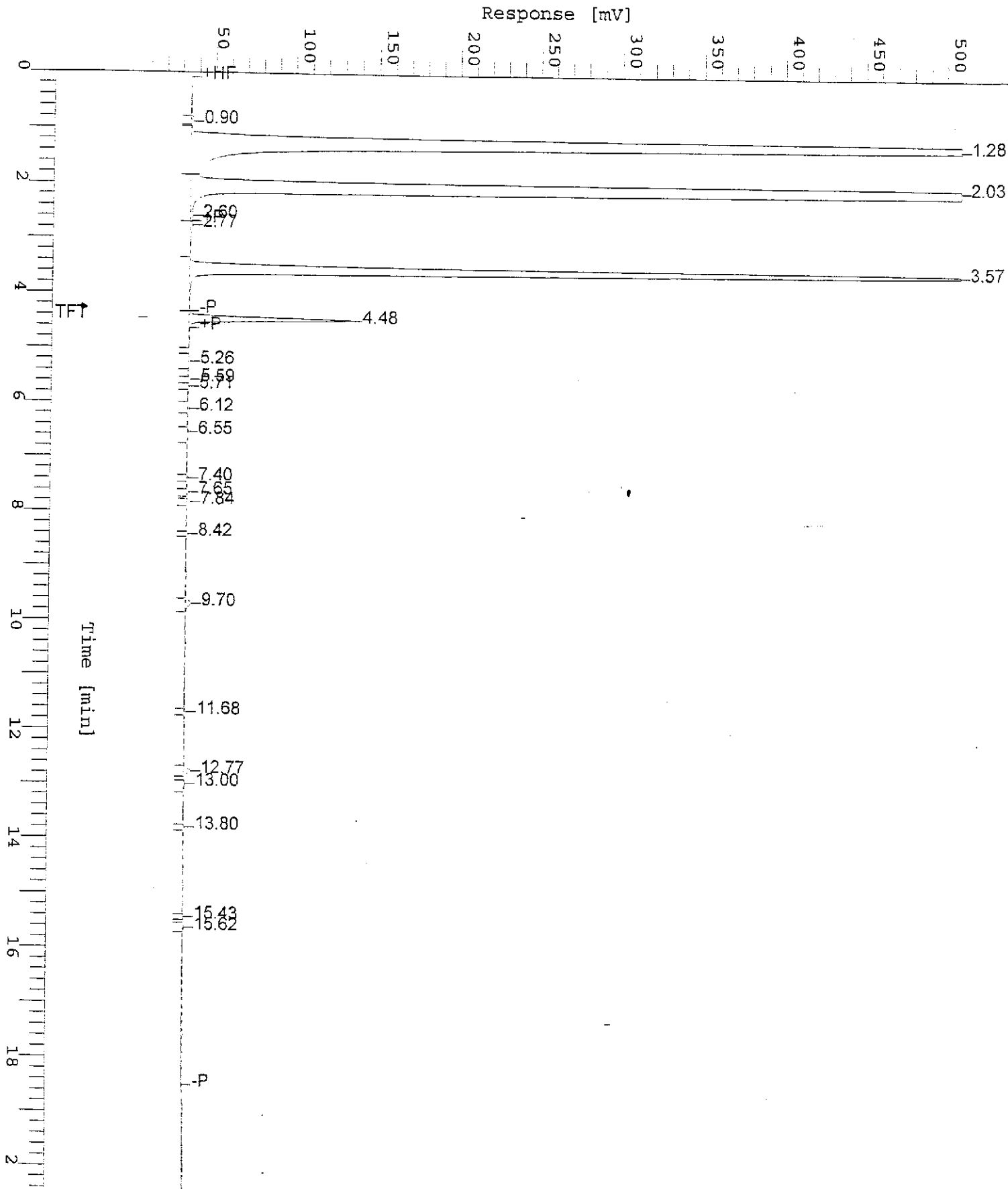
Time of Injection: 10/11/99 10:58

Low Point : 9.02 mV

Plot Scale: 500.0 mV

Page 1 of 1

High Point : 509.02 mV



# Chromatogram

[mV]

M909ACA-2  
S:\GHP\_02\1017\011A007.raw  
TPH

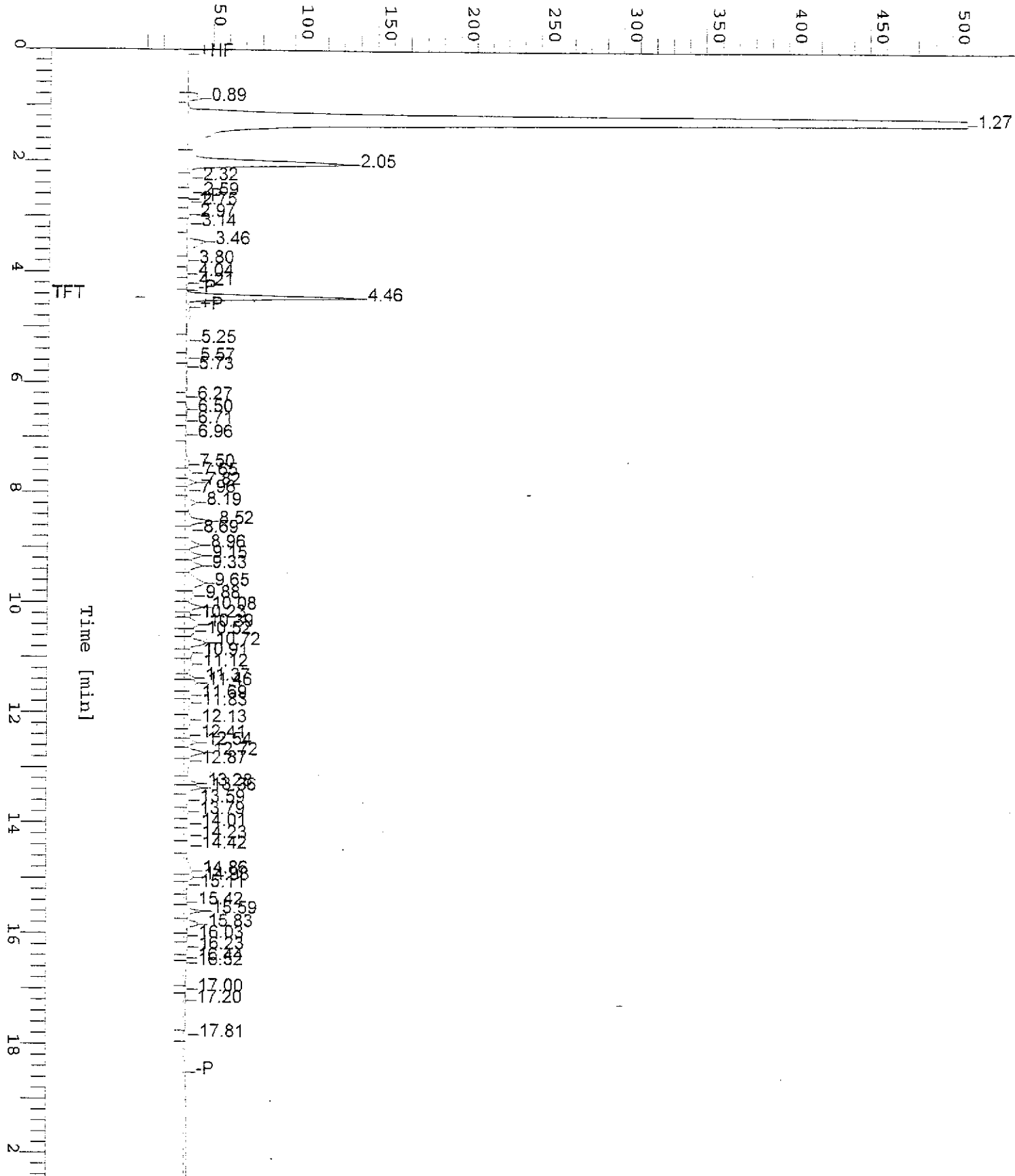
Sample #: MW-2  
Date : 10/11/99 11:44  
Time of Injection: 10/11/99 11:23  
Low Point : 9.74 mV  
High Point : 509.74 mV  
Plot Scale: 500.0 mV

Page 1 of 1

Time : 0.00 min  
End Time : 20.50 min  
Plot Offset: 10 mV

Gain Factor: -1.0

Response [mV]



# Chromatogram

9909ACA-4RE

S:\GHP\_03\1017\012A022.raw

: TPH

Time : 0.00 min

Factor: -1.0

End Time : 20.00 min

Plot Offset: 26 mV

Sample #: MW-4

Date : 10/12/99 20:32

Time of Injection: 10/12/99 20:11

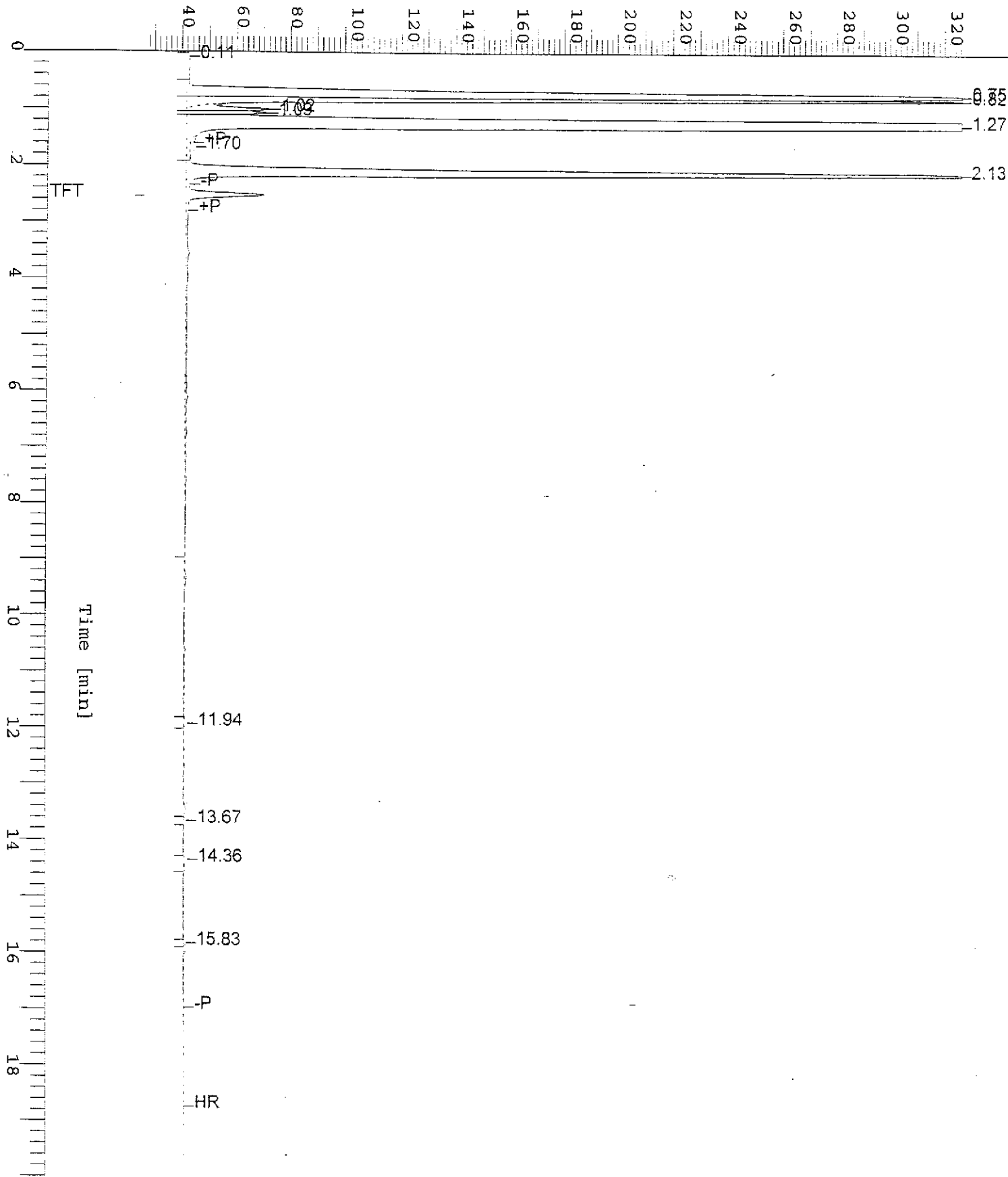
Low Point : 26.40 mV

Plot Scale: 300.0 mV

Page 1 of 1

High Point : 326.40 mV

Response [mV]



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 9-1851  
 Facility Address 451 Hegenberger Rd., Oakland  
 Consultant Project Number 990929-IU  
 Consultant Name BLAINE TECH SERVICE, INC.  
 Address 1680 ROGERS AVE., SAN JOSE  
 Project Contact (Name) CHRISTINE LILLIE  
 (Phone) 408-573-0555 (Fax Number) 408-573-7771

Chevron Contact (Name) PHIL BRIGGS  
 (Phone) (925) 842-9136  
 Laboratory Name SEQUOIA  
 Laboratory Service Order 9144488 M909ACA  
 Laboratory Service Code ZZ02800  
 Samples Collected by (Name) Patrick Flaherty  
 Signature Patrick Flaherty

State Method:  CA  OR  WA  NW Series  CO  UT

Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Sample Preservation	Date/Time	Analytical Parameters														Remarks	
					BTEX/MTBE+TPH GAS (8020 + 8015)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oxygenates (8250)	Purgeable Halocarbons (8010)	Purgeable Organics (8260)	Extractable Organics (8270)	Oil and Grease (5520)	Metals (ICAP or AA) Cd,Cr,Pb,Zn,Cu	BTEX (8020)	BTEX/MTBE/Naph. (8020)	TPH - HCD	TPH-D Extended			
nw-1	3	W	HCL	9-29/1993	X															Lab Sample No. 01
nw-2	↓	↓	↓	1440	X															02
nw-3	↓	↓	↓	1425	X															03
nw-4	↓	↓	↓	1505	X															04
TB	2	↓	↓	-	X															05

Relinquished By (Signature) <u>Patrick Flaherty</u>	Organization <u>BTS</u>	Date/Time <u>9/30/93</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>SEQUOIA</u>	Date/Time <u>9/30/93</u>	Iced Y/N	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 6 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>9/21/93</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>9/25/93</u>	Iced Y/N	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	Iced Y/N	

# **Field Data Sheets**





# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>990929-J3</u>	Station #: <u>9-1851</u>
Sampler: <u>P.F.</u>	Date: <u>9-28-99</u>
Well I.D.: <u>MW-1</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>14.70</u>	Depth to Water: <u>3.62</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVE)</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 <sup>2</sup> * 0.163

Purge Method: Bailer  
Disposable Bailer  
Middleburg  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
Disposable Bailer  
Extraction Port  
 Other: \_\_\_\_\_

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

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1445	79.3	8.0	3580	1.75	
1447	79.0	7.8	3420	3.5	
1449	78.6	7.8	3220	5.25	

Did well dewater? Yes (No) Gallons actually evacuated: 5.25

Sampling Time: 1453 Sampling Date: 9-29-99

Sample I.D.: MW-1 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
	D.R.P. (if req'd):	Pre-purge:	mV	Post-purge:

# CHEVRON WELL MONITORING DATA SHEET

Project #: 990929-13	Station #: 9-1851
Sampler: P.F.	Date: 9-28-99
Well I.D.: MW-2	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth: 15.12	Depth to Water: 4.44
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVE</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 <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u> <u>Disposable Bailer</u> Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> <u>Disposable Bailer</u> <u>Extraction Port</u> Other: _____
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1.6	X	3	=	4.9	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1432	78.2	8.0	6530	1.75	sheen
1434	77.9	7.9	6700	3.5	odor
1436	77.8	7.8	6780	5.0	

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: 5.0
Sampling Time: 1440	Sampling Date: 9-29-99
Sample I.D.: MW-2	Laboratory: <u>Sequoia</u> CORE 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: <u>mg/L</u> Post-purge: <u>mg/L</u>
O.R.P. (if req'd):	Pre-purge: <u>mV</u> Post-purge: <u>mV</u>

## CHEVRON WELL MONITORING DATA SHEET

Project #: 990929-13	Station #: 9-1851
Sampler: P.F.	Date: 9-28-99
Well I.D.: MW-3	Well Diameter: ② 3 4 6 8
Total Well Depth: 1472	Depth to Water: 3.95
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVE</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 <sup>2</sup> * 0.163

Purge Method: Bailer  
Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

1.7	x	3	=	5.1	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1417	81.0	7.9	4670	1.75	
1419	80.7	7.8	4460	3.5	
1421				5.25	

Did well dewater? Yes No Gallons actually evacuated: 5.25

Sampling Time: 1425 Sampling Date: 9-29-99

Sample I.D.: MW-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
D.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## CHEVRON WELL MONITORING DATA SHEET

Project #: <u>990929-J3</u>	Station #: <u>9-1851</u>
Sampler: <u>P.F.</u>	Date: <u>9-28-99</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>14.99</u>	Depth to Water: <u>5.58</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVE</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 <sup>2</sup> * 0.163

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

<u>1.5</u>	x	<u>3</u>	=	<u>4.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1457</u>	<u>78.0</u>	<u>8.0</u>	<u>3000</u>	<u>1.5</u>	
<u>1459</u>	<u>77.6</u>	<u>7.9</u>	<u>3260</u>	<u>3</u>	
<u>1501</u>	<u>77.4</u>	<u>7.9</u>	<u>3310</u>	<u>4.5</u>	

Did well dewater? Yes  No  Gallons actually evacuated: 4.5

Sampling Time: 1505      Sampling Date: 9-29-99

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

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

Duplicate I.D.:      Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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