Chevron

January 30, 1998

Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583

#541

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

Re: Chevron Service Station #9-1851
451 Hegenberger Road
Oakland, California

Dear Mr. Chan:

Enclosed is the Fourth Quarter 1997 Groundwater Monitoring Report that was prepared by our consultant Blaine Tech Services Inc., for the above noted site. The groundwater samples collected were analyzed for TPH-g, BTEX, MtBE, TPH-d and VOC constituents, in monitoring well M-2 and analyzed for TPH-g, BTEX, and MtBE constituents in the remaining three wells.

The TPH-g and BTEX constituents for monitoring well MW-1 were below the method detection limits, while the concentrations of the benzene constituent decreased in wells MW-2 and MW-3, but increased in well MW-4. Results from testing for TPH-d in well MW-2, the chromatogram pattern indicated an unidentified hydrocarbon.

The depth to ground water varied from 2.96 feet to 5.03 feet below grade with a direction of flow southwesterly.

Due to the belief that a preferential pathway may be intercepting groundwater at the site, a Work Plan for Groundwater Investigation was approved by your office and the work was released to Pacific Environmental for the investigation. A report of these findings will be submitted to your office when received.

other than BTEX + MtBE

It appears that there has been minimal or no impact from VOC constituents, as the last two sampling events have been below method detection limits in well MW-2. **Therefore, Chevron requests that this analyses be deleted for future events.**

ok to eliminate 8240 analyses

2/4/98 BC

Chevron will continue to sample quarterly for the present and until the results of the groundwater investigation is completed. If you have any questions call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Bill Scudder, Chevron

Mr. Ben Shimek
451 Hegenberger Road
Oakland, CA 94621

BLAINE
TECH SERVICES INC

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

January 22, 1998

Phil Briggs
Chevron U.S.A. Products Company
P. 0. Box 6004
San Ramon, CA 94583-0904

4th Quarter 1997 Monitoring at 9-1851

Fourth Quarter 1997 Groundwater Monitoring at
Chevron Service Station Number 9-1851
451 Hegenberger Rd.
Oakland, CA

Monitoring Performed on December 12, 1997

Groundwater Sampling Report 971212-C-4

This report covers the routine monitoring of groundwater wells at this Chevron facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to McKittrick Waste Treatment Site for disposal.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS.** The full analytical report for the most recent samples is located in the **Analytical Appendix.** The table

also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix.**

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

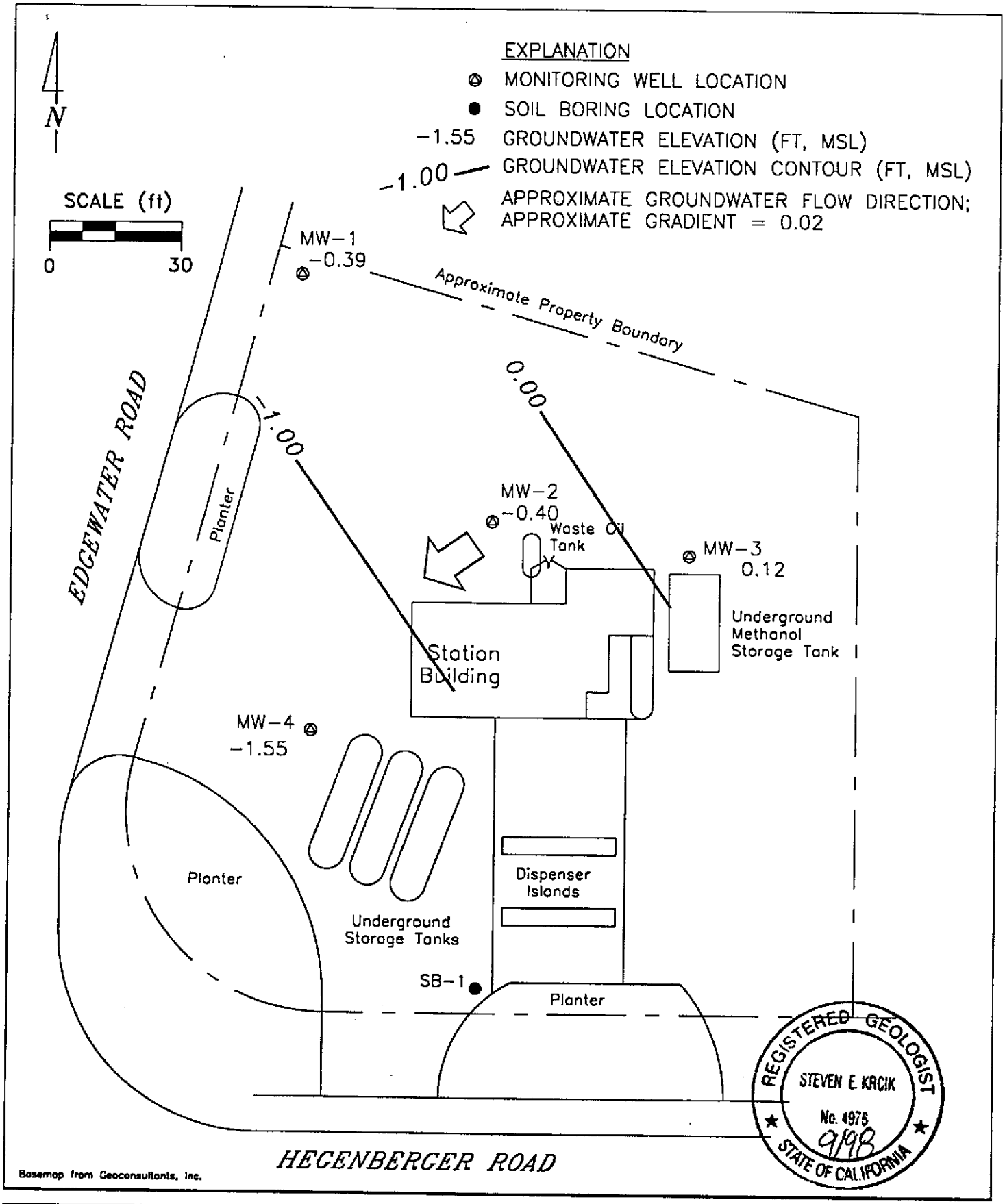
Derek Kern for

Francis Thie
Vice President

FPT/ew

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

Professional Engineering Appendix



PREPARED BY

RRM engineering contracting firm

Chevron Station 9-1851
451 Hegenberger Road
Oakland, California

GROUNDWATER ELEVATION CONTOUR MAP, DECEMBER 12, 1997

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
MW-1																	
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
MW-2																	
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
MW-3																	
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

* Results of EPA 8010 test indicates that the detection of 1,1-Dichloroethane is 1.7 ppb.
** Chromatagram pattern indicates an unidentified hydrocarbon.
*** Results of EPA 8015 test indicates that levels of Methanol and Methyl ethyl ketone are respetively <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
MW-4																	
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	--	--	--	--	--	--	8260	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
TRIP BLANK																	
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	<2.5
09/09/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
12/12/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	<2.5
																	<2.5

** Chromatagram pattern indicates an unidentified hydrocarbon.

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
C-1,2 DCE = Cis-1,2-Dichloroethylene
Conf. run = Confirmation run

Analytical Appendix

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Chevron 9-1851
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9712A31-01

Sampled: 12/12/97
Received: 12/15/97

Analyzed: 12/23/97
Reported: 12/31/97

QC Batch Number: GC122397BTEX02A
Instrument ID: GCHP2

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**27**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	116

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1271

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Chevron 9-1851
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9712A31-02

Sampled: 12/12/97
Received: 12/15/97

Analyzed: 12/29/97
Reported: 12/31/97

QC Batch Number: GC122997BTEX02A
Instrument ID: GCHP2

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**180**
Methyl t-Butyl Ether	**2.5**	**34**
Benzene	**0.50**	**1.8**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**3.2**
Chromatogram Pattern:		**Gas**
Unidentified HC		**>C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	111

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1271

Peggy Renner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Chevron 9-1851
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9712A31-02

Sampled: 12/12/97
Received: 12/15/97
Extracted: 12/18/97
Analyzed: 12/19/97
Reported: 12/31/97

QC Batch Number: GC1218970HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**2500**	**8500**
Chromatogram Pattern:	**C9-C24**	**Unidentified HC**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	Q

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Renner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Chevron 9-1851
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8240
Lab Number: 9712A31-02

Sampled: 12/12/97
Received: 12/15/97

Analyzed: 12/17/97
Reported: 12/31/97

QC Batch Number: MS1217978240F2A
Instrument ID: F2

Volatile Organics (EPA 8240)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
cis-1,2-Dichloroethene	2.0	N.D.
trans-1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis-1,3-Dichloropropene	2.0	N.D.
trans-1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	5.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	5.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Chevron 9-1851
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8240
Lab Number: 9712A31-02

Sampled: 12/12/97
Received: 12/15/97

Analyzed: 12/17/97
Reported: 12/31/97

QC Batch Number: MS1217978240F2A
Instrument ID: F2

Analyte	Detection Limit ug/L		Sample Results ug/L
Surrogates	**Control Limits %**		**% Recovery**
1,2-Dichloroethane-d4	76	114	99
Toluene-d8	88	110	99
4-Bromofluorobenzene	86	115	91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Perner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Chevron 9-1851	Sampled: 12/12/97
1680 Rogers Avenue	Sample Descript: MW-3	Received: 12/15/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/23/97
Attention: Fran Thie	Lab Number: 9712A31-03	Reported: 12/31/97

QC Batch Number: GC122397BTEX02A
Instrument ID: GCHP2

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**52**
Methyl t-Butyl Ether	**2.5**	**710**
Benzene	**0.50**	**15**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		**Gas**
Unidentified HC		**<C7**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	116

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1271

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Chevron 9-1851	Sampled: 12/12/97
1680 Rogers Avenue	Sample Descript: MW-4	Received: 12/15/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/23/97
Attention: Fran Thie	Lab Number: 9712A31-04	Reported: 12/31/97

QC Batch Number: GC122397BTEX02A
Instrument ID: GCHP2

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**430**
Methyl t-Butyl Ether	**12**	**7800**
Benzene	**2.5**	**120**
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		**Gas**
Unidentified HC		**<C7**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	114

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1271

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Chevron 9-1851
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9712A31-05

Sampled: 12/12/97
Received: 12/15/97

Analyzed: 12/23/97
Reported: 12/31/97

QC Batch Number: GC122397BTEX02A
Instrument ID: GCHP2

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	116

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1271

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Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Chevron 9-1851
Matrix: Liquid
Work Order #: 9712A31 -02

Reported: Dec 31, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS1217978240F2A	MS1217978240F2A	MS1217978240F2A	MS1217978240F2A	MS1217978240F2A
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.
Analyst:	L. Duong	L. Duong	L. Duong	L. Duong	L. Duong
MS/MSD #:	971296701	971296701	971296701	971296701	971296701
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/17/97	12/17/97	12/17/97	12/17/97	12/17/97
Analyzed Date:	12/17/97	12/17/97	12/17/97	12/17/97	12/17/97
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	45	45	47	46	45
MS % Recovery:	90	90	94	92	90
Dup. Result:	43	46	46	44	43
MSD % Recov.:	86	92	92	88	86
RPD:	4.5	2.2	2.2	4.4	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	LCS121797	LCS121797	LCS121797	LCS121797	LCS121797
Prepared Date:	12/17/97	12/17/97	12/17/97	12/17/97	12/17/97
Analyzed Date:	12/17/97	12/17/97	12/17/97	12/17/97	12/17/97
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	47	49	50	46	46
LCS % Recov.:	94	98	100	92	92
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	65-135	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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Blaine Tech Services, Inc.	Client Project ID:	Chevron 9-1851	
1680 Rogers Ave.	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9712A31-02	Reported: Dec 31, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1218970HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3510
Analyst:	G. Fish
MS/MSD #:	971271905
Sample Conc.:	N.D.
Prepared Date:	12/18/97
Analyzed Date:	12/18/97
Instrument I.D.#:	GCHP5
Conc. Spiked:	1000 µg/L
Result:	930
MS % Recovery:	93
Dup. Result:	870
MSD % Recov.:	87
RPD:	6.7
RPD Limit:	0-50

LCS #:	BLK121897
Prepared Date:	12/18/97
Analyzed Date:	12/18/97
Instrument I.D.#:	GCHP5
Conc. Spiked:	1000 µg/L
LCS Result:	800
LCS % Recov.:	80

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Reggy Penner
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services, Inc.	Client Project ID:	Chevron 9-1851	
1680 Rogers Ave.	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9712A31-01-03, 05	Reported: Dec 31, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC122397802002A	GC122397802002A	GC122397802002A	GC122397802002A	GC122397802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8021
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	7121620	7121620	7121620	7121620	7121620
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/23/97	12/23/97	12/23/97	12/23/97	12/23/97
Analyzed Date:	12/23/97	12/23/97	12/23/97	12/23/97	12/23/97
Instrument I.D.#:	HP2	HP2	HP2	HP2	HP2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	370 µg/L
Result:	20	21	22	64	320
MS % Recovery:	100	105	110	107	87
Dup. Result:	19	20	20	65	310
MSD % Recov.:	95	100	100	108	84
RPD:	5.1	4.9	9.5	1.6	3.2
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS122397	LCS122397	LCS122397	LCS122397	LCS122397
Prepared Date:	12/23/97	12/23/97	12/23/97	12/23/97	12/23/97
Analyzed Date:	12/23/97	12/23/97	12/23/97	12/23/97	12/23/97
Instrument I.D.#:	HP2	HP2	HP2	HP2	HP2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	370 µg/L
LCS Result:	19	20	20	64	310
LCS % Recov.:	95	100	100	107	84
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL
Elap #1271

Peggy Benner
Project Manager

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Sequoia Analytical

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Blaine Tech Services, Inc.	Client Project ID:	Chevron 9-1851	
1680 Rogers Ave.	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9712A31-04	Reported: Dec 31, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC122997802002A	GC122997802002A	GC122997802002A	GC122997802002A	GC122997802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8021
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	7121813	7121813	7121813	7121813	7121813
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/29/97	12/29/97	12/29/97	12/29/97	12/29/97
Analyzed Date:	12/29/97	12/29/97	12/29/97	12/29/97	12/29/97
Instrument I.D.#:	HP2	HP2	HP2	HP2	HP2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	310 µg/L
Result:	22	23	22	69	320
MS % Recovery:	110	115	110	115	103
Dup. Result:	22	23	23	68	330
MSD % Recov.:	110	115	115	113	106
RPD:	0.0	0.0	4.4	1.5	3.1
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS122997	LCS122997	LCS122997	LCS122997	LCS122997
Prepared Date:	12/29/97	12/29/97	12/29/97	12/29/97	12/29/97
Analyzed Date:	12/29/97	12/29/97	12/29/97	12/29/97	12/29/97
Instrument I.D.#:	HP2	HP2	HP2	HP2	HP2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	310 µg/L
LCS Result:	19	21	21	66	310
LCS % Recov.:	95	105	105	110	100
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL
Elap #1271

Peggy Penner
Project Manager

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Chevron 9-1851 Lab Proj. ID: 9712A31	Received: 12/15/97 Reported: 12/31/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 13 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 9712A31

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 9-1851
Facility Address 451 Hegenberger Rd., Oakland, CA
Consultant Project Number
Consultant Name Blaine Tech Services, Inc.
Address 1680 Rogers Ave., San Jose, CA 95112
Project Contact (Name) Fran Thie
(Phone) (408)573-0555 (Fax Number) (408)573-7771

Chevron Contact (Name) Phil Briggs
(Phone) (510)842-9136
Laboratory Name Sequoia
Laboratory Release Number 9034738
Samples Collected by (Name) Cassidy McIntire
Collection Date 12/12/97
Signature

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015) MTBE	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					
								Analyses To Be Performed												
MW1	01	3	W		1520	HCL	Y	X												
MW2	02	8			1550			X	X				X							
MW3	03	3			1625			X												
MW4	04	3			1640			X												
TB	05	2						X												

DO NOT BILL FOR TB-LB

Remarks

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	BTS	12/15/97 1110		SA	12/15/97 1108
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					12/15/97

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

DE 15 11 39

Field
Data
Sheets

WELL GAUGING DATA

Project # 971212-C4 Date 12-12-97 Client Chevron

Site 451 Hgenberger Rd Oakland, CA

Well I.D.	Well Size (in.)	Sheen/ Odor	Depth to Immiscible Liquid (feet)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to Water (feet)	Depth to Well Bottom (feet)	Survey Point: TOB or TOC
MW1	2					3.00	14.71	TOC
MW2	2					3.91	14.78	"
MW3	2					2.96	14.70	"
MW4	2					5.03	14.99	"

CHEVRON WELL MONITORING DATA SHEET

Project #: 971212-C4	Station #: 9-1851
Sampler: CW	Date: 12-12-97
Well I.D.: MW 1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 14.71	Depth to Water: 3.00
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	radius² * 0.163

Purge Method: Bailer / Disposable Bailer ✓ / Middleburg / Electric Submersible / Extraction Pump / Other: ____

Sampling Method: Bailer / Disposable Bailer ✓ / Extraction Port / Other: ____

1.9	x	3	=	5.7 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
15:10	65.6	7.2	2200	2.0	
15:13	64.3	7.0	2000	4.0	
15:16	64.6	6.9	1900	6.0	

Did well dewater? Yes (No)		Gallons actually evacuated: 6.0	
Sampling Time: 15:20		Sampling Date: 12-12-97	
Sample I.D.: MW1		Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs	
Analyzed for: (TPH-G BTEX MTBE) TPH-D		Other:	
Duplicate I.D.:	Analyzed for: TPH-G BTEX MTBE TPH-D	Other:	
D.O. (if req'd):	Pre-purge: ____ mg/L	Post-purge: ____	mg/L
O.R.P. (if req'd):	Pre-purge: ____ mV	Post-purge: ____	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 921212-C4	Station #: 9-1851
Sampler: CM	Date: 12-12-97
Well I.D.: MW2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 14.78	Depth to Water: 3.91
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	radius² * 0.163

Purge Method: Bailer / Disposable Bailer ✓ / Middleburg / Electric Submersible / Extraction Pump / Other: _____

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

1.7 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 5.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
15.30	65.9	7.4	4700	2.0	
15.34	65.0	7.0	4600	4.0	
1537	65.3	7.0	4300	5.5	

Did well dewater? Yes (No)	Gallons actually evacuated: 4.5
Sampling Time: 15.50	Sampling Date:
Sample I.D.: MW-2	Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs
Analyzed for: (TPH-G BTEX MTBE TPH-D) Other: 8240	
Duplicate I.D.:	Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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

CHEVRON WELL MONITORING DATA SHEET

Project #: 971212-C4	Station #: 9-1851
Sampler: CM	Date: 12 12 97
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 14.70	Depth to Water: 2.96
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	radius² * 0.163

Purge Method: Bailer / Disposable Bailer ✓ / Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: Bailer / Disposable Bailer ✓ / Extraction Port / Other: ___

1.9	x	3	=	5.7 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
16:05	65.0	7.2	3000	2.0	
16:09	64.1	7.1	3100	4.0	
16:14	65.2	7.1	3200	6.0	

Did well dewater? Yes (No)		Gallons actually evacuated: 6.0	
Sampling Time: 16:25		Sampling Date: 12-12-97	
Sample I.D.: MW-3		Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs	
Analyzed for: (TPH-G BTEX MTBE) TPH-D		Other:	
Duplicate I.D.:	Analyzed for: TPH-G BTEX MTBE TPH-D	Other:	
D.O. (if req'd):	Pre-purge: ___ mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge: ___ mV	Post-purge:	mV

CHEVRON WELL MONITORING DATA SHEET

Project #: 971212-C4	Station #: 9-1851
Sampler: CM	Date: 12-12-97
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 14.99	Depth to Water: 5.03
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	radius² * 0.163

Purge Method: Bailer / Disposable Bailer ✓ / Middleburg / Electric Submersible / Extraction Pump / Other: _____

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

1.6 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 4.8 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
16:30	66.8	7.5	4000	2	
16:32	65.2	7.4	5800	4	
16:34	65.9	7.3	5600	5	

Did well dewater? Yes (No) Gallons actually evacuated: 5.0

Sampling Time: 16:40 Sampling Date: 12-12-97

Sample I.D.: MW-4 Laboratory: (Sequoia) GTEL N. Creek Assoc. Labs

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

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

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