



Chevron

ENVIRONMENTAL
PROTECTION
JAN 31 1997 2:46

January 31, 1997

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

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing - Sales West
Phone 510 842-9500

**Re: Former Chevron Service Station # 9-4612
3616 San Leandro Street
Oakland, California**

Dear Mr. Chan:

Enclosed is the Third and Fourth Quarter Groundwater Monitoring reports for 1996 that was prepared by Blaine Tech Services, Inc. for the above noted site. As noted in the reports, the groundwater samples were analyzed for TPH-g, BTEX and MtBE constituents. Monitoring well MW-3 was also analyzed for the TPH-d constituent.

Dissolved concentrations of these constituents in monitoring wells VH-1 and MW-2 are consistent with previous sampling results in both quarters. The benzene constituent for monitoring well MW-3 showed a slight increase from the third to fourth quarters. BTEX constituents were below method detection limits in monitoring well MW-4 for both quarters. The concentration of TPH-d detected in monitoring well MW-3 showed a chromatogram pattern as an unidentified hydrocarbon in both quarters.

Depth to ground water in the third quarter varied from 9.15 feet to 10.26 feet below grade with the flow direction to the southwest. In the fourth quarter the depth to ground water varied from 10.74 feet to 11.48 feet below grade with the direction of flow to the southwest. These last two quarters appears to confirm that the direction of flow is to the southwest. Chevron will continue to sample quarterly.

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

January 31, 1997
Mr. Barney Chan
Former Chevron Service Station # 9-4612
Page 2

cc. Ms. B. C. Owen, Chevron

Mr. Jack Ratto
P.O. Box 6032
Oakland, CA. 94603

Mr. Terry McIlraith
407 Castello Road
Lafayette, CA 94549

December 2, 1996

Phil Briggs
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, CA 94583-0804

4th Quarter 1996 Monitoring at 9-4612

Fourth Quarter 1996 Groundwater Monitoring at
Chevron Service Station Number 9-4612
3616 San Leandro Street
Oakland, CA

Monitoring Performed on October 30, 1996

Groundwater Sampling Report 961030-F-4

This report covers the routine quarterly 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.

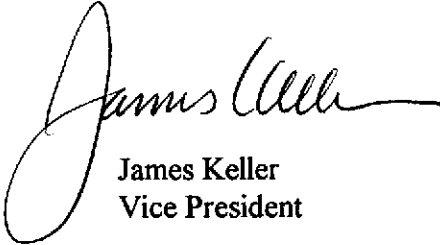
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater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



James Keller
Vice President

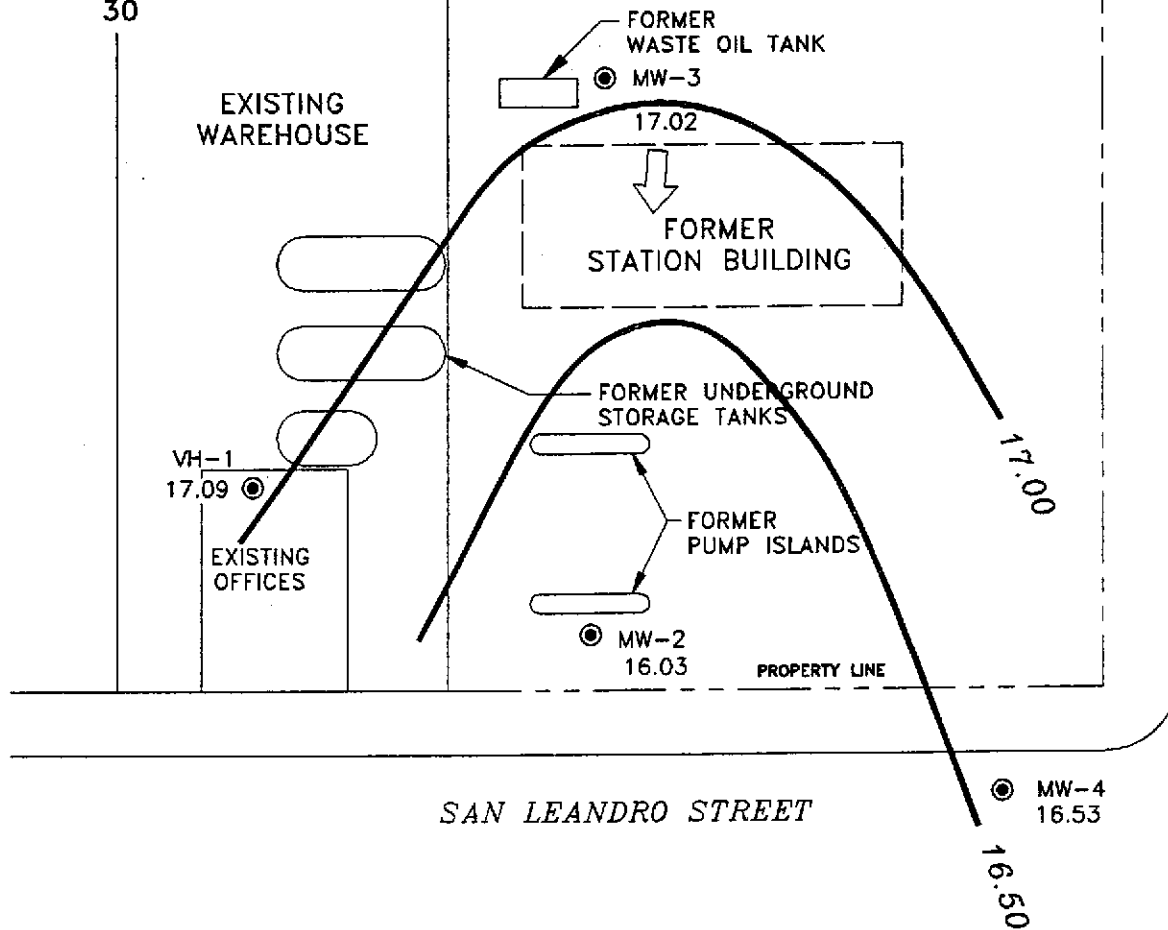
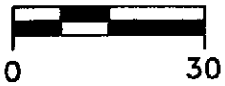
JPK/cg

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

Professional Engineering Appendix



SCALE (ft)



EXPLANATION

- MONITORING WELL
- 16.03 GROUNDWATER ELEVATION (FT, MSL)
- 16.50 — GROUNDWATER ELEVATION CONTOUR (FT, MSL)
- ↓ APPROXIMATE GROUNDWATER FLOW DIRECTION;
APPROXIMATE GRADIENT = 0.02



Base map from Cambria Environmental Technology, Inc.

PREPARED BY

RRM INC.

Chevron Station 9-4612
3616 San Leandro Street
Oakland, California

**GROUNDWATER ELEVATION
CONTOUR MAP, OCTOBER 30, 1996**

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	TPH-Diesel	TOG	HVOC	MTBE
VH-1													
08/10/88	--	--	13.00	--	11,000	3300	200	520	540	--	--	--	--
06/01/89	--	--	10.32	--	15,000	2200	120	540	310	--	--	--	--
09/15/89	--	--	15.69	--	5600	1900	90	350	160	--	--	--	--
12/08/89	--	--	14.77	--	11,000	1900	69	270	99	--	--	--	--
03/07/91	--	--	11.26	--	4500	820	39	120	77	--	--	--	--
09/24/91	--	--	12.98	--	3300	520	19	39	27	--	--	--	--
01/08/92	--	--	13.77	--	5000	600	34	81	76	--	--	--	--
04/20/92	--	--	8.18	--	7400	670	60	110	140	--	--	--	--
03/26/93	27.85	21.14	6.71	--	4900	600	40	72	94	--	--	--	--
05/27/93	27.85	19.27	8.58	--	13,000	1600	120	230	220	--	--	--	--
08/18/93	27.85	17.39	10.46	--	2700	210	10	8.1	18	--	--	--	--
11/03/93	27.85	15.28	12.57	--	4600	680	42	35	68	--	--	--	--
02/10/94	27.85	18.77	9.08	--	1900	260	19	22	29	--	--	--	--
05/12/94	27.85	19.76	8.09	--	2000	390	28	3.9	29	--	--	--	--
08/26/94	27.85	17.10	10.75	--	4900	500	<5.0	23	31	--	--	--	--
11/14/94	27.85	18.40	9.45	--	760	69	<2.0	<2.0	2.2	300	--	--	--
02/01/95	27.85	21.88	5.97	--	1300	120	5.9	<0.5	13	--	--	--	--
05/12/95	27.85	20.14	7.71	--	4400	460	31	45	49	--	--	--	--
08/22/95	27.85	18.59	9.26	--	2900	310	15	28	32	--	--	--	--
12/19/95	27.85	19.05	8.80	--	930	53	<2.5	<2.5	<2.5	--	--	--	39
01/31/96	27.85	22.35	5.50	--	3700	320	<10	41	40	--	--	--	180
04/30/96	27.85	19.81	8.04	--	3900	270	<20	<20	<20	--	--	--	120
08/01/96	27.85	18.67	9.18	--	2700	140	11	18	28	--	--	--	200
10/30/96	27.85	18.67	10.76	--	2700	140	<12	<12	<12	--	--	--	280

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	TPH-Diesel	TOG	HVOC	MTBE
MW-2													
02/16/93	27.51	--	--	--	9200	720	110	250	170	--	--	--	--
03/26/93	27.51	19.89	7.62	--	--	--	--	--	--	--	--	--	--
05/27/93	27.51	18.04	9.47	--	360	5.3	2.1	1.8	2.5	--	--	--	--
08/18/93	27.51	16.46	11.05	--	9400	1100	76	110	100	--	--	--	--
11/03/93	27.51	14.56	12.95	--	8600	390	20	2.7	120	--	--	--	--
02/10/94	27.51	17.72	9.79	--	2700	370	38	44	41	--	--	--	--
05/12/94	27.51	18.59	8.92	--	3800	650	76	15	62	--	--	--	--
08/26/94	27.51	16.14	11.37	--	16,000	1300	270	28	120	--	--	--	--
11/14/94	27.51	17.48	10.03	--	5100	390	10	43	27	--	--	--	--
02/01/95	27.51	20.47	7.04	--	6900	520	82	170	110	--	--	--	--
05/12/95	27.51	18.76	8.75	--	7700	510	83	110	100	--	--	--	--
08/22/95	27.51	17.35	10.16	--	4500	220	16	61	47	--	--	--	--
12/19/95	27.51	18.05	9.46	--	2900	240	<10	19	18	--	--	--	220
01/31/96	27.51	21.91	5.60	--	3900	320	18	72	39	--	--	--	<25
04/30/96	27.51	18.68	8.83	--	5600	200	36	55	47	--	--	--	170
08/01/96	27.51	17.25	10.26	--	6200	190	15	62	59	--	--	--	220
10/30/96	27.51	17.25	11.48	--	5700	190	<25	67	36	--	--	--	260

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	TPH-Diesel	TOG	HVOC	MTBE
MW-3													
02/16/93	28.50	--	--	--	3500	<0.5	8.1	4.6	7.7	--	--	--	--
03/26/93	28.50	21.32	7.18	--	--	--	--	--	--	--	--	--	--
05/27/93	28.50	19.17	9.33	--	4200	580	84	150	100	--	--	--	--
08/18/93	28.50	16.50	12.00	--	910	12	3.7	6.2	3.8	1400	<5000	ND	--
11/03/93	28.50	15.21	13.29	--	5300	29	1.9	0.6	27	--	--	--	--
02/10/94	28.50	18.87	9.63	--	63	<0.5	0.7	<0.5	<0.5	<50	--	--	--
05/12/94	28.50	19.73	8.77	--	<50	<0.5	0.5	<0.5	<0.5	84	--	--	--
08/26/94	28.50	17.08	11.42	--	2100	12	<0.5	5.0	0.5	--	--	--	--
11/14/94	28.50	18.43	10.07	--	140	0.78	<0.5	<0.5	<0.5	--	--	--	--
02/01/95	28.50	22.21	6.29	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
05/12/95	28.50	20.43	8.07	--	330	13	1.1	1.9	0.69	540*	--	--	--
08/22/95	28.50	18.55	9.95	--	980	32	<1.0	<1.0	<1.0	550*	--	--	--
12/19/95	28.50	19.10	9.40	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	--	<2.5
01/31/96	28.50	23.45	5.05	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	--	<2.5
04/30/96	28.50	20.10	8.40	--	320	2.4	<0.5	0.75	<0.5	240*	--	--	7.8
08/01/96	28.50	18.70	9.80	--	980	9.6	<0.5	0.98	2.2	470*	--	--	54
10/30/96	28.50	18.70	11.48	--	2000	14	<10	<10	<10	760*	--	--	140

* 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	TPH-Diesel	TOG	HVOC	MTBE
MW-4													
08/22/95	27.27	18.16	9.11	--	9600	100	<10	<10	<10	--	--	--	--
12/19/95	27.27	18.97	8.30	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
01/31/96	27.27	21.67	5.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
04/30/96	27.27	20.27	7.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
08/01/96	27.27	18.12	9.15	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/30/96	27.27	18.12	10.74	--	110	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
TRIP BLANK													
05/27/93	--	---	---	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--
08/18/93	--	---	---	--	<50	<0.5	<0.5	<0.5	<1.5	1400	<5000	ND	--
11/03/93	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/10/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
05/12/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	84	--	--	--
08/26/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/14/94	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/01/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
05/12/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/22/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/19/95	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
01/31/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
04/30/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
08/01/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5
10/30/96	--	---	---	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<2.5

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on November 1, 1994.

Earlier field data and analytical results are drawn from the September 27, 1994 Groundwater Technology, Inc. report.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

TOG = Total Oil & Grease

HVOC = Halogenated Volatile Organic Compounds

MTBE = Methyl t-Butyl Ether

Analytical Appendix



Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-4612/961030-F4 Sample Descript: VH-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9610J95-01	Sampled: 10/30/96 Received: 10/31/96 Analyzed: 11/04/96 Reported: 11/08/96
--	---	---

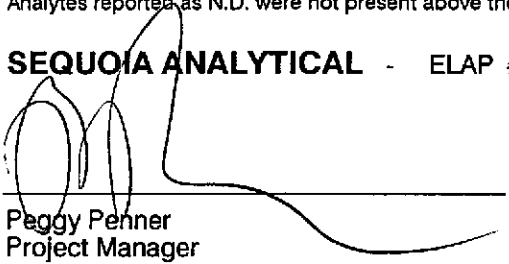
QC Batch Number: GC110496BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1250	2700
Methyl t-Butyl Ether	62	280
Benzene	12	140
Toluene	12	N.D.
Ethyl Benzene	12	N.D.
Xylenes (Total)	12	N.D.
Chromatogram Pattern: Weathered Gas		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-4612/961030-F4 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9610J95-02	Sampled: 10/30/96 Received: 10/31/96 Analyzed: 11/04/96 Reported: 11/08/96
Attention: Jim Keller		

QC Batch Number: GC110496BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	2500	5700
Methyl t-Butyl Ether	125	260
Benzene	25	190
Toluene	25	N.D.
Ethyl Benzene	25	67
Xylenes (Total)	25	36
Chromatogram Pattern: Weathered Gas		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	93

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-4612/961030-F4 Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9610J95-03	Sampled: 10/30/96 Received: 10/31/96 Analyzed: 11/04/96 Reported: 11/08/96
--	---	---

QC Batch Number: GC110496BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	2000
Methyl t-Butyl Ether	50	140
Benzene	10	14
Toluene	10	N.D.
Ethyl Benzene	10	N.D.
Xylenes (Total)	10	N.D.
Chromatogram Pattern: Weathered Gas		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	95

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-4612/961030-F4 Sample Descript: MW-3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9610J95-03	Sampled: 10/30/96 Received: 10/31/96 Extracted: 11/04/96 Analyzed: 11/06/96 Reported: 11/08/96
Attention: Jim Keller		

QC Batch Number: GC1104960HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50 C9-C24	760 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 109

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 Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-4612/961030-F4 Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9610J95-04	Sampled: 10/30/96 Received: 10/31/96 Analyzed: 11/04/96 Reported: 11/08/96
Attention: Jim Keller		

QC Batch Number: GC110496BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-4612/961030-F4 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9610J95-05	Sampled: 10/07/96 Received: 10/31/96 Analyzed: 11/01/96 Reported: 11/08/96
Attention: Jim Keller		

QC Batch Number: GC110196BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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	98

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager





Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Proj. ID: Chevron 9-4612/961030-F4
Lab Proj. ID: 9610J95

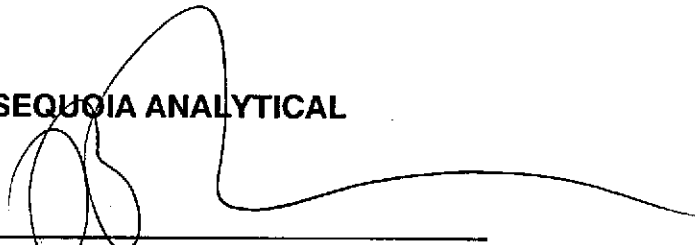
Received: 10/31/96
Reported: 11/08/96

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH Note: Sample 9610J95-01 was diluted 25-fold.
Sample 9610J95-02 was diluted 50-fold.
Sample 9610J95-03 was diluted 20-fold.

SEQUOIA ANALYTICAL


Peggy Penner
Project Manager





Blaine Tech Services, Inc. Client Project ID: Chevron 9-4612 / 961030-F4
 985 Timothy Drive Matrix: Liquid
 San Jose, CA 95133 Work Order #: 9610J95 -01, 05 Reported: Nov 12, 1996
 Attention: Jim Keller

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110496BTEX17A	GC110496BTEX17A	GC110496BTEX17A	GC110496BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	Y. Arteaga	Y. Arteaga	Y. Arteaga	Y. Arteaga
MS/MSD #:	9610E8901	9610E8901	9610E8901	9610E8901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/4/96	11/4/96	11/4/96	11/4/96
Analyzed Date:	11/4/96	11/4/96	11/4/96	11/4/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	9.7	9.7	28
MS % Recovery:	99	97	97	93
Dup. Result:	9.2	9.0	8.9	26
MSD % Recov.:	92	90	89	87
RPD:	7.3	7.5	8.6	7.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK110496	BLK110496	BLK110496	BLK110496
Prepared Date:	11/4/96	11/4/96	11/4/96	11/4/96
Analyzed Date:	11/4/96	11/4/96	11/4/96	11/4/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.4	9.3	28
LCS % Recov.:	97	94	93	93

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

SEQUOIA ANALYTICAL

 Reggy 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

9610J95.BLA <1>





Blaine Tech Services, Inc.
 985 Timothy Drive
 San Jose, CA 95133
 Attention: Jim Keller

Client Project ID: Chevron 9-4612 / 961030-F4
 Matrix: Liquid

Work Order #: 9610J95-02-04

Reported: Nov 12, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110196BTEX17A	GC110196BTEX17A	GC110196BTEX17A	GC110196BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	Y. Arteaga	Y. Arteaga	Y. Arteaga	Y. Arteaga
MS/MSD #:	9610E8901	9610E8901	9610E8901	9610E8901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/1/96	11/1/96	11/1/96	11/1/96
Analyzed Date:	11/1/96	11/1/96	11/1/96	11/1/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.8	9.4	28
MS % Recovery:	100	98	94	93
Dup. Result:	9.9	9.5	9.4	28
MSD % Recov.:	99	95	94	93
RPD:	1.0	3.1	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK110196	BLK110196	BLK110196	BLK110196
Prepared Date:	11/1/96	11/1/96	11/1/96	11/1/96
Analyzed Date:	11/1/96	11/1/96	11/1/96	11/1/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.4	9.3	28
LCS % Recov.:	97	94	93	93

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

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

9610J95.BLA <2>





Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: Chevron 9-4612 / 961030-F4
Matrix: Liquid

Work Order #: 9610J95-03

Reported: Nov 12, 1996

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC1104960HBPEXZ
Analy. Method: EPA 8015M
Prep. Method: EPA 3520

Analyst: J. Minkel
MS/MSD #: 9610J9601
Sample Conc.: 190
Prepared Date: 11/4/96
Analyzed Date: 11/6/96
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

Result: 1500
MS % Recovery: 131

Dup. Result: 1400
MSD % Recov.: 121

RPD: 6.9
RPD Limit: 0-50

LCS #: BLK110496

Prepared Date: 11/4/96
Analyzed Date: 11/6/96
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

LCS Result: 1200
LCS % Recov.: 120

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

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

9610J95.BLA <3>



Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>961030-F4</u>	Station #: <u>9-4612</u>
Sampler: <u>TC</u>	Date: <u>10/30/96</u>
Well I.D.: <u>VH-1</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth: <u>28.53</u>	Depth to Water: <u>10.76</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVO</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

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

<u>11.5</u>	x	<u>3</u>	=	<u>34.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1353</u>	<u>64.6</u>	<u>7.0</u>	<u>840</u>	<u>11.5</u>	<u>ODOR</u>
<u>1405</u>	<u>64.2</u>	<u>7.0</u>	<u>800</u>	<u>23.0</u>	
<u>1417</u>	<u>64.0</u>	<u>7.1</u>	<u>800</u>	<u>34.5</u>	

Did well dewater? Yes <input type="checkbox"/> <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>34.5</u>	
Sampling Time: <u>1420</u>	Sampling Date: <u>10/30/96</u>	
Sample I.D.: <u>VH-1</u>	Laboratory: <u>Sequoia</u> GTEL N. Creek Assoc. Labs	
Analyzed for: <u>TPH-G BTEX MTBE</u> TPH-D Other:		
Duplicate I.D.:	Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
D.O. (if req'd):	Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV	Post-purge: _____ mV

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>961030-F4</u>	Station #: <u>9-4612</u>
Sampler: <u>TC</u>	Date: <u>10/30/96</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>2</u> 3 4 6 8 <u> </u>
Total Well Depth: <u>19.90</u>	Depth to Water: <u>11.48</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Sampling Method: Bailer

Disposable Bailer Disposable Bailer

Middleburg Extraction Port

Electric Submersible Other: _____

Extraction Pump

Other: _____

<u>1.3</u>	\times	<u>3</u>	$=$	<u>3.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1424</u>	<u>64.2</u>	<u>7.2</u>	<u>520</u>	<u>1.5</u>	
<u>1426</u>	<u>63.6</u>	<u>7.2</u>	<u>480</u>	<u>2.75</u>	
<u>1428</u>	<u>63.8</u>	<u>7.1</u>	<u>500</u>	<u>4.0</u>	

Did well dewater? Yes No Gallons actually evacuated: 4.0

Sampling Time: 1440 Sampling Date: 10/30/96

Sample I.D.: MW-2 Laboratory: Sequoia GTEL N. Creek Assoc. Labs

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

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

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

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>961030-F4</u>	Station #: <u>9-46/2</u>
Sampler: <u>TG</u>	Date: <u>10/30/96</u>
Well I.D.: <u>mw-3</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: 19.74 <u>19.74</u>	Depth to Water: <u>11.48</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

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

<u>1.3</u>	x	<u>3</u>	=	<u>3.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>1334</u>	<u>63.8</u>	<u>7.5</u>	<u>500</u>	<u>1.5</u>	<u>SLIGHT ODOR</u>
<u>1336</u>	<u>63.6</u>	<u>7.2</u>	<u>510</u>	<u>2.75</u>	
<u>1338</u>	<u>63.8</u>	<u>7.2</u>	<u>500</u>	<u>4.0</u>	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>4.0</u>	
Sampling Time: <u>1345</u>	Sampling Date: <u>10/30/96</u>	
Sample I.D.: <u>mw-3</u>	Laboratory: <u>(Sequoia)</u> GTEL N. Creek Assoc. Labs	
Analyzed for: <u>(TPH-G BTEX MTBE TPH-D)</u> 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

