

BLAINE
TECH SERVICES INC.



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ENVIRONMENTAL
PROTECTION

97 FEB 28 PM 3:47

January 13, 1997

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

Fourth Quarter 1996 Groundwater Monitoring at
2001 Versailles Avenue
Alameda, CA

Monitoring Performed on December 12, 1996

Groundwater Sampling Report 961212-F-2

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.

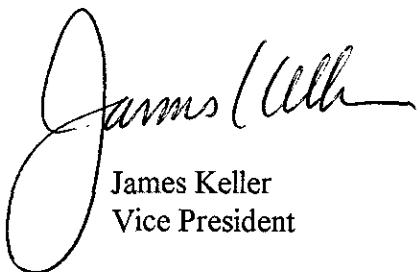
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater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



A handwritten signature in black ink, appearing to read "James Keller".

James Keller
Vice President

JKK/cg

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

Professional Engineering Appendix

Table of Well Data and Analytical Results

Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	Analytical results are in parts per billion (ppb)								
					TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TPH-Diesel	TDS(ppm)	MTBE	TOG
MW-1													
06/01/94	--	--	--	--	600	43	ND	8.9	3.5	340*	740	--	--
08/31/95	13.60	6.57	7.03	--	78	<0.5	<0.5	<0.5	<0.5	1200*	--	--	--
10/27/95	13.60	6.21	7.39	--	<50	<0.5	<0.5	<0.5	<0.5	1100*	--	<2.5	--
01/26/96	13.60	7.48	6.12	--	<50	5.6	<0.5	<0.5	<0.5	920*	--	<2.5	--
02/23/96	13.60	10.30	3.30	--	--	--	--	--	--	--	--	--	<5000
05/21/96	13.60	8.08	5.52	--	<50	<0.5	<0.5	<0.5	<0.5	580	--	<2.5	--
12/12/96	13.60	8.02	5.58	--	<50	<0.5	<0.5	<0.5	<0.5	1000	--	<2.5	--
MW-2													
06/01/94	--	--	--	--	ND	ND	ND	ND	ND	270*	--	--	--
08/31/95	12.22	6.20	6.02	--	<50	<0.5	<0.5	<0.5	<0.5	700*	--	--	--
10/27/95	12.22	5.75	6.47	--	<50	<0.5	<0.5	<0.5	<0.5	710*	--	<2.5	--
01/26/96	--	--	--	Inaccessible	--	--	--	--	--	--	--	--	--
02/23/96	--	--	--	Inaccessible	--	--	--	--	--	--	--	--	--
05/21/96	12.22	8.97	3.25	--	<50	<0.5	<0.5	<0.5	<0.5	580*	--	<2.5	<5000
12/12/96	12.22	6.71	5.51	--	<50	<0.5	<0.5	<0.5	<0.5	510*	--	<2.5	<5000
MW-3													
06/01/94	--	--	--	--	360	0.70	ND	ND	0.50	190*	780	--	--
08/31/95	14.41	6.32	8.09	--	56	<0.5	<0.5	<0.5	<0.5	860*	--	--	--
10/27/95	14.41	5.58	8.83	--	<50	<0.5	<0.5	<0.5	<0.5	870*	--	<2.5	--
01/26/96	14.41	8.68	5.73	--	<50	<0.5	<0.5	<0.5	<0.5	530*	--	<2.5	--
02/23/96	14.41	9.47	4.94	--	--	--	--	--	--	--	--	--	<5000
05/21/96	14.41	7.43	6.98	--	<50	<0.5	<0.5	<0.5	<0.5	1000*	--	<2.5	--
12/12/96	14.41	8.20	6.21	--	<50	<0.5	<0.5	<0.5	<0.5	640*	--	<2.5	--
MW-4													
05/31/94	--	--	--	--	170	ND	ND	ND	ND	160*	--	--	--
08/31/95	13.70	5.48	8.22	--	<50	<0.5	<0.5	<0.5	<0.5	940*	--	--	--
10/27/95	13.70	5.05	8.65	--	<50	<0.5	<0.5	<0.5	<0.5	570*	--	<2.5	--
01/26/96	13.70	8.35	5.35	--	<50	<0.5	<0.5	<0.5	<0.5	730*	--	<2.5	--
02/23/96	13.70	9.36	4.34	--	--	--	--	--	--	--	--	--	<5000
05/21/96	13.70	6.92	6.78	--	<50	<0.5	<0.5	<0.5	<0.5	500*	--	<2.5	--
12/12/96	13.70	6.46	7.24	--	<50	<0.5	<0.5	<0.5	<0.5	650*	--	<2.5	--

* 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	TDS(ppm)	MTBE	TOG
MW-5													
05/31/94	--	--	--	--	140	ND	ND	1.2	ND	620*	--	--	--
08/31/95	12.63	5.37	7.26	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
10/27/95	12.63	4.85	7.78	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
01/26/96	12.63	8.30	4.33	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	<2.5	--
02/23/96	12.63	9.33	3.30	--	--	--	--	--	--	1000*	--	<2.5	--
05/21/96	12.63	6.83	5.80	--	<50	<0.5	<0.5	<0.5	<0.5	160*	--	<2.5	--
12/12/96	12.63	7.39	5.24	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	<2.5	--
MW-6													
05/31/94	--	--	--	--	ND	ND	ND	ND	ND	ND	550	--	550
08/31/95	13.06	4.38	8.68	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	--	--
10/27/95	13.06	3.94	9.12	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	<2.5	--
01/26/96	13.06	7.16	5.90	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	<2.5	--
02/23/96	13.06	8.44	4.62	--	--	--	--	--	--	78*	--	<2.5	--
05/21/96	13.06	5.73	7.33	--	<50	<0.5	<0.5	<0.5	<0.5	53*	--	<2.5	--
12/12/96	13.06	6.35	6.71	--	<50	<0.5	<0.5	<0.5	<0.5	<50	--	<2.5	--
TAP HOSE													
06/01/94	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--
WELL													
06/02/94	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--	--

* 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	TDS(ppm)	MTBE	TOG
TRIP BLANK													
08/31/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/27/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
01/26/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--
05/21/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	<2.5	--
12/12/96	--	--	--	--	<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 August 31, 1995.
 Earlier field data and analytical results are drawn from Chromalab, Inc. and GeoAnalytical Laboratories, Inc.

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

ND = Not detected at or above the minimum quantitation limit. See laboratory reports for minimum quantitation limits.

TDS = Total Dissolved Solids

MTBE = Methyl t-Butyl Ether

TOG= Total Oil and Grease

Analytical Appendix



Sequoia
Analytical

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612927-01

Sampled: 12/12/96
Received: 12/13/96
Extracted: 12/19/96
Analyzed: 12/20/96
Reported: 12/26/96

QC Batch Number: GC1219960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50 C9-C24	1000 W-Diesel
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 134

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

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612927-01

Sampled: 12/12/96
Received: 12/13/96

Analyzed: 12/17/96
Reported: 12/26/96

QC Batch Number: GC121796BTEX03A
Instrument ID: GCHP3

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	88

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

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Peggy Penner
Project Manager

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612927-02

Sampled: 12/12/96
Received: 12/13/96
Extracted: 12/19/96
Analyzed: 12/20/96
Reported: 12/26/96

QC Batch Number: GC1219960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50 C9-C24	510 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 149

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



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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612927-02

Sampled: 12/12/96
Received: 12/13/96

Analyzed: 12/17/96
Reported: 12/26/96

QC Batch Number: GC121796BTEX03A
Instrument ID: GCHP3

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	82

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

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Peggy Penner
Project Manager

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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612927-03

Sampled: 12/12/96
Received: 12/13/96
Extracted: 12/19/96
Analyzed: 12/23/96
Reported: 12/26/96

QC Batch Number: GC1219960HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50 C9-C24	640 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 161 Q

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

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Peggy Penner
Project Manager

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San Jose, CA 95133
Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612927-03

Sampled: 12/12/96
Received: 12/13/96
Analyzed: 12/17/96
Reported: 12/26/96

QC Batch Number: GC121796BTEX03A
Instrument ID: GCHP3

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	91

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

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Peggy Peppier
Project Manager

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**Sequoia
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Blaine Technical Services
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Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612927-04

Sampled: 12/12/96
Received: 12/13/96
Extracted: 12/19/96
Analyzed: 12/23/96
Reported: 12/26/96

QC Batch Number: GC1219960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50 C9-C24	650 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 147

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

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Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612927-04

Sampled: 12/12/96
Received: 12/13/96

Analyzed: 12/18/96
Reported: 12/26/96

QC Batch Number: GC121796BTEX02B
Instrument ID: GCHP2

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 %	
Trifluorotoluene	70	130
		% Recovery
		72

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

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Peggy Penner
Project Manager

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Blaine Technical Services
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Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612927-05

Sampled: 12/12/96
Received: 12/13/96
Extracted: 12/19/96
Analyzed: 12/20/96
Reported: 12/26/96

QC Batch Number: GC1219960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 106

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

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**Sequoia
Analytical**

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Blaine Technical Services
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Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612927-05

Sampled: 12/12/96
Received: 12/13/96

Analyzed: 12/17/96
Reported: 12/26/96

QC Batch Number: GC121796BTEX03A
Instrument ID: GCHP3

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		
Trifluorotoluene	Control Limits % 70 130	% Recovery 82

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Perner
Project Manager

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Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

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

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612927-06

Sampled: 12/12/96
Received: 12/13/96
Extracted: 12/19/96
Analyzed: 12/20/96
Reported: 12/26/96

QC Batch Number: GC1219960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 110

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

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Project Manager

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

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612927-06

Sampled: 12/12/96
Received: 12/13/96
Analyzed: 12/17/96
Reported: 12/26/96

QC Batch Number: GC121796BTEX03A
Instrument ID: GCHP3

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		
Trifluorotoluene	Control Limits % 70	% Recovery 130 89

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9612927-07

Sampled: 12/12/96
Received: 12/13/96

Analyzed: 12/17/96
Reported: 12/26/96

QC Batch Number: GC121796BTEX03A
Instrument ID: GCHP3

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		
Trifluorotoluene	Control Limits % 70 130	% Recovery 86

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Renner
Project Manager

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Sequoia
Analytical

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FAX (916) 921-0100

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

Client Proj. ID: Chev Signal Blk Plt/961212-F2
Lab Proj. ID: 9612927

Received: 12/13/96
Reported: 12/26/96

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 16 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Peggy Periner
Project Manager

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

Client Project ID: Chevron Signal Blk Pft/961212-F2
Matrix: Liquid

Work Order #: 9612927 -01-07

Reported: Dec 31, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC121796BTEX03A	GC121796BTEX03A	GC121796BTEX03A	GC121796BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	961271501	961271501	961271501	961271501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/17/96	12/17/96	12/17/96	12/17/96
Analyzed Date:	12/17/96	12/17/96	12/17/96	12/17/96
Instrument I.D. #:	GCHP03	GCHP03	GCHP03	GCHP03
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.3	9.0	8.9	28
MS % Recovery:	93	90	89	93
Dup. Result:	9.3	9.0	9.0	28
MSD % Recov.:	93	90	90	93
RPD:	0.0	0.0	1.1	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK121796	BLK121796	BLK121796	BLK121796
Prepared Date:	12/17/96	12/17/96	12/17/96	12/17/96
Analyzed Date:	12/17/96	12/17/96	12/17/96	12/17/96
Instrument I.D. #:	GCHP03	GCHP03	GCHP03	GCHP03
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.8	8.3	8.2	26
LCS % Recov.:	88	83	82	87

MS/MSD Control Limits	60-140	60-140	60-140	60-140
	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.



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

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

Client Project ID: Chevron Signal Blk Plt/961212-F2
Matrix: Liquid

Work Order #: 9612927-01-06

Reported: Dec 31, 1996

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC1219960HBPEXB
Analy. Method: EPA 8015M
Prep. Method: EPA 3510

Analyst: J. Minkel
MS/MSD #: 961290801
Sample Conc.: N.D.
Prepared Date: 12/19/96
Analyzed Date: 12/20/96
Instrument I.D.#: GCHP05B
Conc. Spiked: 1000 µg/L

Result: 1200
MS % Recovery: 120

Dup. Result: 1400
MSD % Recov.: 140

RPD: 15.0
RPD Limit: 0-50

LCS #: BLK121996

Prepared Date: 12/19/96
Analyzed Date: 12/20/96
Instrument I.D.#: GCHP05B
Conc. Spiked: 1000 µg/L

LCS Result: 1200
LCS % Recov.: 120

MS/MSD	60-140
LCS	50-150
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.

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

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Former Signal Bulk Plant	Phil Briggs
	Facility Address 2001 Versailles Ave., Alameda, CA	(Phone) (510) 842-9136
	Consultant Project Number 961212 - FZ	Laboratory Name Sequoia
	Consultant Name Blaine Tech Services, Inc.	Laboratory Release Number 3442430
	Address 985 Timothy Dr., San Jose, CA 95133	Samples Collected by (Name) Travis GRAF
	Project Contact (Name) Jim Keller	Collection Date 12/12/96
(Phone) 408 995-5535 (Fax Number) 408 293-8773		

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)	Analyses To Be Performed						DO NOT BILL FOR TB-LB	Remarks	
									BTEX + TPH GAS (8010 + 8015)	TPH Diesel (8015)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8220)	Extractable Organics (8220)	Metals Cd, Cr, Pb, Zn, Ni (ICP or AA)		
MW-1	1	5	W			1600	HCl	Y	X	X							
MW-2	2	5				1530			X	X						X	9612927
MW-3	3	5				1630			X	X						X	
MW-4	4	5				1505			X	X						X	
MW-5	5	5				1440			X	X						X	
MW-6	6	5				1415			X	X						X	
TS	7	2	↓			—	↓	↓	X	ICP	ICP					X	ICP 114

Relinquished By (Signature)

Travis Graf

Organization

BTS

Date/Time 11:45

12/13/96

Received By (Signature)

Father

Organization

Sequoia

Date/Time 11:45

12/13/96

Turn Around Time (Circle Choice)

24 Hrs.

48 Hrs.

6 Days

10 Days

As Contracted

Relinquished By (Signature)

Father

Organization

Date/Time

12/13/96

Received By (Signature)

Organization

Date/Time

Relinquished By (Signature)

Organization

Date/Time

Received For Laboratory By (Signature)

Travis Graf

Date/Time

12/13/96 13:44

Field Data Sheets

WELL GAUGING DATA

Project # 961212-F2 Date 12/12/96 Client CHEVRON BULK PLANT

FORMER SIGNAL
BULK PLANT

Site 200, VERSAILLES AVE. ARAMEOA, CA

CHEVRON WELL MONITORING DATA SHEET

Project #:	961212-F2	Station #:	SIGNAL BULK PLANT				
Sampler:	TG	Date:	12/12/96				
Well I.D.:	MW-1	Well Diameter:	(2)	3	4	6	8
Total Well Depth:	22.42	Depth to Water:	5.58				
Depth to Free Product:		Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH		

Well Diameter	Multipier	Well Diameter	Multipier
2"	0.15	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

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

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Other: _____

$$\frac{2.7}{\text{1 Case Volume (Gals.)}} \times \underline{3} = \frac{8.1}{\text{Calculated Volume}} \text{ Gals.}$$

Time	Temp (F)	pH	Cond.	Gals. Removed	Observations
1544	66.2	7.4	780	2.75	Slow RECHARGE
1547	66.6	7.3	780	5.50	
1549	66.4	7.3	780	8.25	

Did well dewater? Yes No Gallons actually evacuated: 8.25

Sampling Time: 1600 Sampling Date: 12/12/96

Sample I.D.: MW-1 Laboratory: Sequoia GTEL

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

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

CHEVRON WELL MONITORING DATA SHEET

Project #:	961212 - F2	Station #:	SIGNAL Bulk Plant				
Sampler:	TG	Date:	12/12/96				
Well I.D.:	MW-2	Well Diameter:	(2)	3	4	6	8
Total Well Depth:	22.06	Depth to Water:	5.51				
Depth to Free Product:		Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH		

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

Purge Method: Bailex
 Disposable Bailex
 Middleburg
 Electric Submersible
 Extraction Pump
 Other: _____

Sampling Method: Bailex
 Disposable Bailex
 Extraction Port
 Other: _____

$$\frac{2.6}{\text{1 Case Volume (Gals.)}} \times \frac{3}{\text{Specified Volumes}} = \frac{7.8}{\text{Calculated Volume}} \text{ Gals.}$$

Time	Temp (F)	pH	Cond.	Gals. Removed	Observations
1518 1321	66.8	7.0	620	2.75	SLOW RECHARGE
1521 1321	66.0	7.1	700	85.25	
1524 1324	65.0	7.1	760	8.0	

Did well dewater? Yes No Gallons actually evacuated: 8.0

Sampling Time: ~~1330~~ 1530 Sampling Date: 12/12/96

Sample I.D.: MW-2 Laboratory: Sequoia GTEL

Analyzed for: DPG BTEX MTBE TPH-D Other: _____

D.O. (if req'd): Pre-purge: mL Post-purge: mL

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

CHEVRON WELL MONITORING DATA SHEET

Project #:	961212-F2	Station #:	SIGNATURE BULK PEANUT				
Sampler:	TG	Date:	12/12/96				
Well I.D.:	MW-3	Well Diameter:	(2)	3	4	6	8
Total Well Depth:	23.40	Depth to Water:	6.21				
Depth to Free Product:		Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):		YSI	HACH	

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

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

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Other: _____

$$\begin{array}{r}
 2.8 \\
 \times \quad 3 \\
 \hline
 1 \text{ Case Volume (Gals.)} \quad \text{Specified Volumes} \quad = \quad 8.4 \text{ Gals.} \\
 \end{array}
 \quad \text{Calculated Volume}$$

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1615	64.2	7.0	800	3.0	
1618	63.4	7.0	720	5.75	
1621	63.2	7.0	700	8.50	

Did well dewater? Yes No Gallons actually evacuated: 8.50

Sampling Time: 1630 Sampling Date: 12/12/96

Sample I.D.: MW-3 Laboratory: Sequoia GTEL

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

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

CHEVRON WELL MONITORING DATA SHEET

Project #:	961212 - F2	Station #:	SIGNAL Bulk Prod				
Sampler:	TG	Date:	12/12/96				
Well I.D.:	MW-4	Well Diameter:	(2)	3	4	6	8
Total Well Depth:	21.08	Depth to Water:	7.24				
Depth to Free Product:		Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH		

Well Diameter	Mohr's Law	Well Diameter	Mohr's Law
2"	0.15	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

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

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Other: _____

$$2.2 \times 3 = 6.6 \text{ Gals.}$$

1 Case Volume (Gals.) Specified Volumes Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1453	66.8	7.8	800	2.25	
1455	66.0	7.4	860	4.50	
1457	65.8	7.3	860	6.75	

Did well dewater? Yes No Gallons actually evacuated: 6.75

Sampling Time: 1505 Sampling Date: 12/12/96

Sample I.D.: MW-4 Laboratory: Sequoia GTEL

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

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

Project #:	961212-F2	Station #:	SIGNAL BULK PLANT				
Sampler:	TG	Date:	12/12/96				
Well I.D.:	MW-5	Well Diameter:	(2)	3	4	6	8
Total Well Depth:	22.10	Depth to Water:	5.24				
Depth to Free Product:		Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH		

Well Diameter	Magnitude	Well Diameter	Magnitude
2"	0.15	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.153

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

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Other: _____

$$\begin{array}{r}
 \frac{2.7}{\text{1 Case Volume (Gals.)}} \times \frac{3}{\text{Specified Volumes}} = \frac{8.1}{\text{Calculated Volume}}
 \end{array}
 \text{ Gals.}$$

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1428	69.6	7.6	900	2.75	
1430	70.4	7.8	900	5.50	
1432	70.6	7.8	900	8.25	

Did well dewater? Yes Gallons actually evacuated: 8.25

Sampling Time: 1440 Sampling Date: 12/12/96

Sample I.D.: MW-5 Laboratory: Sequoia GTEL

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

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

CHEVRON WELL MONITORING DATA SHEET

Project #:	961212-F2	Station #:	SIGNAL Bulk Plant				
Sampler:	TG	Date:	12/12/96				
Well I.D.:	MW-6	Well Diameter:	(2)	3	4	6	8
Total Well Depth:	20.18	Depth to Water:	6.71				
Depth to Free Product:		Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH		

Well Diameter	Meter	Well Diameter	Meter
2"	0.15	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	$\pi d^2 / 4 \times 0.163$

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

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Other: _____

$$\begin{array}{r}
 2.2 \\
 \times \\
 3
 \end{array} = \underline{\quad 6.6 \quad} \text{ Gals.}$$

1 Case Volume (Gals.) Specified Volumes Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1402	68.2	7.6	600	2.25	
1404	68.4	7.4	540	4.50	
1406	68.4	7.4	560	6.75	

Did well dewater? Yes No Gallons actually evacuated: 6.75

Sampling Time: 1415 Sampling Date: 12/12/96

Sample I.D.: MW-6 Laboratory: Sequoia GTEL

Analyzed for: TTHM 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