



Chevron

607

December 26, 1995

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

Mark A. Miller
SAR Engineer
Phone No. 510 842-8134
Fax No. 510 842-8252

ENVIRONMENTAL
PROTECTION
95 DEC 28 PM 2:28

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

**Re: Former Signal Bulk Plant
2001 Versailles Avenue, Alameda, CA**

Dear Mr. Chan:

Enclosed is the Fourth Quarter 1995 Groundwater Monitoring report dated November 17, 1995, prepared by our consultant Blaine Tech Services, Inc. for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), BTEX, and total petroleum hydrocarbons as diesel (TPH-D).

Dissolved concentrations of TPH-G and BTEX constituents observed during the past quarter were below method detection limits in all wells. Concentrations of TPH-D were detected in MW-1 through MW-4, however the chromatogram pattern observed was not consistent with motor fuel hydrocarbons. Depth to ground water was measured at approximately 6.5 to 9.1 feet below grade and the direction of flow is to the north-northeast.

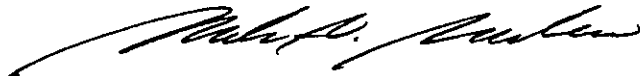
After discussing the unidentified hydrocarbon pattern observed on the chromatogram with the analytical laboratory, it appears that the unidentified peaks are an artifact of the sampling process we are currently experiencing with a number of TPH-D samples. The lab indicates that the miscellaneous peaks have been subtracted out of the quantitation so that only TPH-D results are reported. We are working with our laboratory and sampling consultant to find a solution to this problem.

Thank you for your letter of November 28, 1995. As requested, we will include analysis of EPA Methods 8010 and 8270 for monitor well MW-5. Should concentrations of these constituents be below method detection limits, they will be discontinued from the sampling program.

If you have any questions or comments, please feel free to call me at (510) 842-8134.

Mr. Barney Chan
December 26, 1995
Page 2

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY



Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: ✓ Ms. B.C. Owen

Mr. Clifford Mapes
14 Grass Valley Court
Oakland, CA 94605

Exxon Company, U.S.A.
Marketing Department
Attn.: Distribution Manager
800 Bell Street, Suite 2845
Houston, TX 77002

Mr. William J. Stack
Exxon Company, U.S.A.
800 Bell Street, Suite 4137
Houston, TX 77002

November 17, 1995

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

Fourth Quarter 1995 Groundwater Monitoring at
2001 Versailles Avenue
Alameda, CA

Monitoring Performed on October 27, 1995

Groundwater Sampling Report **951027-W-1**

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 Chevron's Richmond Refinery for disposal.

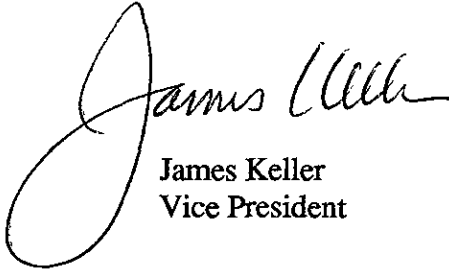
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater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

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.

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
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
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
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
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
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	--	<2.5

* Unknown hydrocarbon found in diesel range qualified as diesel.

** 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
MW-6												
05/31/94	--	--	--	--	ND	ND	ND	ND	ND	ND	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
TAP HOSE												
06/01/94	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
WELL												
06/02/94	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
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	--	--	--

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

Analytical Appendix



Blaine Technical Services	Client Proj. ID: Chevron FSBP, 951027-W1	Sampled: 10/27/95
985 Timothy Drive	Sample Descript: MW1	Received: 10/30/95
San Jose, CA 95133	Matrix: LIQUID	Extracted: 11/01/95
Attention: Jim Keller	Analysis Method: EPA 8015 Mod	Analyzed: 11/04/95
	Lab Number: 9510L30-01	Reported: 11/07/95

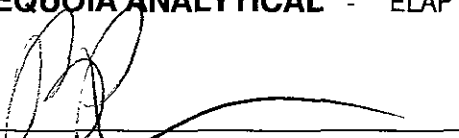
QC Batch Number: GC1101950HBPEXZ
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50 C9-C24	1100 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 FSBP, 951027-W1
Sample Descript: MW1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9510L30-01

Sampled: 10/27/95
Received: 10/30/95
Analyzed: 11/01/95
Reported: 11/07/95

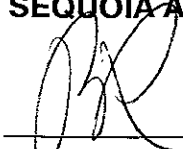
QC Batch Number: GC110195BTEX21A
Instrument ID: GCHP21

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	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 FSBP, 951027-W1
Sample Descript: MW2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9510L30-02

Sampled: 10/27/95
Received: 10/30/95
Extracted: 11/01/95
Analyzed: 11/04/95
Reported: 11/07/95

Attention: Jim Keller

QC Batch Number: GC1101950HBPEXZ
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	710 Unidentified HC
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	137

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 FSBP, 951027-W1 Sample Descript: MW2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510L30-02	Sampled: 10/27/95 Received: 10/30/95 Analyzed: 11/01/95 Reported: 11/07/95
Attention: Jim Keller		
QC Batch Number: GC110195BTEX21A		
Instrument ID: GCHP21		

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	97

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	Client Proj. ID: Chevron FSBP, 951027-W1	Sampled: 10/27/95
985 Timothy Drive	Sample Descript: MW3	Received: 10/30/95
San Jose, CA 95133	Matrix: LIQUID	Extracted: 11/01/95
Attention: Jim Keller	Analysis Method: EPA 8015 Mod	Analyzed: 11/04/95
	Lab Number: 9510L30-03	Reported: 11/07/95

QC Batch Number: GC1101950HBPEXZ
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	870 Unidentified HC
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	130

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 FSBP, 951027-W1
Sample Descript: MW3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9510L30-03

Sampled: 10/27/95
Received: 10/30/95
Analyzed: 11/01/95
Reported: 11/07/95

QC Batch Number: GC110195BTEX17A
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	90

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	Client Proj. ID: Chevron FSBP, 951027-W1	Sampled: 10/27/95
985 Timothy Drive	Sample Descript: MW4	Received: 10/30/95
San Jose, CA 95133	Matrix: LIQUID	Extracted: 11/01/95
Attention: Jim Keller	Analysis Method: EPA 8015 Mod	Analyzed: 11/04/95
	Lab Number: 9510L30-04	Reported: 11/07/95
QC Batch Number: GC1101950HBPEXZ		
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	570 Unidentified HC
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	128

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	Client Proj. ID: Chevron FSBP, 951027-W1	Sampled: 10/27/95
985 Timothy Drive	Sample Descript: MW4	Received: 10/30/95
San Jose, CA 95133	Matrix: LIQUID	
Attention: Jim Keller	Analysis Method: 8015Mod/8020	Analyzed: 11/01/95
	Lab Number: 9510L30-04	Reported: 11/07/95

QC Batch Number: GC110195BTEX21A
Instrument ID: GCHP21

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

Client Proj. ID: Chevron FSBP, 951027-W1
Sample Descript: MW5
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9510L30-05

Sampled: 10/27/95
Received: 10/30/95
Extracted: 11/01/95
Analyzed: 11/04/95
Reported: 11/07/95


QC Batch Number: GC1101950HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	131

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 FSBP, 951027-W1
Sample Descript: MW5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9510L30-05

Sampled: 10/27/95
Received: 10/30/95
Analyzed: 11/01/95
Reported: 11/07/95

QC Batch Number: GC110195BTEX21A
Instrument ID: GCHP21

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	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	Client Proj. ID: Chevron FSBP, 951027-W1	Sampled: 10/27/95
985 Timothy Drive	Sample Descript: MW6	Received: 10/30/95
San Jose, CA 95133	Matrix: LIQUID	Extracted: 11/01/95
Attention: Jim Keller	Analysis Method: EPA 8015 Mod	Analyzed: 11/04/95
	Lab Number: 9510L30-06	Reported: 11/07/95

QC Batch Number: GC1101950HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	93

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 FSBP, 951027-W1
Sample Descript: MW6
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9510L30-06

Sampled: 10/27/95
Received: 10/30/95
Analyzed: 11/01/95
Reported: 11/07/95

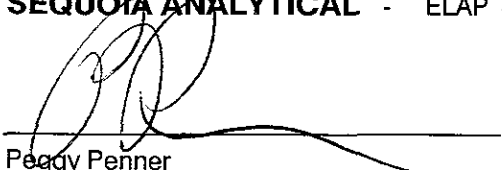
QC Batch Number: GC110195BTEX21A
Instrument ID: GCHP21

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	94

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 FSBP, 951027-W1
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9510L30-07

Sampled: 10/27/95
Received: 10/30/95
Analyzed: 11/01/95
Reported: 11/07/95

QC Batch Number: GC110195BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	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	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





Sequoia
Analytical

680 Chesapeake Drive	Redwood City, CA 94063	(415) 364-9600	FAX (415) 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 Technical Services
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Proj. ID: Chevron FSBP, 951027-W1
Lab Proj. ID: 9510L30

Received: 10/30/95
Reported: 11/07/95

LABORATORY NARRATIVE

No issues.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager





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

Client Project ID: Chevron FSBP/ 951027-W1
Matrix: Liquid

Work Order #: 9510L30 -03

Reported: Nov 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110195BTEX17A	GC110195BTEX17A	GC110195BTEX17A	GC110195BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Woo	J. Woo	J. Woo	J. Woo
MS/MSD #:	9510F4007	9510F4007	9510F4007	9510F4007
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/1/95	11/1/95	11/1/95	11/1/95
Analyzed Date:	11/1/95	11/1/95	11/1/95	11/1/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.8	9.7	30
MS % Recovery:	96	98	97	100
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	4.1	2.0	3.0	3.3
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK102795	BLK102795	BLK102795	BLK102795
Prepared Date:	11/1/95	11/1/95	11/1/95	11/1/95
Analyzed Date:	11/1/95	11/1/95	11/1/95	11/1/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	31
LCS % Recov.:	100	100	100	103

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120
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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.

SEQUOIA ANALYTICAL

Peggy Penner
Peggy Penner
Project Manager

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

9510L30.BLA <1>





Blaine Tech Services, Inc. Client Project ID: Chevron FSBP / 951027-W1
 985 Timothy Drive Matrix: Liquid
 San Jose, CA 95133
 Attention: Jim Keller Work Order #: 9510L30-01-02, 04-06 Reported: Nov 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110195BTEX21A	GC110195BTEX21A	GC110195BTEX21A	GC110195BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	B. Sullivan	B. Sullivan	B. Sullivan	B. Sullivan
MS/MSD #:	9510F4007	9510F4007	9510F4007	9510F4007
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/1/95	11/1/95	11/1/95	11/1/95
Analyzed Date:	11/1/95	11/1/95	11/1/95	11/1/95
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	12	12	36
MS % Recovery:	110	120	120	120
Dup. Result:	10	11	11	33
MSD % Recov.:	100	110	110	110
RPD:	9.5	8.7	8.7	8.7
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK102695	BLK102695	BLK102695	BLK102695
Prepared Date:	11/1/95	11/1/95	11/1/95	11/1/95
Analyzed Date:	11/1/95	11/1/95	11/1/95	11/1/95
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	31
LCS % Recov.:	100	100	100	103

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120
---------------------------	--------	--------	--------	--------

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.

SEQUOIA ANALYTICAL

Peggy Penner
 Peggy Penner
 Project Manager

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

9510L30.BLA <2>





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

Client Project ID: Chevron FSBP/ 951027-W1
Matrix: Liquid

Work Order #: 9510L30-01-06

Reported: Nov 9, 1995

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC1101950HBPEXZ
Analy. Method: EPA 8015M
Prep. Method: EPA 3520

Analyst: B. Ali
MS/MSD #: 9510L8002
Sample Conc.: 580
Prepared Date: 11/1/95
Analyzed Date: 11/3/95
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

Result: 1500
MS % Recovery: 92

Dup. Result: 1400
MSD % Recov.: 82

RPD: 6.9
RPD Limit: 0-50

LCS #: BLK110195

Prepared Date: 11/1/95
Analyzed Date: 11/3/95
Instrument I.D.#: GCHP4
Conc. Spiked: 1000 µg/L

LCS Result: 1000
LCS % Recov.: 100

MS/MSD	
LCS	38-122
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

9510L30.BLA <3>



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

Chevron Facility Number: Former Signal Bulk Plant
Facility Address: 2001 Versailles Ave., Alameda, CA 951027-W
Consultant Project Number: 951027-W
Consultant Name: Blaine Tech Services, Inc.
Address: 985 Timothy Dr., San Jose, CA 95133
Project Contact (Name): Jim Keller
(Phone) 408 995-5535 (Fax Number) 408 293-8773

Chevron Contact (Name): Mark Miller
(Phone): (510) 842-8134
Laboratory Name: Sequoia
Laboratory Release Number: 3442430
Samples Collected by (Name): Dave
Collection Date: 10-27-95
Signature: [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)	Analytes To Be Performed																	
								BTEX + TPH GAS (8020 + 8015)	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)	MTBE									
MW1		5	W		1540	HCI	Y	X	X									X							
MW2		5	W		1336		Y	X	X									X							
MW3		5	W		1416		Y	X	X									X							
MW4		5	W		1450		Y	X	X									X							
MW5		5	W		1244		Y	X	X									X							
MW6		5	W		1202		Y	X	X									X							
TB		2	W				Y	X	X																

DO NOT BILL
FOR TB-LB
9510L30

Remarks

4920
02 A-E
05
04
05
06 ↓
07 A,B

Relinquished By (Signature): <u>[Signature]</u>	Organization: <u>BTS</u>	Date/Time: <u>9:10 10/30/95</u>	Received By (Signature): <u>[Signature]</u>	Organization: <u>Sequoia</u>	Date/Time: <u>9:10 10/30/95</u>
Relinquished By (Signature): <u>[Signature]</u>	Organization:	Date/Time: <u>10/30/95</u>	Received By (Signature):	Organization:	Date/Time:
Relinquished By (Signature): <u>[Signature]</u>	Organization:	Date/Time:	Received For Laboratory By (Signature): <u>[Signature]</u>	Organization:	Date/Time: <u>11/26 10/30/95</u>

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

#1/HCH

Field Data Sheets

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>951027-W1</u>	Station #: <u>FORMER SIGNAL BULK PLANT</u>
Sampler: <u>Dave</u>	Start Date: <u>10-27-95</u>
Well I.D.: <u>MW1</u>	Well Diameter: (circle one) <u>(2)</u> 3 4 6 —
Total Well Depth: <u>22.43</u>	Depth to Water: <u>7.39</u>
Before _____ After _____	Before <u> </u> After <u>16.15</u>
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Measurements referenced to: <u>PVC</u>	Grade _____ Other: _____

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	<u>0.16</u>	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

<u>2.4</u>	x	<u>3</u>	=	<u>7.2</u>
1 Case Volume		Specified Volumes		gallons

Purging: <u>Bailer</u> <u>Disposable Bailer</u> Middieburg Electric Submersible Extraction Pump Other _____	Sampling: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port Other _____
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TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1520	69.2	7.0	1200	—	3	
1537	69.0	7.3	1150	—	6	
1522	<u>DEWATERED @ 3 GAL</u>				8	
1536	<u>DTW @ 16.15'</u>					
1537	69.0	7.3	1150	—		

Did Well Dewater? YES If yes, gals. 5.5 Gallons Actually Evacuated: 6.5

Sampling Time: <u>1540</u>	Sampling Date: <u>10-27-95</u>
Sample I.D.: <u>MW1</u>	Laboratory: <u>SEQ.</u>
Analyzed for: (Circle) <u>TPH-G</u> <u>BTEX</u> <u>TPH-D</u>	OTHER: _____
Duplicate I.D.: _____	Cleaning Blank I.D.: _____
Analyzed for: (Circle) <u>TPH-G</u> <u>BTEX</u> <u>TPH-D</u>	OTHER: _____

CHEVRON WELL MONITORING DATA SHEET

Project #: 951027-W1	Station #: FORMER SIGNAL BULK PLANT
Sampler: Dave	Start Date: 10-27-95
Well I.D.: MW2	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: 22.08	Depth to Water: 6.47
Before After	Before After
Depth to Free Product: _____ Thickness of Free Product (feet): _____	
Measurements referenced to: <u>PVC</u> Grade Other: _____	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

$$\frac{2.5}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{7.5}{\text{gallons}}$$

Purging: Bailer Disposable Bailer
~~Middlebury~~
 Electric Submersible
 Extraction Pump
 Other _____

Sampling: Bailer Disposable Bailer
~~Extraction Port~~
 Other _____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1322	70.4	7.0	1100	—	3	
1329	69.8	7.0	1100	—	6	
1333	69.0	7.0	1100	—	8	

Did Well Dewater? No If yes, gals. _____ Gallons Actually Evacuated: 8

Sampling Time: 1336 Sampling Date: 10-27-95

Sample I.D.: MW2 Laboratory: SEQ

Analyzed for: TPH-G BTEX TPH-D OTHER: _____
 (Circle)

Duplicate I.D.: _____ Cleaning Blank I.D.: _____

Analyzed for: TPH-G BTEX TPH-D OTHER: _____
 (Circle)

CHEVRON WELL MONITORING DATA SHEET

Project #: 951027-W1	Station #: FORMER SIGNAL BULK PLANT
Sampler: Dave	Start Date: 10-27-95
Well I.D.: MW3	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: 23.37	Depth to Water: 8.83
Before After	Before After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVC</u>	Grade Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

2.3	x	3	=	6.9
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Disposable Bailer
 Middleburg
 Electric Submersible
 Extraction Pump
 Other _____

Sampling: Bailer
Disposable Bailer
 Extraction Port
 Other _____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1403	69.2	6.8	1200	—	3	SLIGHT ODOR
1409	68.6	6.8	1200	—	5	
1413	68.6	6.8	1100	—	7	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 7

Sampling Time: 1416 Sampling Date: 10-27-95

Sample I.D.: MW3 Laboratory: SEQ

Analyzed for: TPH-G BTEX TPH-D OTHER: _____
 (Circle)

Duplicate I.D.: _____ Cleaning Blank I.D.: _____

Analyzed for: TPH-G BTEX TPH-D OTHER: _____
 (Circle)

CHEVRON WELL MONITORING DATA SHEET

Project #: 951027-W1	Station #: FORMER SIGNAL BULK PLANT
Sampler: Dave	Start Date: 10-27-95
Well I.D.: MW4	Well Diameter: (circle one) <u>(2)</u> 3 4 6
Total Well Depth: 21.04	Depth to Water: 8.65
Before	After
Before	After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVC</u>	Grade Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	<u>0.16</u>	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

<u>2.0</u>	\times	<u>3</u>	$=$	<u>6.0</u>	gallons
1 Case Volume		Specified Volumes			

Purging: Bailer <u>Disposable Bailer</u> Middleburg Electric Submersible Extraction Pump Other _____	Sampling: Bailer <u>Disposable Bailer</u> Extraction Port Other _____
--	---

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1438	70.0	7.2	1100	—	2	
1442	69.4	7.2	1100	—	4	
1446	69.4	7.2	1100	—	6	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 6

Sampling Time: 1450 Sampling Date: 10-27-95

Sample I.D.: MW4 Laboratory: SEQ.

Analyzed for: (TPH-G) (BTEX) (TPH-D) OTHER:

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

CHEVRON WELL MONITORING DATA SHEET

Project #: 951027-W1	Station #: FORMER SIGNAL BULK PLANT
Sampler: Dave	Start Date: 10-27-95
Well I.D.: MWS	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: 22.01	Depth to Water: 7.78
Before After	Before After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVC</u>	Grade Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

$$\begin{array}{rcl}
 \underline{2.3} & \times & \underline{3} \\
 \text{1 Case Volume} & & \text{Specified Volumes} \\
 & & = \underline{6.9} \\
 & & \text{gallons}
 \end{array}$$

Purging: Bailer
 Disposable Bailer
 Middleburg
 Electric Submersible
 Extraction Pump
 Other _____

Sampling: Bailer
 Disposable Bailer
 Extraction Port
 Other _____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1229	68.0	7.8	500	—	3	
1235	67.8	7.6	550	—	5	
1240	67.8	7.5	550	—	7	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 7

Sampling Time: 1244 Sampling Date: 10-27-95

Sample I.D.: MWS Laboratory: SEQ

Analyzed for: TPH-G BTEX TPH-D OTHER:

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
 (Circle)

CHEVRON WELL MONITORING DATA SHEET

Project #: <u>951027-W1</u>	Station #: <u>FORMER SIGNAL BULK PLANT</u>
Sampler: <u>Dave</u>	Start Date: <u>10-27-95</u>
Well I.D.: <u>MW6</u>	Well Diameter: (circle one) <u>(2)</u> 3 4 6
Total Well Depth: <u>20.68</u>	Depth to Water: <u>9.12</u>
Before	After
Before	After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVC</u>	Grade Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

<u>1.8</u>	<u>x</u>	<u>3</u>	<u>=</u>	<u>5.4</u>
1 Case Volume		Specified Volumes		gallons

Purging: <u>Bailer</u> <u>Disposable Bailer</u> <u>Middleburg</u> Electric Submersible Extraction Pump Other _____	Sampling: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port Other _____
---	---

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
<u>1149</u>	<u>70.0</u>	<u>7.3</u>	<u>800</u>	<u>7200</u>	<u>2</u>	
<u>1153</u>	<u>69.6</u>	<u>7.2</u>	<u>800</u>	<u>5200</u>	<u>4</u>	
<u>1159</u>	<u>69.2</u>	<u>7.2</u>	<u>800</u>	<u>—</u>	<u>6</u>	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 6

Sampling Time: 1202 Sampling Date: 10-27-95

Sample I.D.: MW6 Laboratory: SEQUOIA

Analyzed for: TPH-G BTEX TPH-D OTHER:

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER: