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September 9, 1996

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

**3rd Quarter 1996 Monitoring at 9-1723**

Third Quarter 1996 Groundwater Monitoring at  
Chevron Service Station Number 9-1723  
9757 San Leandro Street  
Oakland, CA

Monitoring Performed on August 1, 1996

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**Groundwater Sampling Report 960801-D-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 McKittrick Waste Treatment Site for disposal.

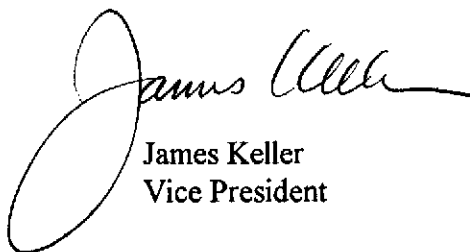
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater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

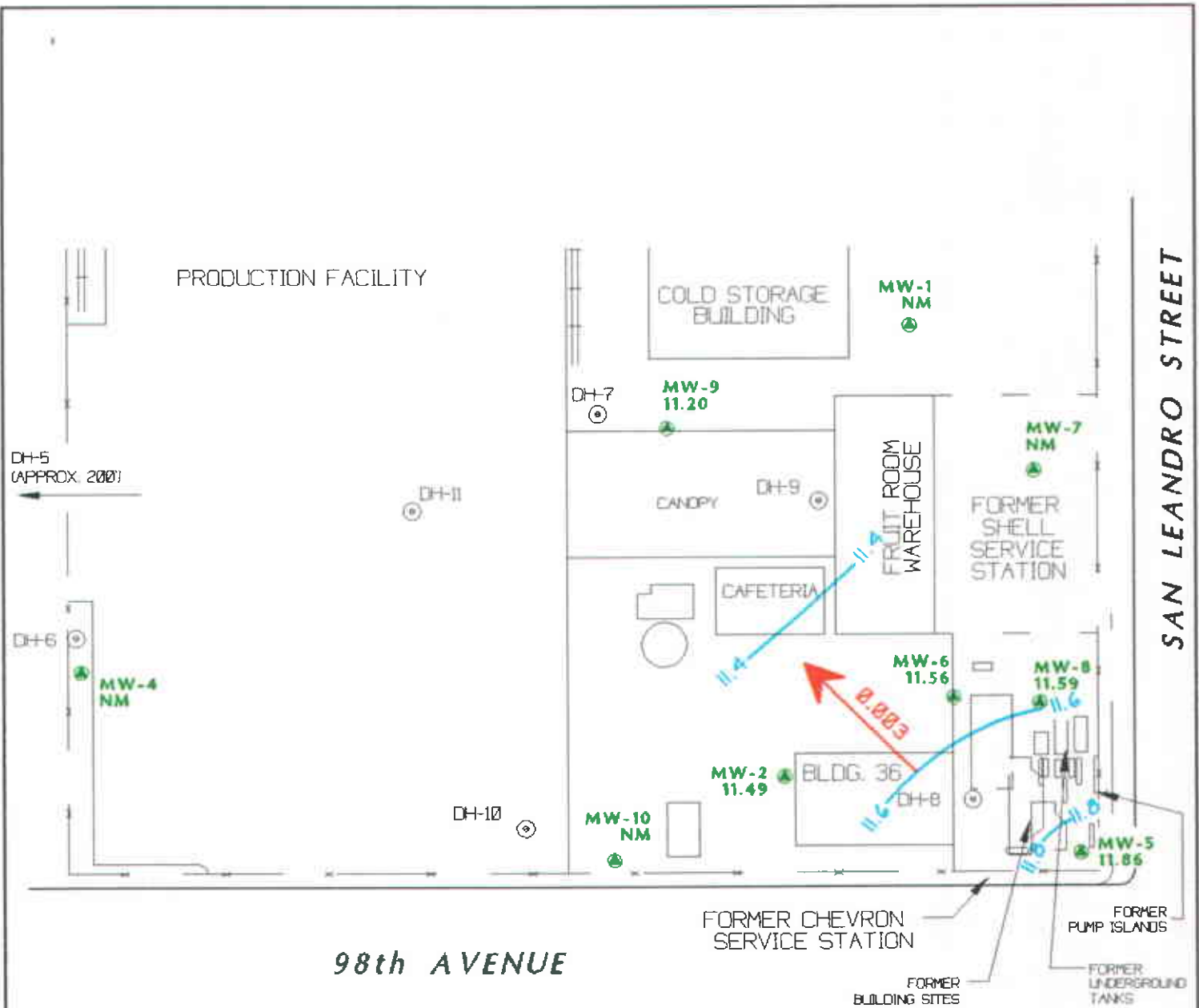


James Keller  
Vice President

JPK/cg

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

# **Professional Engineering Appendix**



EXPLANATION	
● MW-2	MONITORING WELL LOCATION AND WELL NUMBER
11.49	GROUND-WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
NM	NOT MEASURED
— 11.6	GROUND-WATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
→ 0.003	APPROXIMATE DIRECTION OF GROUND-WATER FLOW. GRADIENT INDICATED IN FEET / FEET



TITLE : GROUND-WATER ELEVATION CONTOUR MAP - AUGUST 1, 1996  
 LOCATION : CHEVRON SERVICE STATION No.: 9-1723 9757 SAN LEANDRO STREET, OAKLAND, CALIFORNIA  
 SOURCE : CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC.



GEOCONSULTANTS, INC  
 SAN JOSE, CALIFORNIA  
 Project No. 0758-09  
DRAWN BY: CHEVRON-DHS97X-BASE

# **Table of Field 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	Lead	MTBE
<b>MW-1</b>											
11/02/93	20.92	10.68	10.24	--	--	--	--	--	--	--	--
02/10/94	20.92	--	--	--	--	--	--	--	--	--	--
05/12/94	20.92	--	--	--	--	--	--	--	--	--	--
08/26/94	20.92	--	--	Suspended	--	--	--	--	--	--	--
<b>MW-2</b>											
11/02/93	21.31	10.83	10.48	--	--	--	--	--	--	--	--
02/10/94	21.31	--	--	--	--	--	--	--	--	--	--
05/12/94	21.31	11.94	9.37	--	390	6.8	2.0	6.3	14	--	--
08/26/94	21.31	--	--	Sampled Biannually	--	--	--	--	--	--	--
02/01/95	21.31	13.76	7.55	--	78	10	1.2	<0.5	0.51	--	--
08/02/95	21.31	11.53	9.78	--	100	3.5	<0.5	2.6	4.1	--	--
01/31/96	21.31	14.38	6.93	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	21.31	11.49	9.82	--	73	<0.5	<0.5	<0.5	<0.5	--	610
<b>MW-4</b>											
11/02/93	--	--	10.23	--	--	--	--	--	--	--	--
02/10/94	--	--	--	--	--	--	--	--	--	--	--
05/12/94	--	--	--	--	--	--	--	--	--	--	--
08/26/94	--	--	--	Suspended	--	--	--	--	--	--	--
<b>MW-5</b>											
11/02/93	21.84	11.15	10.69	--	790	43	3.4	22	12	<400	--
02/10/94	21.84	13.10	8.74	--	1400	52	3.0	50	40	--	--
05/12/94	21.84	12.40	9.44	--	1800	87	6.2	77	66	--	--
08/26/94	21.84	--	--	--	--	--	--	--	--	--	--
11/11/94	21.84	13.50	8.34	--	380	18	<1.0	18	11	--	--
02/01/95	21.84	14.32	7.52	--	570	36	0.59	21	11	--	--
05/18/95	21.84	12.87	8.97	--	590	29	1.0	16	9.8	--	--
08/02/95	21.84	11.98	9.86	--	210	9.2	<0.5	4.0	1.2	--	--
11/01/95	21.84	11.58	10.26	--	210	5.6	<0.5	1.9	<0.5	--	<2.5
01/31/96	21.84	14.72	7.12	--	1200	50	<5.0	19	29	--	<25
05/16/96	21.84	14.22	7.62	--	440	14	<0.5	17	8.6	--	11
08/01/96	21.84	11.86	9.98	--	58	1.4	<0.5	<0.5	<0.5	--	2.5

## 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	Lead	MTBE
<b>MW-6</b>											
11/02/93	21.71	10.93	10.78	--	300	19	1.8	2.5	5.0	<400	--
02/10/94	21.71	12.86	8.85	--	200	10	0.9	2.0	4.0	--	--
05/12/94	21.71	12.08	9.63	--	210	10	1.1	1.2	3.1	--	--
08/26/94	21.71	10.82	10.89	--	310	16	1.4	2.3	7.1	--	--
11/11/94	21.71	13.25	8.46	--	<50	1.3	<0.5	<0.5	1.0	--	--
02/01/95	21.71	14.02	7.69	--	<50	1.9	<0.5	<0.5	0.51	--	--
05/18/95	21.71	12.43	9.28	--	<50	8.2	<0.5	<0.5	<0.5	--	--
08/02/95	21.71	11.64	10.07	--	<50	2.3	<0.5	<0.5	<0.5	--	--
11/01/95	21.71	11.31	10.40	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
01/31/96	21.71	13.63	8.08	--	<50	0.98	<0.5	<0.5	<0.5	--	<2.5
05/16/96	21.71	13.91	7.80	--	<50	1.6	<0.5	<0.5	<0.5	--	<2.5
08/01/96	21.71	11.56	10.15	--	<50	0.82	<0.5	<0.5	<0.5	--	<2.5
<b>MW-7</b>											
11/02/93	20.95	10.88	10.07	--	--	--	--	--	--	--	--
02/10/94	20.95	--	--	--	--	--	--	--	--	--	--
05/12/94	20.95	--	--	--	--	--	--	--	--	--	--
08/26/94	20.95	--	--	Suspended	--	--	--	--	--	--	--
<b>MW-8</b>											
11/02/93	21.84	11.02	10.82	--	15,000	2000	440	420	1400	<400	--
02/10/94	21.84	12.97	8.87	--	6500	1200	380	250	7900	--	--
05/12/94	21.84	12.19	9.65	--	30,000	1400	2900	800	3800	--	--
08/26/94	21.84	10.90	10.94	--	17,000	720	200	330	930	--	--
11/11/94	21.84	13.38	8.46	--	6800	250	170	190	650	--	--
02/01/95	21.84	14.36	7.48	--	330	68	2.8	2.7	4.3	--	--
05/18/95	21.84	12.54	9.30	--	540	120	12	11	23	--	--
08/02/95	21.84	11.73	10.11	--	1100	150	9.7	20	40	--	--
11/01/95	21.84	11.36	10.48	--	1700	120	15	16	39	--	<5.0
01/31/96	21.84	14.64	7.20	--	57	5.3	<0.5	<0.5	<0.5	--	<2.5
05/16/96	21.84	13.99	7.85	--	2100	260	43	56	130	--	64
08/01/96	21.84	11.59	10.25	--	1100	45	0.92	8.9	25	--	7.4

## 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	Lead	MTBE
<b>MW-9</b>											
11/02/93	20.55	10.53	10.02	--	--	--	--	--	--	--	--
02/10/94	20.55	--	--	--	--	--	--	--	--	--	--
05/12/94	20.55	11.60	8.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	20.55	--	--	Sampled Biannually	--	--	--	--	--	--	--
02/01/95	20.55	13.35	7.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/02/95	20.55	11.22	9.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/96	20.55	14.10	6.45	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
08/01/96	20.55	11.20	9.35	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
<b>MW-10</b>											
11/02/93	21.25	10.93	10.32	--	--	--	--	--	--	--	--
02/10/94	21.25	--	--	--	--	--	--	--	--	--	--
05/12/94	21.25	--	--	--	--	--	--	--	--	--	--
08/26/94	21.25	--	--	--	--	--	--	--	--	--	--
<b>RINSATE</b>											
02/10/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--



## 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	Lead	MTBE
<b>TRIP BLANK</b>											
02/10/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/12/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/26/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/11/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
02/01/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
05/18/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
08/02/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
11/01/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--
01/31/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<2.5
05/16/96	--	--	--	--	<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

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 14, 1994 Groundwater Technology, Inc. report.

**ABBREVIATIONS:**

TPH = Total Petroleum Hydrocarbons  
 MTBE = Methyl t-Butyl Ether

# **Analytical Appendix**



Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron 9-1723 960801-D1 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9608194-01	Sampled: 08/01/96 Received: 08/02/96 Analyzed: 08/13/96 Reported: 08/22/96
Attention: Jim Keller		

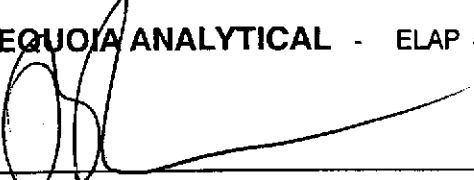
QC Batch Number: GC071396BTEX18A  
Instrument ID: GCHP18

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	73
Methyl t-Butyl Ether	2.5	610
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	116

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 9-1723 960801-D1  
Sample Descript: MW-5  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9608194-02

Sampled: 08/01/96  
Received: 08/02/96  
Analyzed: 08/13/96  
Reported: 08/22/96

QC Batch Number: GC081396BTEX18A  
Instrument ID: GCHP18

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	58
Methyl t-Butyl Ether	2.5	2.5
Benzene	0.50	1.4
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	86

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 9-1723 960801-D1  
Sample Descript: MW-6  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9608194-03

Sampled: 08/01/96  
Received: 08/02/96  
Analyzed: 08/13/96  
Reported: 08/22/96

Attention: Jim Keller

QC Batch Number: GC081396BTEX18A  
Instrument ID: GCHP18

**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.
<b>Benzene</b>	<b>0.50</b>	<b>0.82</b>
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	77

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 9-1723 960801-D1 Sample Descript: MW-8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9608194-04	Sampled: 08/01/96 Received: 08/02/96  Analyzed: 08/15/96 Reported: 08/22/96
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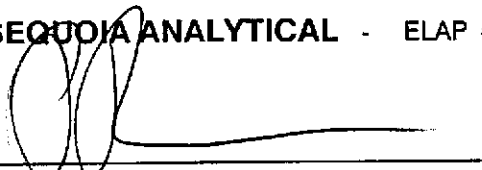
QC Batch Number: GC081596BTEX22A  
Instrument ID: GCHP22

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	1100
Methyl t-Butyl Ether	2.5	7.4
Benzene	0.50	45
Toluene	0.50	0.92
Ethyl Benzene	0.50	8.9
Xylenes (Total)	0.50	25
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	112

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 9-1723 960801-D1  
Sample Descript: MW-9  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9608194-05

Sampled: 08/01/96  
Received: 08/02/96

Analyzed: 08/13/96  
Reported: 08/22/96

QC Batch Number: GC081396BTEX18A  
Instrument ID: GCHP18

**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:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
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  
985 Timothy Drive  
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Chevron 9-1723 960801-D1  
Sample Descript: TB  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9608194-06

Sampled: 08/01/96  
Received: 08/02/96  
Analyzed: 08/13/96  
Reported: 08/22/96

QC Batch Number: GC081396BTEX18A  
Instrument ID: GCHP18

**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:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	92

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Peggy Penner  
Project Manager







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

Client Project ID: Chevron 9-1723 / 960801-D1  
 Matrix: Liquid

Work Order #: 9608194 -01-03, 05-06

Reported: Aug 26, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC081396BTEX18A	GC081396BTEX18A	GC081396BTEX18A	GC081396BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	H. Porter	H. Porter	H. Porter	H. Porter
MS/MSD #:	960818607	960818607	960818607	960818607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/13/96	8/13/96	8/13/96	8/13/96
Analyzed Date:	8/13/96	8/13/96	8/13/96	8/13/96
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.8	9.7	9.2	29
MS % Recovery:	98	97	92	97
Dup. Result:	9.5	9.4	9.5	28
MSD % Recov.:	95	94	95	93
RPD:	3.1	3.1	3.2	3.5
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK081396	BLK081396	BLK081396	BLK081396
Prepared Date:	8/13/96	8/13/96	8/13/96	8/13/96
Analyzed Date:	8/13/96	8/13/96	8/13/96	8/13/96
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.3	9.2	9.2	28
LCS % Recov.:	93	92	92	93

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

**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  
 Project Manager

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

9608194.BLA <1>





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

Client Project ID: Chevron 9-1723 / 960801-D1  
Matrix: Liquid

Work Order #: 9608194-04

Reported: Aug 26, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC081596BTEX22A	GC081596BTEX22A	GC081596BTEX22A	GC081596BTEX22A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	H. Porter	H. Porter	H. Porter	H. Porter
MS/MSD #:	960819101	960819101	960819101	960819101
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/15/96	8/15/96	8/15/96	8/15/96
Analyzed Date:	8/15/96	8/15/96	8/15/96	8/15/96
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	11	10	32
MS % Recovery:	100	110	100	108
Dup. Result:	10	11	10	33
MSD % Recov.:	100	110	100	109
RPD:	0.0	0.0	0.0	0.90
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK081596	BLK081596	BLK081596	BLK081596
Prepared Date:	8/15/96	8/15/96	8/15/96	8/15/96
Analyzed Date:	8/15/96	8/15/96	8/15/96	8/15/96
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	30
LCS % Recov.:	100	100	100	101

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

**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  
Project Manager

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

9608194.BLA <2>





# **Field Data Sheets**



## CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960801-D1</u>	Station #: <u>9-1723</u>
Sampler: <u>MD</u>	Date: <u>8-1-96</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>21.98</u>	Depth to Water: <u>9.82</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 <sup>2</sup> * 0.163

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

<u>1.9</u>	x	<u>3</u>	=	<u>5.8</u> Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
900	66.4	7.2	1100	2	
904	66.2	7.0	1000	4	
906	67.2	7.0	1000	6	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>6.0</u>	
Sampling Time: <u>9:10</u>	Sampling Date: <u>8-1</u>	
Sample I.D.: <u>MW-2</u>	Laboratory: <u>(Sequoia)</u> GTEL	
Analyzed for: <u>(TPH-G)</u> <u>(BTEX)</u> <u>(MTBE)</u> 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>960801-D1</u>	Station #: <u>9-1723</u>
Sampler: <u>MD</u>	Date: <u>8-1-96</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>9.98</u> 17.55	Depth to Water: <u>47.55</u> 9.98
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	Multplier	Well Diameter	Multplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

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

<u>1.2</u>	x	<u>3</u>	=	<u>3.6</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
940	66.8	7.6	1000	1	
942	67.2	7.4	900	2	
945	67.2	7.4	900	4	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>4.0</u>	
Sampling Time: <u>950</u>	Sampling Date: <u>8-1-96</u>	
Sample I.D.: <u>MW-5</u>	Laboratory: <u>(Sequoia)</u> GTEL	
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> 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>960801-D1</u>	Station #: <u>9-1723</u>
Sampler: <u>MD</u>	Date: <u>8-21-86</u>
Well I.D.: <u>MW-6</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>19.88</u>	Depth to Water: <u>10.15</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	Multplier	Well Diameter	Multplier
2"	0.15	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

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

<u>1.5</u>	x	<u>3</u>	=	<u>4.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>815</u>	<u>69.0</u>	<u>7.6</u>	<u>1200</u>	<u>2</u>	
<u>818</u>	<u>68.6</u>	<u>7.2</u>	<u>1100</u>	<u>4</u>	
<u>821</u>	<u>68.8</u>	<u>7.2</u>	<u>1000</u>	<u>5</u>	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>5.0</u>	
Sampling Time: <u>830</u>	Sampling Date: <u>8-1</u>	
Sample I.D.: <u>MW-6</u>	Laboratory: <u>(Sequoia)</u> GTEL	
Analyzed for: <u>(TPH-G)</u> <u>(BTEX)</u> <u>(MTBE)</u> <u>(TPH-D)</u> 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>960001-D1</u>	Station #: <u>9-1723</u>
Sampler: <u>MD</u>	Date: <u>8-1-96</u>
Well I.D.: <u>MW-8</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>18.96</u>	Depth to Water: <u>10.25</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 <sup>2</sup> * 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>1.4</u>	x	<u>3</u>	=	<u>4.1</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
842	68.6	7.4	1000	1	ODOR / SHEEN
844	69.0	7.4	1000	2	
846	68.6	7.2	900	4.5	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>4.5</u>	
Sampling Time: <u>850</u>	Sampling Date: <u>8-1-96</u>	
Sample I.D.: <u>MW-8</u>	Laboratory: <u>Sequidia</u> GTEL	
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> 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>960801-D1</u>	Station #: <u>9-1723</u>
Sampler: <u>MD</u>	Date: <u>8-1-96</u>
Well I.D.: <u>MW-9</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>20.05</u>	Depth to Water: <u>9.35</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	Multplier	Well Diameter	Multplier
2"	0.15	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer	Sampling Method: Bailer
Disposable Bailer	Disposable Bailer <u>X</u>
Middleburg	Extraction Port
Electric Submersible <u>X</u>	Other: _____
Extraction Pump	
Other: _____	

<u>6.9</u>	x	<u>3</u>	=	<u>20.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
<u>9:22</u>	<u>62.6</u>	<u>7.4</u>	<u>1000</u>	<u>7</u>	
<u>9:24</u>	<u>63.4</u>	<u>7.2</u>	<u>950</u>	<u>14</u>	
<u>9:26</u>	<u>63.6</u>	<u>7.2</u>	<u>950</u>	<u>21</u>	

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: <u>21.0</u>	
Sampling Time: <u>9:30</u>	Sampling Date: <u>8-1-96</u>	
Sample I.D.: <u>MW-9</u>	Laboratory: <u>Sequoia</u> GTEL	
Analyzed for: TPH-G <u>X</u> BTEX <u>X</u> MTBE <u>X</u> 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