



December 5, 1995

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

Ms. Jennifer Eberle  
Alameda County Health Care Services  
Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

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

**Re: Former Chevron Service Station #9-0019  
210 Grand Avenue, Oakland, CA**

Dear Ms. Eberle:

Enclosed is the Third Quarter 1995 Groundwater Monitoring Report dated November 3, 1995, prepared by our consultant Blaine Tech Services, Inc. for the above referenced site. Per prior agreement between Chevron and your office, only monitor wells MW-4 through MW-7 are sampled on a quarterly basis. Depth to water measurements are collected from all wells to maintain knowledge of ground water flow direction and gradient.

As indicated in the report, ground water samples collected from all wells were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. Concentrations of dissolved hydrocarbon constituents in the ground water samples collected were consistent with previous observations at the site. Depth to ground water was measured at approximately 3.7 to 7.5 feet below grade and the direction of flow is to the west-southwest.

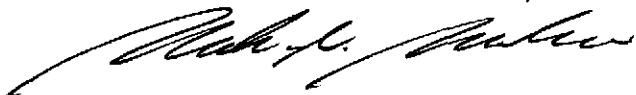
Thank you for your letter of November 21, 1995, approving the removal of the ground water extraction system and the abandonment of monitor wells MW-1 and MW-3 to allow for pending development of the site. This work was recently performed and a report documenting field activities will be forwarded to your office shortly.

We agree that some source material does remain in soil and ground water in the vicinity of monitor wells MW-4 and MW-5. However, previous reports on excavation activities conducted at the site in 1990 and 1991 document that the majority of the source material has been removed. The excavation extended laterally to the edge of the property where MW-4 and MW-5 are located and further excavation was not reasonable. Current ground water monitoring information suggests that the dissolved hydrocarbon plume is stable or even shrinking over time. Based on this information, we do not feel that additional excavation will significantly benefit ground water quality in the area beyond natural attenuation and degradation mechanisms currently taking place.

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

Ms. Jennifer Eberle  
December 5, 1995  
Page 2

Sincerely,  
CHEVRON U.S.A. PRODUCTS COMPANY



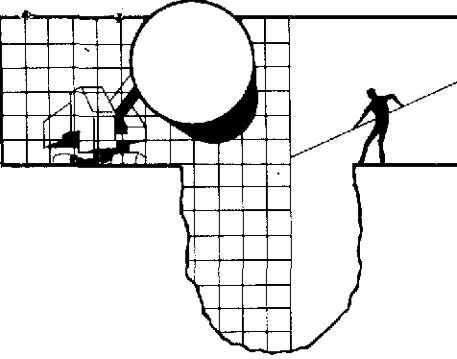
Mark A. Miller  
Site Assessment and Remediation Engineer

Enclosure

cc: Ms. B.C. Owen

Mr. Ron Basarich  
City of Oakland  
Real Estate Department  
1330 Broadway, Suite #101  
Oakland, CA 94612

Mr. Andrew Clark-Clough  
City of Oakland  
Environmental Affairs Division  
1333 Broadway, Suite 330  
Oakland, CA 94612



# **BLAINE TECH SERVICES INC.**

985 TIMOTHY DRIVE  
SAN JOSE, CA 95133  
(408) 995-5535  
FAX (408) 293-8773

November 3, 1995

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

### **3rd Quarter 1995 Monitoring at 9-0019**

Third Quarter 1995 Groundwater Monitoring at  
Chevron Service Station Number 9-0019  
210 Grand Avenue  
Oakland, CA

Monitoring Performed on September 27, 1995

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### **Groundwater Sampling Report 950927-S-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.

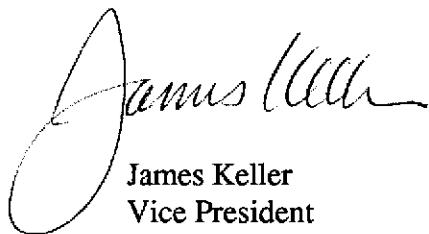
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater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

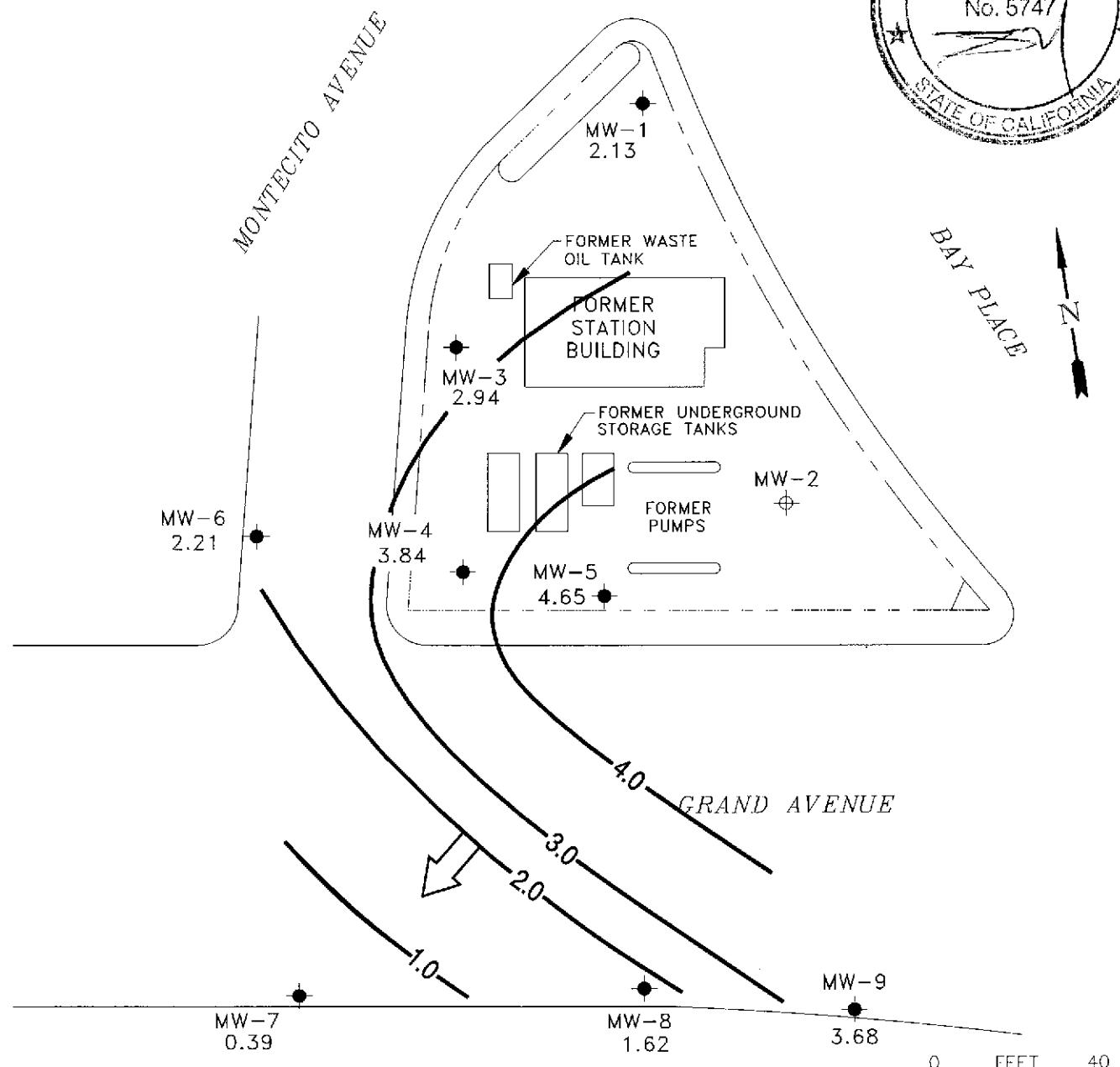
Yours truly,



James Keller  
Vice President

JPK/dk

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



#### LEGEND



MONITORING WELL

POTENTIOMETRIC SURFACE ELEVATION (FT)

POTENTIOMETRIC SURFACE CONTOUR



GROUND WATER FLOW DIRECTION

0 FEET 40  
SCALE

Base map from Groundwater Technology, Inc.

**CAMBRIA**  
Environmental Technology, Inc.



Chevron Station 9-0019  
210 Grand Avenue  
Oakland, California

ICHEVRON9-0019D0019-QM.DWG

Ground Water Elevations  
September 27, 1995

FIGURE

**1**

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	TOG	Chloro- form	1, 2- DCA	Freon	1, 1, 1- TCA	PCE	1, 2- DCPA	1, 2- DCE
<b>MW-1</b>																	
03/14/89	9.63	2.89	6.74	--	600	<0.2	<0.2	3.2	1.7	<3000	1.0	<0.2	<20	<0.2	--	--	--
06/08/89	9.63	2.49	7.14	--	<50	<0.1	<0.5	<0.1	<0.2	--	<0.5	<0.1	<20	<0.1	--	--	--
09/14/89	9.63	2.42	7.21	--	<50	<0.2	<1.0	<0.2	<0.4	--	<1.0	<0.2	<1.0	0.7	--	--	--
12/08/89	9.63	2.34	7.29	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
03/19/90	9.63	2.63	7.00	--	190	0.8	<0.3	7.0	3.0	--	<0.5	<0.5	--	<0.5	--	--	--
07/06/90	9.63	2.50	7.13	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
10/03/90	9.63	2.10	7.53	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
08/23/91	9.63	2.57	7.06	--	150	5.0	11	3.5	10	--	<0.5	<0.5	--	<0.5	--	--	--
11/22/91	9.63	2.16	7.47	--	86	7.2	11	2.9	13	--	<0.5	<0.5	<0.5	<0.5	--	--	--
02/26/92	9.63	2.94	6.69	--	<50	<0.5	<0.5	<0.5	1.4	--	<0.5	<0.5	<0.5	<0.5	--	--	--
05/22/92	9.63	2.67	6.96	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	--
09/29/92	9.63	2.44	7.19	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
12/23/92	9.63	2.60	7.03	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/22/93	9.63	3.03	6.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
06/07/93	9.63	2.66	6.97	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/10/93	9.63	2.55	7.08	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/07/94	9.63	2.80	6.83	--	<50	<0.5	<0.5	<0.5	1.0	--	--	--	--	--	--	--	--
06/16/94	9.63	2.60	7.03	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/08/94	9.63	2.53	7.10	--	<50	1.3	1.5	<0.5	1.7	--	--	--	--	--	--	--	--
11/29/94	9.63	2.81	6.82	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/21/95	9.63	3.73	5.90	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
06/27/95	9.63	2.69	6.94	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/27/95	9.63	2.13	7.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TOG	Chloro-form	1,2-DCA	Freon	1,1,1-TCA	PCE	1,2-DCPA	1,2-DCE
<b>MW-2</b>																	
03/14/89	8.99	2.91	6.08	--	<100	6.7	7.1	0.5	4.6	<3000	<1.0	0.7	<20	<0.2	--	--	--
06/08/89	8.99	3.77	5.22	--	--	--	--	--	--	--	--	--	--	<0.2	--	--	--
06/09/89	8.99	--	--	--	<100	<0.2	<1.0	<0.2	<0.4	--	<1.0	<0.2	<20	<0.2	--	--	--
09/14/89	8.99	3.04	5.95	--	<50	<0.2	<1.0	<0.2	<0.4	--	<1.0	<0.2	<1.0	<0.2	--	--	--
12/08/89	8.99	-0.26	9.25	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
03/19/90	8.99	3.07	5.92	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
07/06/90	9.01	2.22	6.79	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
10/03/90	9.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/23/91	9.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/15/91	9.01	--	--	Well Destroyed	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>MW-3</b>																	
03/14/89	8.19	2.16	6.02	--	<100	2.1	0.8	<0.2	2.0	<3000	<1.0	3.0	<20	<0.2	--	--	--
06/08/89	8.19	2.30	5.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/89	8.19	--	--	--	<100	<0.5	<1.0	<0.2	<0.4	--	<1.0	3.3	<20	<0.2	--	--	--
09/14/89	8.19	1.88	6.30	--	<50	<0.2	<1.0	<0.2	<0.4	--	<1.0	2.2	<1.0	<0.2	--	--	--
12/08/89	8.19	-1.34	9.52	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	1.3	--	<0.5	--	--	--
03/19/90	8.19	2.01	6.17	--	<50	<0.3	<0.3	<0.3	<0.6	--	0.5	1.3	--	<0.5	--	--	--
07/06/90	8.19	0.67	7.52	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
10/03/90	8.19	0.88	7.31	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	0.83	--	<0.5	--	--	--
08/23/91	8.19	2.53	5.65	--	220	16	22	5.5	16	--	<0.5	0.6	--	<0.5	--	--	--
11/22/91	8.19	1.41	6.78	--	<50	<0.5	<0.5	<0.5	0.6	--	0.6	1.0	<0.5	<0.5	--	--	--
02/26/92	8.19	3.54	4.65	--	<50	4.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	--
05/22/92	8.19	2.63	5.56	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	--
09/29/92	8.19	1.96	6.23	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	--	<0.5	--	--
12/23/92	8.19	2.37	5.82	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
03/22/93	8.19	3.27	4.92	--	<50	7.0	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
06/07/93	8.19	2.50	5.69	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
09/10/93	8.19	2.15	6.04	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
03/07/94	8.19	3.04	5.15	--	<50	1.0	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
06/16/94	8.19	2.30	5.89	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
09/08/94	8.19	2.13	6.06	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	1.0	--	--
11/29/94	8.19	3.00	5.19	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
03/21/95	8.19	4.43	3.76	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
06/27/95	8.19	3.09	5.10	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
09/27/95	8.19	2.94	5.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TOG	Chloro-form	1, 2-DCA	Freon	1, 1, 1-TCA	PCE	1, 2-DCPA	1, 2-DCE
<b>MW-4</b>																	
03/14/89	7.60	2.08	5.52	--	3000	810	200	30	130	<3000	<20	<5.0	<20	<5.0	--	--	--
06/08/89	7.60	3.41	4.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/89	7.60	--	--	--	900	440	13	22	40	--	<20	<5.0	60	<5.0	--	--	--
09/14/89	7.60	2.80	4.80	--	540	220	2.0	6.1	9.3	--	<1.0	2.3	<1.0	<0.2	--	--	--
12/08/89	7.60	2.74	4.86	--	150	18	<0.3	1.0	<0.6	--	<0.5	1.9	--	<0.5	--	--	--
03/19/90	7.60	2.95	4.65	--	270	50	<0.3	0.7	<0.6	--	<0.5	0.8	--	<0.5	--	--	--
07/06/90	7.59	1.17	6.42	--	140	0.7	<0.3	0.5	<0.6	--	<0.5	0.79	--	<0.5	--	--	--
10/03/90	7.59	1.20	6.39	--	180	<0.3	<0.3	2.0	<0.6	--	<0.5	0.5	--	<0.5	--	--	--
08/23/91	7.59	3.17	4.42	--	400	9.9	6.8	3.1	7.1	--	<0.5	<0.5	--	<0.5	--	--	--
11/22/91	7.59	2.21	5.38	--	130	3.4	1.3	3.5	6.0	--	<0.5	<0.5	<0.5	<0.5	--	--	--
02/26/92	7.59	4.94	2.65	--	520	15	2.7	6.1	8.6	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
05/22/92	7.59	3.63	3.96	--	460	20	2.8	5.0	6.9	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
09/29/92	7.59	2.91	4.68	--	160	1.1	1.7	0.8	2.8	--	<0.5	<0.5	--	<0.5	--	--	--
12/23/92	7.59	3.96	3.63	--	110	0.7	0.5	0.9	1.7	--	--	--	--	--	--	--	--
03/22/93	7.59	4.69	2.90	--	930	9.0	3.0	7.0	8.0	--	--	--	--	--	--	--	--
06/07/93	7.59	3.70	3.89	--	240	2.0	0.9	3.0	3.0	--	--	--	--	--	--	--	--
09/10/93	7.59	3.07	4.52	--	<50	<0.5	<0.5	0.8	<0.5	--	--	--	--	--	--	--	--
03/07/94	7.59	4.44	3.15	--	550	3.0	3.0	8.0	12	--	--	--	--	--	--	--	--
06/16/94	7.59	3.51	4.08	--	150	<0.5	0.6	1.5	0.7	--	--	--	--	--	--	--	--
09/08/94	7.59	3.04	4.55	--	<50	<0.5	<0.5	<0.5	1.2	--	--	--	--	--	--	--	--
11/29/94	7.59	4.74	2.85	--	130	<0.5	1.1	<0.5	0.58	--	--	--	--	--	--	--	--
03/21/95	7.59	5.89	1.70	--	720	2.2	<2.0	5.9	<2.0	--	--	--	--	--	--	--	--
06/27/95	7.59	4.21	3.38	--	100	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/27/95	7.59	3.84	3.75	--	<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	TOG	Chloro-form	1, 2-DCA	Freon	1, 1, 1-TCA	PCE	1, 2-DCPA	1, 2-DCE
<b>MW-5</b>																	
03/14/89	8.35	1.37	6.98	--	20,000	6600	1600	270	1100	<3000	<100	<20	<20	<20	--	--	--
06/08/89	8.35	3.62	4.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/89	8.35	--	--	--	15,000	>2800	270	240	640	--	<20	28	<20	<5.0	--	--	--
06/09/89	8.35	--	--	Duplicate	12,000	5100	300	240	700	--	<200	<50	<20	<50	--	--	--
09/14/89	8.35	2.98	5.37	--	15,000	>730	>320	>290	440	--	<10	<2.0	<20	<2.0	--	--	--
09/14/89	8.35	--	--	Duplicate	15,000	3300	450	490	730	--	<100	<20	100	<20	--	--	--
09/14/89	8.35	--	--	Triplicate	16,000	3100	550	400	690	--	<50	<10	<50	<10	--	--	--
12/08/89	8.35	-0.78	9.13	--	20,000	4600	640	390	1300	--	<0.5	27	--	<0.5	--	--	--
03/19/90	8.35	3.23	5.12	--	25,000	6500	1200	450	2200	--	<0.5	10	--	0.7	--	--	--
07/06/90	8.35	2.54	5.81	--	30,000	5600	890	210	1400	--	<0.5	<0.5	--	<0.5	1.2	--	--
10/03/90	8.35	1.45	6.90	--	29,000	6000	790	270	1500	--	<0.5	<0.5	--	<0.5	--	2.0	--
08/23/91	8.35	3.30	5.05	--	36,000	6100	1200	460	2600	--	<0.5	3.9	--	<0.5	--	0.9	--
11/22/91	8.35	2.10	6.25	--	21,000	8000	1500	530	2600	--	<0.5	3.9	<0.5	<0.5	1.0	0.8	--
02/26/92	8.35	5.35	3.00	--	43,000	14,000	1600	640	4700	--	<0.5	2.0	<0.5	<0.5	--	--	--
05/22/92	8.35	3.86	4.49	--	72,000	18,000	8100	920	10000	--	<0.5	6.8	<0.5	<0.5	--	--	--
09/29/92	8.35	3.50	4.85	--	54,000	14,000	1400	740	8100	--	<0.5	4.4	--	<0.5	--	--	--
12/23/92	8.35	4.77	3.58	--	38,000	8400	910	530	5300	--	<0.5	2.9	--	<0.5	--	--	--
03/22/93	8.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/07/93	8.35	-3.82	12.17	--	24,000	3000	280	360	1200	--	<0.5	<0.5	--	<0.5	--	--	--
09/10/93	8.35	-0.15	8.50	--	8900	860	160	100	320	--	<5.0	<5.0	--	<5.0	--	--	--
03/07/94	8.35	5.30	3.05	--	9600	2100	380	120	290	--	<12.5	<12.5	--	<12.5	--	--	--
06/16/94	8.35	2.64	5.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/08/94	8.35	2.43	5.92	--	10,000	3600	360	210	460	--	<0.5	<0.5	--	<0.5	1.2	--	2.0
09/08/94	8.35	3.04	5.31	--	14,000	2800	270	170	360	--	<0.5	2.8	--	<0.5	--	--	--
11/29/94	8.35	5.72	2.63	--	11,000	2800	280	130	300	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
03/21/95	8.35	7.41	0.94	--	6700	1400	120	100	260	--	<0.5	0.59	<0.5	<0.5	<0.5	<0.5	--
06/27/95	8.35	6.01	2.34	--	18,000	6100	480	600	990	--	<10	<10	<10	<10	<10	<10	--
09/27/95	8.35	4.65	3.70	--	15,000	2600	140	210	310	--	<25	<25	<25	<25	<25	<25	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	TOG	Chloro- form	1, 2- DCA	Freon	1, 1, 1- TCA	PCE	1, 2- DCPA	1, 2- DCE
<b>MW-6</b>																	
07/06/90	6.56	-2.53	9.09	--	210	<0.3	<0.3	3.0	7.0	--	<0.5	<0.5	--	<0.5	--	--	--
10/03/90	6.56	0.78	5.78	--	320	<0.3	0.3	1.0	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
08/23/91	6.56	-0.93	7.49	--	320	1.7	<0.5	2.1	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
11/22/91	6.56	-1.07	7.63	--	190	1.9	2.2	5.4	7.7	--	<0.5	<0.5	<0.5	<0.5	--	--	--
02/26/92	6.56	1.01	5.55	--	120	2.0	1.5	3.5	5.1	--	<0.5	<0.5	<0.5	<0.5	--	--	--
05/22/92	6.56	-0.38	6.94	--	160	1.1	0.6	0.9	1.0	--	<0.5	<0.5	<0.5	<0.5	--	--	--
09/29/92	6.56	-0.24	6.80	--	65	0.5	1.4	0.5	0.64	--	<0.5	<0.5	--	<0.5	--	--	--
12/23/92	6.56	0.57	5.99	--	140	0.7	0.7	0.9	2.1	--	--	--	--	--	--	--	--
03/22/93	6.56	-0.51	7.07	--	71	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
06/07/93	6.56	-1.05	7.61	--	85	<0.5	<0.5	2.0	1.0	--	--	--	--	--	--	--	--
09/10/93	6.56	1.88	4.68	--	<50	<0.5	<0.5	1.0	<0.5	--	--	--	--	--	--	--	--
03/07/94	6.56	1.34	5.22	--	<50	<0.5	<0.5	<0.5	0.8	--	--	--	--	--	--	--	--
06/16/94	6.56	2.39	4.17	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/08/94	6.56	1.96	4.60	--	70	<0.5	0.6	<0.5	2.3	--	--	--	--	--	--	--	--
11/29/94	6.56	0.03	6.53	--	120	<0.5	<0.5	1.3	<0.5	--	--	--	--	--	--	--	--
03/21/95	6.56	-0.47	7.03	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
06/27/95	6.56	0.20	6.36	--	84	<0.5	<0.5	<0.5	1.1	--	--	--	--	--	--	--	--
09/27/95	6.56	2.21	4.35	--	<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	TOG	Chloro- form	1, 2- DCA	Freon	1, 1, 1- TCA	PCE	1, 2- DCPA	1, 2- DCE
<b>MW-7</b>																	
07/06/90	4.99	-0.86	5.85	--	<50	<0.3	<0.3	<0.3	<0.6	<1000	<0.5	<0.5	--	<0.5	--	--	
10/03/90	4.99	-1.26	6.25	--	<50	<1.5	<1.5	<1.5	<3.0	--	<0.5	<0.5	--	<0.5	--	--	
08/23/91	4.99	-0.51	5.50	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	
11/22/91	4.99	-0.74	5.73	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	
02/26/92	4.99	0.15	4.84	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	
05/22/92	4.99	0.10	4.89	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	
09/29/92	4.99	-0.56	5.55	--	<50	<0.5	<0.5	<0.5	0.6	--	<0.5	<0.5	--	<0.5	--	--	
12/23/92	4.99	0.12	4.87	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/22/93	4.99	0.94	4.05	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/07/93	4.99	0.36	4.63	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/10/93	4.99	-0.57	5.56	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/07/94	4.99	0.34	4.65	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/16/94	4.99	-0.08	5.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/08/94	4.99	-0.34	5.33	--	250	34	40	4.4	26	--	--	--	--	--	--	--	
11/29/94	4.99	0.12	4.87	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/21/95	4.99	1.31	3.68	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/27/95	4.99	0.53	4.46	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/27/95	4.99	0.39	4.60	--	<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	TOG	Chloro- form	1, 2- DCA	Freon	1, 1, 1- TCA	PCE	1, 2- DCPA	1, 2- DCE
<b>MW-8</b>																	
07/06/90	6.77	2.79	3.98	--	<50	<0.3	<0.3	<0.3	<0.6	<1000	<0.5	<0.5	--	<0.5	--	--	
10/03/90	6.77	2.04	4.73	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	
08/23/91	6.77	2.01	4.76	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	
11/22/91	6.77	1.04	5.73	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	
02/26/92	6.77	2.47	4.30	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	
05/22/92	6.77	3.11	3.66	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	--	--	
09/29/92	6.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/23/92	6.77	3.94	2.83	--	<50	<0.5	7.2	0.6	2.5	--	--	--	--	--	--	--	
03/22/93	6.77	2.39	4.38	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/07/93	6.77	1.60	5.17	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/10/93	6.77	1.61	5.16	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/07/94	6.77	2.06	4.71	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/16/94	6.77	2.62	4.15	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/08/94	6.77	1.66	5.11	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
11/29/94	6.77	1.94	4.83	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/21/95	6.77	0.94	5.83	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/27/95	6.77	0.57	6.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/27/95	6.77	1.62	5.15	--	--	--	--	--	--	--	--	--	--	--	--	--	

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	TOG	Chloro- form	1, 2- DCA	Freon	1, 1, 1- TCA	PCE	1, 2- DCPA	1, 2- DCE
<b>MW-9</b>																	
07/06/90	7.63	3.02	4.61	--	<50	<0.3	<0.3	<0.3	<0.6	<1000	<0.5	<0.5	--	<0.5	--	--	--
10/03/90	7.63	2.49	5.14	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	--
08/23/91	7.63	2.18	5.45	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	--	<0.5	--	--	--
11/22/91	7.63	2.15	5.48	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
02/26/92	7.63	5.00	2.63	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
05/22/92	7.63	3.63	4.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
09/29/92	7.63	2.93	4.70	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	--	<0.5	--	--
12/23/92	7.63	3.87	3.76	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/22/93	7.63	5.52	2.11	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
06/07/93	7.63	4.35	3.28	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/10/93	7.63	2.45	5.18	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/07/94	7.63	4.61	3.02	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
06/16/94	7.63	3.50	4.13	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/08/94	7.63	2.84	4.79	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
11/29/94	7.63	3.71	3.92	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
03/21/95	7.63	0.14	7.49	Insufficient water	--	--	--	--	--	--	--	--	--	--	--	--	--
06/27/95	7.63	5.73	1.90	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
09/27/95	7.63	3.68	3.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	TOG	Chloro- form	1, 2- DCA	Freon	1, 1, 1- TCA	PCE	1, 2- DCPA	1, 2- DCE
<b>TRIP BLANK</b>																	
12/08/89	--	--	--	--	<100	<0.1	<0.2	<0.1	<0.2	--	<0.5	<0.1	--	<0.1	--	--	
06/09/89	--	--	--	--	<50	<0.5	<0.5	<0.1	<0.2	--	<0.5	<0.1	<20	<0.1	--	--	
09/14/89	--	--	--	--	<50	<0.1	<0.5	<0.1	<0.2	--	<0.5	<0.1	<0.5	<0.1	--	--	
12/08/89	--	--	--	--	<50	<0.3	<0.3	<0.3	<0.6	--	4.4	<0.5	--	1.9	--	--	
03/19/90	--	--	--	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	
07/06/90	--	--	--	--	<50	<0.3	<0.3	<0.3	<0.6	--	<0.5	<0.5	--	<0.5	--	--	
10/03/90	--	--	--	--	<50	<0.3	<0.3	<0.3	1.0	--	<0.5	<0.5	--	<0.5	--	--	
08/23/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
11/22/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5	--	--	--	
02/26/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
05/22/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/29/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
12/23/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/22/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/07/93	--	--	--	--	<50	<0.5	<0.5	<0.5	1.0	--	--	--	--	--	--	--	
09/10/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/07/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/16/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/08/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
11/29/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
03/21/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
06/27/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
09/27/95	--	--	--	--	<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 November 1, 1994.

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

### ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

TOG = Total Oil and Grease

1,2-DCA = 1,2-Dichloroethane

1,1,1-TCA = 1,1,1-Trichloroethane

PCE = Trichloroethene

1,2-DCPA = 1,2-Dichloroproppane

1,2-DCE = 1,2-Dichloroethene



**Sequoia  
Analytical**

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

Client Proj. ID: Chevron, 9-0019, 950927-S1  
Sample Descript: MW-4  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9509J52-01

Sampled: 09/27/95  
Received: 09/28/95  
  
Analyzed: 10/02/95  
Reported: 10/09/95

QC Batch Number: GC100295BTEX03A  
Instrument ID: GCHP03

### 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:		
<b>Surrogates</b>		
Trifluorotoluene	70                  130	% Recovery 76

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, 9-0019, 950927-S1  
Sample Descript: MW-5  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9509J52-02

Sampled: 09/27/95  
Received: 09/28/95  
  
Analyzed: 10/04/95  
Reported: 10/09/95

QC Batch Number: GC100495BTEX02A  
Instrument ID: GCHP02

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L	
TPPH as Gas	10000	.....	15000
Benzene	100	.....	3600
Toluene	100	.....	140
Ethyl Benzene	100	.....	210
Xylenes (Total)	100	.....	310
Chromatogram Pattern:	.....	.....	Gas
Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	80

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Peggy Penner  
Project Manager

Page:

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**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: Chevron, 9-0019, 950927-S1  
Sample Descript: MW-5  
Matrix: LIQUID  
Analysis Method: EPA 8010  
Lab Number: 9509J52-02

Sampled: 09/27/95  
Received: 09/28/95  
  
Analyzed: 10/03/95  
Reported: 10/09/95

QC Batch Number: GC100295801008A  
Instrument ID: GCHP8

### Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.
<b>Surrogates</b>		
1-Chloro-2-fluorobenzene	70	130
	Control Limits %	% Recovery
		82

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Peggy Penner  
Project Manager

Page:

3



**Sequoia  
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233  
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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: Chevron, 9-0019, 950927-S1  
Sample Descript: MW-6  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9509J52-03

Sampled: 09/27/95  
Received: 09/28/95  
Analyzed: 10/02/95  
Reported: 10/09/95

QC Batch Number: GC100295BTEX03A  
Instrument ID: GCHP03

### 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	82

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, 9-0019, 950927-S1  
Sample Descript: MW-7  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9509J52-04

Sampled: 09/27/95  
Received: 09/28/95  
  
Analyzed: 10/02/95  
Reported: 10/09/95

QC Batch Number: GC100295BTEX03A  
Instrument ID: GCHP03

### **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	85

Analytics 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, 9-0019, 950927-S1  
Sample Descript: TB  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9509J52-05

Sampled: 09/27/95  
Received: 09/28/95  
  
Analyzed: 10/02/95  
Reported: 10/09/95

QC Batch Number: GC100295BTEX03A  
Instrument ID: GCHP03

### 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	76

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, 9-0019, 950927-S1

Received: 09/28/95

Lab Proj. ID: 9509J52

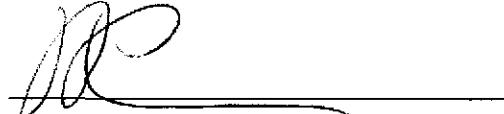
Reported: 10/09/95

## **LABORATORY NARRATIVE**

TPPH Note: Sample 9509J52-02 was diluted 200-fold.

8010 Note: Sample 9509J52-02 was diluted 50-fold due to high boilers in the PID.

**SEQUOIA ANALYTICAL**

  
Peggy Penner  
Project Manager





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

Client Project ID: Chevron 9-0019, 950927-S1  
Matrix: Liquid

Work Order #: 9509J52 -01, 03-05

Reported: Oct 10, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC100295BTEX03A	GC100295BTEX03A	GC100295BTEX03A	GC100295BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	9509C0201	9509C0201	9509C0201	9509C0201
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/2/95	10/2/95	10/2/95	10/2/95
Analyzed Date:	10/2/95	10/2/95	10/2/95	10/2/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.2	9.3	9.3	27
MS % Recovery:	92	93	93	90
Dup. Result:	9.1	9.0	9.0	27
MSD % Recov.:	91	90	90	90
RPD:	1.1	3.3	3.3	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:  
Analyzed Date:  
Instrument I.D. #:  
Conc. Spiked:

LCS Result:

LCS % Recov.:

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



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

Client Project ID: Chevron 9-0019, 950927-S1  
Matrix: Liquid

Work Order #: 9509J52-02

Reported: Oct 10, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC100495BTEX02A	GC100495BTEX02A	GC100495BTEX02A	GC100495BTEX02A
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 #:	9509J5203	9509J5203	9509J5203	9509J5203
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/4/95	10/4/95	10/4/95	10/4/95
Analyzed Date:	10/4/95	10/4/95	10/4/95	10/4/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.5	9.2	9.2	28
MS % Recovery:	95	92	92	93
Dup. Result:	11	9.9	10	30
MSD % Recov.:	110	99	100	100
RPD:	15	7.3	8.3	6.9
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D. #:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

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  
Project Manager



**Sequoia  
Analytical**

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

Client Project ID: Chevron 9-0019, 950927-S1  
Matrix: Liquid

Work Order #: 9509J52-02

Reported: Oct 10, 1995

### QUALITY CONTROL DATA REPORT

<b>Analyte:</b>	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
<b>QC Batch#:</b>	GC1002958010008A	GC1002958010008A	GC1002958010008A
<b>Analy. Method:</b>	EPA 8010	EPA 8010	EPA 8010
<b>Prep. Method:</b>	EPA 5030	EPA 5030	EPA 5030

<b>Analyst:</b>	H. Porter	H. Porter	H. Porter
<b>MS/MSD #:</b>	9509J5101	9509J5101	9509J5101
<b>Sample Conc.:</b>	N.D.	10	N.D.
<b>Prepared Date:</b>	10/2/95	10/2/95	10/2/95
<b>Analyzed Date:</b>	10/2/95	10/2/95	10/2/95
<b>Instrument I.D. #:</b>	GCHP8	GCHP8	GCHP8
<b>Conc. Spiked:</b>	25 µg/L	25 µg/L	25 µg/L
 <b>Result:</b>	28	35	27
<b>MS % Recovery:</b>	112	100	108
 <b>Dup. Result:</b>	28	35	27
<b>MSD % Recov.:</b>	112	100	108
 <b>RPD:</b>	0.0	0.0	0.0
<b>RPD Limit:</b>	0-50	0-50	0-50

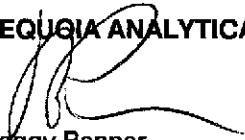
<b>LCS #:</b>	BLK100295	BLK100295	BLK100295
<b>Prepared Date:</b>	10/2/95	10/2/95	10/2/95
<b>Analyzed Date:</b>	10/2/95	10/2/95	10/2/95
<b>Instrument I.D. #:</b>	GCHP8	GCHP8	GCHP8
<b>Conc. Spiked:</b>	25 µg/L	25 µg/L	25 µg/L
 <b>LCS Result:</b>	26	24	25
<b>LCS % Recov.:</b>	104	96	100

<b>MS/MSD LCS Control Limits</b>	28-167	35-146	38-150
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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.

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

**SEQUOIA ANALYTICAL**  
  
 Peggy Penner  
Project Manager

9509J52.BLA <3>



Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number	9-0019	Chevron Contact (Name)	Mark Miller
	Facility Address	210 Grand Ave., Oakland, CA	(Phone)	(510) 842-8134
	Consultant Project Number	95092731	Laboratory Name	Sequoia
	Consultant Name	Blaine Tech Services, Inc.	Laboratory Release Number	2172420
	Address	985 Timothy Dr., San Jose, CA 95133	Samples Collected by (Name)	SHAWN HOLUB
	Project Contact (Name)	Jim Keller	Collection Date	9/27/95
	(Phone) 408 995-5535 (Fax Number) 408 293-8773	Signature	<i>Jim Keller</i>	

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water	Air C = Charcoal	Grab Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										DO NOT BILL FOR TB-LB
									STEX + TPH GSS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICP or AA)			
MW-4	3	W	1042	HCL	Y		X												-01
MW-5	6	W	1058	HCL	Y		X												-02
MW-6	3	W	1010	HCL	Y		X												-03
MW-7	3	W	1025	HCL	X		X												-04
TB	2	W	LAB	HCL	Y		X												-05

SEP 23 1205

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<i>[Signature]</i>	BTS	9-28-95 10:30	<i>SR</i>	SEQ	9-28-95 10:30 AM	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs.
<i>[Signature]</i>	SEQ	9-28-95 12:00 P				5 Days
By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
			<i>Tony M'Alcher</i>		9/28/95 12:05	As Contracted

# **Field Data Sheets**

## WELL GAUGING DATA

Project # 95092751 Date 09/27/95 Client 9-0019

Site 210 GRAND AVB.

# CHEVRON WELL MONITORING DATA SHEET

Project #:	95092751	Station #:	9-0019
Sampler:	SHAWN	Start Date:	09/27/95
Well I.D.:	MW-4	Well Diameter: (circle one)	2 3 4 6
Total Well Depth:		Depth to Water:	
Before	14.40	After	3.75
Depth to Free Product:		Thickness of Free Product (feet):	
Measurements referenced to:	PVC	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

6.92	x	3	20.76
1 Case Volume	Specified Volumes	=	gallons

Purging: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible X  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling: Bailer  
 Disposable Bailer X  
 Extraction Port  
 Other \_\_\_\_\_

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1031	74.8	7.0	1800	-	7	
1033	75.6	7.2	1800	-	14	
1038	75.4	6.8	1800	-	21	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 21

Sampling Time: 1042 Sampling Date: 09/27/95

Sample I.D.: MW-4 Laboratory: SBQU01A

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

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

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

SLOW RICHARD LAST W

# CHEVRON WELL MONITORING DATA SHEET

Project #:	95092751	Station #:	9-0019
Sampler:	SUAWN	Start Date:	09/27/95
Well I.D.:	MW-5	Well Diameter: (circle one)	2 3 <input checked="" type="radio"/> 4 6
Total Well Depth:		Depth to Water:	
Before 14.30	After	Before 3.70	After
Depth to Free Product:		Thickness of Free Product (feet):	
Measurements referenced to:	PVC	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

6.89	x	3	=	20.67
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:
1047	77.4	6.8	1400	—	7	STABIL
1049	77.6	6.8	1400	—	14	OPEN
1051	77.2	6.8	1400	—	21	

Did Well Dewater?  If yes, gals.

Gallons Actually Evacuated: 21

Sampling Time:	1058	Sampling Date:	09/27/95		
Sample I.D.:	MW-5	Laboratory:	SEQUOIA		
Analyzed for: (Circle)	TPH-G <input checked="" type="radio"/>	BTEX <input checked="" type="radio"/>	TPH-D <input type="radio"/>	OTHER <input type="radio"/>	8010
Duplicate I.D.:	Cleaning Blank I.D.:				
Analyzed for: (Circle)	TPH-G BTEX TPH-D OTHER:				

# CHEVRON WELL MONITORING DATA SHEET

Project #:	95092751	Station #:	9-0019
Sampler:	SHAWN	Start Date:	09/27/95
Well I.D.:	MW-6	Well Diameter: (circle one)	<input checked="" type="radio"/> 2    3    4    6
Total Well Depth:		Depth to Water:	
Before	9.50	After	4.35
Depth to Free Product:		Thickness of Free Product (feet):	
Measurements referenced to:	PVC	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

,82	x	3	=	2.47
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:
1003	74.2	7.2	2000	—	.85	
1005	75.0	7.0	2000	—	1.70	
1007	74.2	7.0	2000	—	2.50	

Did Well Dewater?  If yes, gals. Gallons Actually Evacuated: 2.5

Sampling Time: 1010 Sampling Date: 09/27/95

Sample I.D.: MW-6 Laboratory:

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 #: 95092751	Station #: 9-0019	
Sampler: SHAWN	Start Date: 09/27/95	
Well I.D.: MW-7	Well Diameter: (circle one) <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6	
Total Well Depth: Before 9.95 After	Depth to Water: Before 4.60 After	
Depth to Free Product:	Thickness of Free Product (feet):	
Measurements referenced to: <input checked="" type="radio"/> PVC	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

.85	x	3	2.56
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:
1019	71.0	6.2	3000	—	.85	
1020	70.8	6.4	3000	—	1.70	
1021	71.0	6.8	3000	—	2.60	

Did Well Dewater?  If yes, gals. Gallons Actually Evacuated: 260

Sampling Time: 1025 Sampling Date: 09/27/95

Sample I.D.: MW-7 Laboratory: SBANOWA

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)