

ST 1110

ENVIRONMENTAL  
PROTECTION

98 OCT -1 PM 3:14



**Chevron**

September 29, 1998

**Chevron Products Company**  
6001 Bollinger Canyon Road  
Building L, Room 1110  
PO Box 6004  
San Ramon, CA 94583-0904

**Philip R. Briggs**  
Project Manager  
Site Assessment & Remediation  
Phone 925 842-9136  
Fax 925 842-8370

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

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

Dear Mr. Peacock:

Enclosed is the Third Quarter Groundwater Monitoring report for 1998, prepared by our consultant Blaine Tech Services, Inc. for the above noted facility. The ground water samples were analyzed for TPH-g, BTEX, and MtBE. In accordance to your letter of April 22, 1998, monitoring wells MW-4 and MW-5 will be sampled semi-annually (1<sup>st</sup> & 3<sup>rd</sup> quarters) and wells MW-6 and MW-7 will only be gauged to establish water gradient. Note that wells MW-1, MW-2 and MW-3 have been abandoned.

Monitoring well MW-4 detected concentrations of all the constituents in this sampling event, however, this may be an anomaly, since no constituents had been detected in this well for the seven prior sampling events. Additional sampling will be required to establish any pattern.

The concentration of benzene significantly declined in well MW-5 from the last sampling event with MtBE below method detection limits. It therefore appears that the ORC that has been added to MW-5 is starting to have an effect on the hydrocarbons in the groundwater around this well.

The depth of the groundwater varied from 4.42 feet to 5.90 feet below grade with a direction of flow westerly.



September 29, 1998  
Mr. Thomas Peacock  
Former Chevron Service Station # 9-0019  
Page2

If you have any questions or comments, call me at (925) 842-9136.

Sincerely,  
**CHEVRON PRODUCTS COMPANY**



Philip R. Briggs  
Site Assessment and Remediation Project Manager

Enclosure

cc: Ms. Bette Owen, Chevron

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.



1680 ROGERS AVENUE  
SAN JOSE, CA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE

September 21, 1998

Phil Briggs  
Chevron U.S.A. Products Company  
P.O. Box 6004  
San Ramon, CA 94583-0904

### 3rd Quarter 1998 Monitoring at 9-0019

Third Quarter 1998 Groundwater Monitoring at  
Former Chevron Service Station Number 9-0019  
210 Grand Avenue  
Oakland, CA

Monitoring Performed on August 17, 1998

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### Groundwater Sampling Report 980817-Z-1

This report covers the routine monitoring of groundwater wells at this Chevron facility. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to McKittrick Waste Treatment Site for disposal.

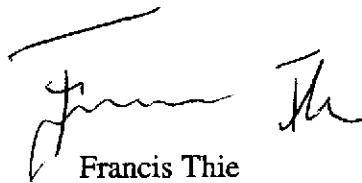
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix**.

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

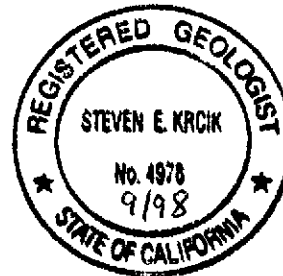
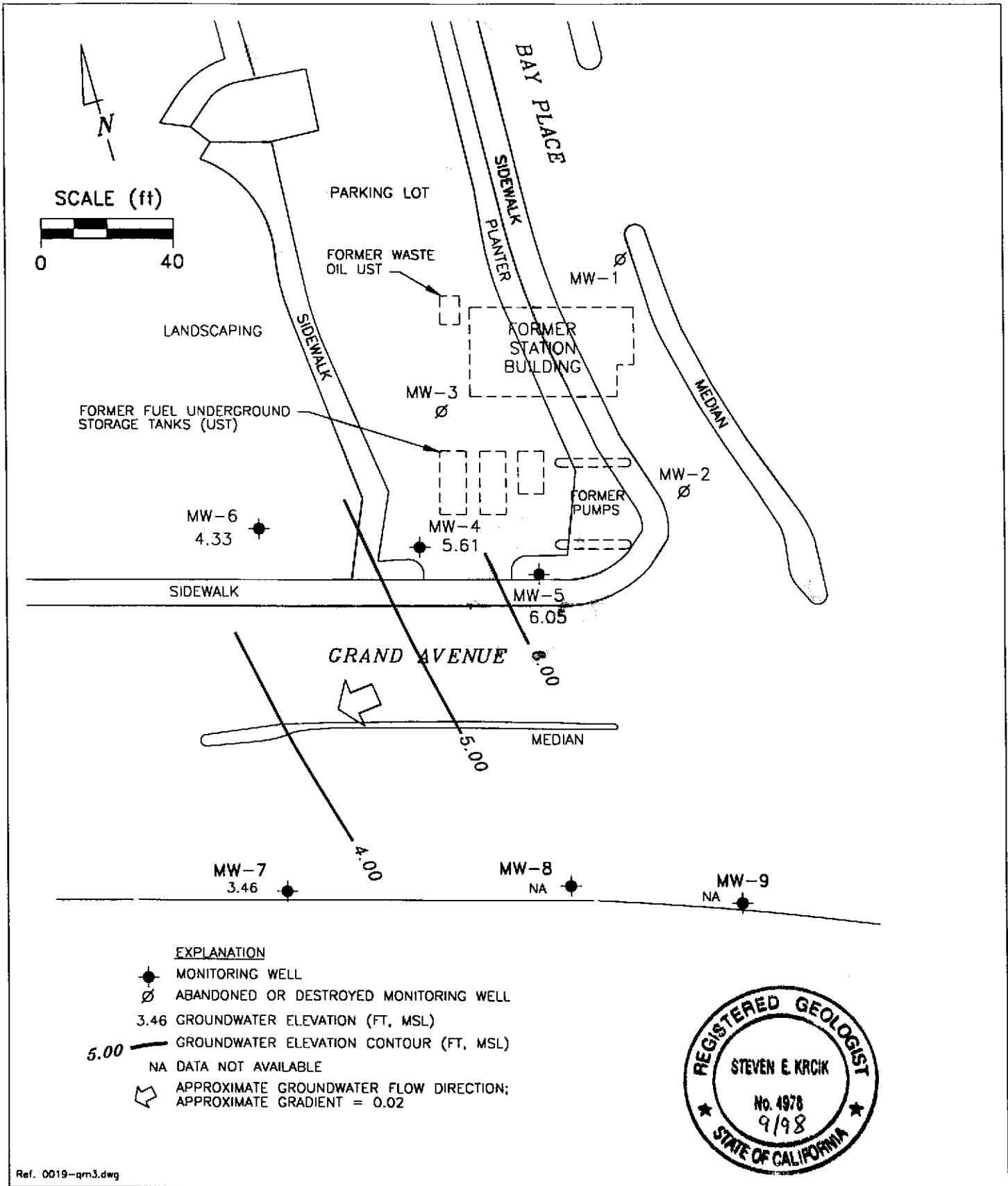
A handwritten signature in black ink, appearing to read 'Francis Thie', is written over a horizontal line.

Francis Thie  
Vice President

FPT/ap

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

# **Professional Engineering Appendix**



PREPARED BY

**RRM**  
engineering contracting firm

Former Chevron Station 9-0019  
210 Grand Avenue  
Oakland, California

GROUNDWATER ELEVATION CONTOUR MAP,  
AUGUST 17, 1998

FIGURE:  
1  
PROJECT:  
DAC04

# **Table of Well Data and Analytical Results**

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	TOG	Chloro- form	1, 2- DCA	Freon	1, 1, 1- TCA	PCE	1, 2- DCPA	1, 2- DCE	MTBE	
<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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/29/95	--	--	--	Abandoned	--	--	--	--	--	--	--	--	--	--	--	--	--	--	



## 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	MTBE	
<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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

## 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	MTBE
<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	--	--	--	--
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	--	--
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	--	--
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	--	--
09/27/95	8.19	2.94	5.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/29/95	--	--	--	Abandoned	--	--	--	--	--	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

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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	MTBE	
<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	--	--	--	--	
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	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	
12/29/95	7.59	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/10/96	7.59	3.71	3.88	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
12/19/96	7.59	2.53	5.06	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
03/22/97	7.59	3.42	4.17	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
06/29/97	10.03	5.76	4.27	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
09/12/97	10.03	5.61	4.42	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
12/05/97	10.03	5.57	4.46	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
02/21/98	10.03	5.92	4.11	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
08/17/98	10.03	5.61	4.42	--	120	5.4	7.8	3.0	28	--	--	--	--	--	--	--	--	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	TOG	Chloro-form	1, 2-DCA	Freon	1, 1, 1-TCA	PCE	1, 2-DCPA	1, 2-DCE	MTBE	
<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	10,000	--	<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	3600	140	210	310	--	<25	<25	<25	<25	<25	<25	--	--	
12/29/95	8.35	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/10/96	8.35	4.31	4.04	--	5700	1800	53	530	84	--	--	--	--	--	--	--	--	<100	
12/19/96	8.35	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/22/97	8.35	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/03/97	--	--	4.46	--	21,000	6800	4100	610	1900	--	--	--	--	--	--	--	--	530	

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## 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	MTBE	
<b>MW-5 (CONT'D)</b>																			
06/29/97	10.99	5.90	5.09	--	16,000	5300	1900	530	1600	--	--	--	--	--	--	--	--	--	<250
09/12/97	10.99	5.98	5.01	--	6100	1900	510	120	390	--	--	--	--	--	--	--	--	--	<25
12/05/97	10.99	5.36	5.63	--	52,000	11,000	7700	1400	3600	--	--	--	--	--	--	--	--	--	920
02/21/98	10.99	6.34	4.65	--	55,000	13,000	11,000	450	3300	--	--	--	--	--	--	--	--	--	1200
06/24/98	10.99	5.51	5.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/17/98	10.99	6.05	4.94	--	5700	4100	1500	210	81	--	--	--	--	--	--	--	--	--	<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	MTBE	
<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	--	--	--	--	--	--	--	--	--	
12/29/95	6.56	0.41	6.15	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	3.2	
03/28/96	6.56	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/04/96	6.56	2.75	3.81	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
06/21/96	6.56	1.64	4.92	--	130	<0.5	<0.5	<0.5	0.66	--	--	--	--	--	--	--	--	<2.5	
09/26/96	6.56	-0.18	6.74	--	130	<0.5	0.52	0.92	1.0	--	--	--	--	--	--	--	--	<2.5	
12/19/96	6.56	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/22/97	6.56	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/29/97	10.23	3.45	6.78	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
09/12/97	10.23	3.97	6.26	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
12/05/97	10.23	3.95	6.28	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
02/21/98	10.23	3.88	6.35	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
08/17/98	10.23	4.33	5.90	No longer sampled	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

## 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	MTBE
<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	--	--	--	--	--	--	--	--	--
12/29/95	4.99	1.24	3.75	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
03/28/96	4.99	1.74	3.25	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
06/21/96	4.99	0.66	4.33	--	<50	<0.5	1.2	<0.5	<0.5	--	--	--	--	--	--	--	--	5.3
09/26/96	4.99	0.04	4.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
12/19/96	4.99	1.81	3.18	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
03/22/97	4.99	2.26	2.73	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
06/29/97	8.08	4.04	4.04	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
09/12/97	8.08	6.04	2.04	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
12/05/97	8.08	5.68	2.40	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5
02/21/98	8.08	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/17/98	8.08	3.46	4.62	No longer sampled	--	--	--	--	--	--	--	--	--	--	--	--	--	--

## 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	MTBE	
<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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/29/95	6.77	2.22	4.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/28/96	6.77	2.55	4.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/21/96	6.77	3.41	3.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/26/96	6.77	2.65	4.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/19/96	6.77	3.83	2.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/22/97	6.77	3.88	2.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/29/97	9.88	6.92	2.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/12/97	9.88	7.11	2.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/05/97	9.88	7.16	2.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/21/98	9.88	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

NO LONGER MONITORED OR SAMPLED



## 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	MTBE	
<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	--	--	--	--	
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	--	--	--	--	
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	--	--	--	--	
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	Insuff. 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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/29/95	7.63	5.08	2.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/28/96	7.63	5.43	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/21/96	7.63	4.98	2.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/26/96	7.63	4.27	3.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/19/96	7.63	5.02	2.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/22/97	7.63	5.30	2.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/29/97	10.74	7.85	2.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/12/97	10.74	7.33	3.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/05/97	10.74	8.00	2.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/21/98	10.74	--	--	Inaccessible	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

NO LONGER MONITORED OR SAMPLED

## 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	MTBE	
<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	--	--	--	--	--	--	--	--	--	
12/29/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	
03/28/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
06/21/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	
09/26/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	
12/19/96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
03/22/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	
06/29/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	<2.5	

CONTINUED ON NEXT PAGE

## 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	MTBE	
<b>TRIP BLANK (CONT'D)</b>																			
09/12/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	<2.5
12/05/97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	<2.5
02/21/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	<2.5
08/17/98	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	<2.5

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on November 1, 1994.  
 Earlier field data and analytical results are drawn from the September 27, 1994 Groundwater Technology, Inc. report.  
 Resurvey of wells was performed by Ron Archer Civil Engineer Inc. on July 22, 1997.

**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-Dichloropropane  
 1,2-DCE = 1,2-Dichloroethene  
 MTBE = Methyl t-butyl Ether

# Analytical Appendix



# Sequoia Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600 FAX (650) 364-9233  
(925) 988-9600 FAX (925) 988-9673  
(916) 921-9600 FAX (916) 921-0100  
(707) 792-1865 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Chevron 9-0019/980817-Z1 Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9808A80-01	Sampled: 08/17/98 Received: 08/18/98 Analyzed: 08/27/98 Reported: 08/31/98
--	---	---

Instrument ID: HP-1

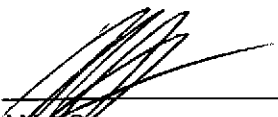
Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	120
Methyl t-Butyl Ether	2.5	7.4
Benzene	0.50	5.4
Toluene	0.50	7.8
Ethyl Benzene	0.50	3.0
Xylenes (Total)	0.50	28
Chromatogram Pattern:		GAS

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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

**SEQUOIA ANALYTICAL** - ELAP #2000

  
 \_\_\_\_\_  
 Mike Gregory  
 Project Manager





# Sequoia Analytical

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FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-0019/980817-Z1 Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9808A80-02	Sampled: 08/17/98 Received: 08/18/98 Analyzed: 08/27/98 Reported: 08/31/98
Attention: Fran Thie		

Instrument ID: HP-1

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	5700
Methyl t-Butyl Ether	50	N.D.
Benzene	10	4100
Toluene	10	1500
Ethyl Benzene	10	210
Xylenes (Total)	10	81
Chromatogram Pattern:		GAS
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	115

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

SEQUOIA ANALYTICAL - ELAP #2000

Mike Gregory  
Project Manager





# Sequoia Analytical

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(707) 792-1865 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Chevron 9-0019/980817-Z1 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9808A80-03	Sampled: 08/17/98 Received: 08/18/98 Analyzed: 08/28/98 Reported: 08/31/98
Attention: Fran Thie		

Instrument ID: HP-1

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	85

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

**SEQUOIA ANALYTICAL - ELAP #2000**

Mike Gregory  
Project Manager





**Sequoia  
Analytical**

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Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112  
Attention: Fran Thie

Client Proj. ID: Chevron 9-0019/980817-Z1

Received: 08/18/98

Lab Proj. ID: 9808A80

Reported: 08/31/98

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 6 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPH-GAS/BTEX:

Sample 9808A80-02 was diluted 20-fold.

**SEQUOIA ANALYTICAL**

  
\_\_\_\_\_  
Mike Gregory  
Project Manager







# Sequoia Analytical

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FAX (707) 792-0342

Blaine Tech Services, Inc.  
1680 Rogers Ave.  
San Jose, CA 95112  
Attention: Fran Thie

Client Project ID: Chevron 9-0019/ 980817-Z1  
Matrix: Liquid

QC Sample Group: 9808A80 -01-03

Reported: Sep 1, 1998

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
<b>Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020
<b>Analyst:</b>	N. Zahedi	N. Zahedi	N. Zahedi	N. Zahedi

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
<b>Batch#:</b>	8080465	8080465	8080465	8080465
<b>Date Prepared:</b>	8/27/98	8/27/98	8/27/98	8/27/98
<b>Date Analyzed:</b>	8/27/98	8/27/98	8/27/98	8/27/98
<b>Instrument I.D.#:</b>	HP1	HP1	HP1	HP1
<b>Conc. Spiked:</b>	20 µg/L	20 µg/L	20 µg/L	60 µg/L
<b>Matrix Spike % Recovery:</b>	91	99	107	102
<b>Matrix Spike Duplicate % Recovery:</b>	102	98	100	103
<b>Relative % Difference:</b>	11	1.0	6.8	0.98

LCS Batch#:	LCS082798	LCS082798	LCS082798	LCS082798
<b>Date Prepared:</b>	8/27/98	8/27/98	8/27/98	8/27/98
<b>Date Analyzed:</b>	8/27/98	8/27/98	8/27/98	8/27/98
<b>Instrument I.D.#:</b>	HP1	HP1	HP1	HP1
<b>LCS % Recovery:</b>	91	100	93	98

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes
	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL  
Elap #2000

Mike Gregory  
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.



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

Chevron Facility Number 9-0019  
Facility Address 210 Grand Ave., Oakland, CA  
Consultant Project Number 980817-21  
Consultant Name Blaine Tech Services, Inc.  
Address 1680 Rogers Ave., San Jose, CA 95112  
Project Contact (Name) Fran Thie  
(Phone) (408)573-0555 (Fax Number) (408)573-7771

Chevron Contact (Name) Phil Briggs  
(Phone) (510) 842-9136  
Laboratory Name Sequoia  
Laboratory Release Number 9029831  
Samples Collected by (Name) Jean  
Collection Date 8-17-98  
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed <u>980817-21</u>										DO NOT BILL FOR TB-LB	Remarks
								BTX + TPH GAS (8020 + 8015) <u>1/11/98</u>	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 (CAP or AA)				
MW-4	1	3	W	D	16:39	HCL	-	X											
MW-5	2	2	W	D	16:54	↓	↓	X											
FB	3	2	W	D		↓	↓	X											

8/18/98

330WG/03 01/HCH

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>BTS</u>	Date/Time <u>8/18/98 10:04</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Sequoia</u>	Date/Time <u>10:09 8/18/98</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 6 Days <u>10 Days</u> As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>8/18/98</u>	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>8/18/98 11:48</u>	

# **Field Data Sheets**



# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>980817-21</u>	Station #: <u>9-0019</u>
Sampler: <u>JR</u>	Date: <u>8-17-98</u>
Well I.D.: <u>MW-4</u>	Well Diameter: 2 3 <u>(4)</u> 6 8 <u>   </u>
Total Well Depth: <u>13.81</u>	Depth to Water: <u>4.42</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 ~~X~~

Disposable Bailer       Disposable Bailer ~~X~~

Middleburg       Extraction Port

Electric Submersible ~~X~~      Other: \_\_\_\_\_

Extraction Pump

Other: \_\_\_\_\_

<u>6.5</u>	x	<u>3</u>	=	<u>19.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1632	74.0	7.2	1500	7	
1633	74.8	7.3	1500	14	
1634	74.8	7.3	1500	21	

Did well dewater?    Yes    (No)    Gallons actually evacuated: 21

Sampling Time: 1639    Sampling Date: 8-17-98

Sample I.D.: MW-4    Laboratory: Sequoia GTEL N. Creek Assoc. L

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

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

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

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

25  
5  
325

50  
65  
203

# CHEVRON WELL MONITORING DATA SHEET

Project #: 980817-21	Station #: 9-0019
Sampler: SR	Date: 8-17-98
Well I.D.: MW-5	Well Diameter: 2 3 <b>4</b> 6 8
Total Well Depth: 9.73	Depth to Water: 4.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVC</b> Grade	D.O. Meter (if req'd): <b>YSI</b> 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>3.3</u>	x	<u>3</u>	=	<u>9.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Gals. Removed	Observations
1648	74.4	7.6	1100	4	- slight odor
1649	74.2	7.8	1000	8	
1650	74.2	7.8	1100	12	

Did well dewater? Yes  No  Gallons actually evacuated: 12

Sampling Time: 1654 Sampling Date: 8-17-98

Sample I.D.: MW-5 Laboratory: **Sequoia** GTEL N. Creek Assoc. Labs

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

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

D.O. (if req'd):	Pre-purge: <b>12.2</b> mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge: <del>7.7</del> mV	Post-purge:	mV