

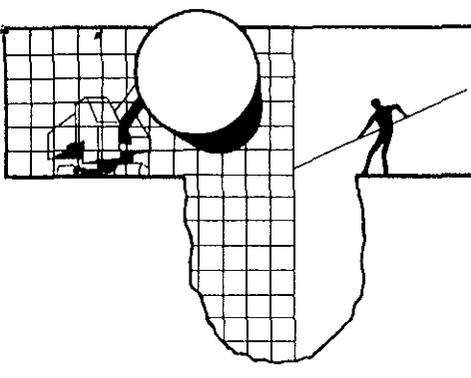


Ms. Susan Hugo  
December 26, 1995  
Page 2

Enclosure

cc: Ms. Y.M. Byeman

Mr. Scott Hooton  
BP Oil Company  
Environmental Resource Management  
Building 13, Suite N  
295 SW 41st Street  
Renton, WA 98055-4931



# BLAINE TECH SERVICES INC.

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

November 10, 1995

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

## 4th Quarter 1995 Monitoring at 9-1583

Fourth Quarter 1995 Groundwater Monitoring at  
Chevron Service Station Number 9-1583  
5509 Martin Luther King Jr. Way  
Oakland, CA

Monitoring Performed on October 11, 1995

---

### Groundwater Sampling Report 951011-T-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.

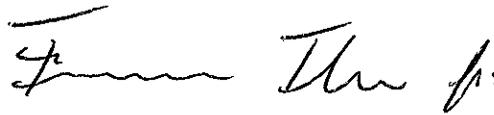
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater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

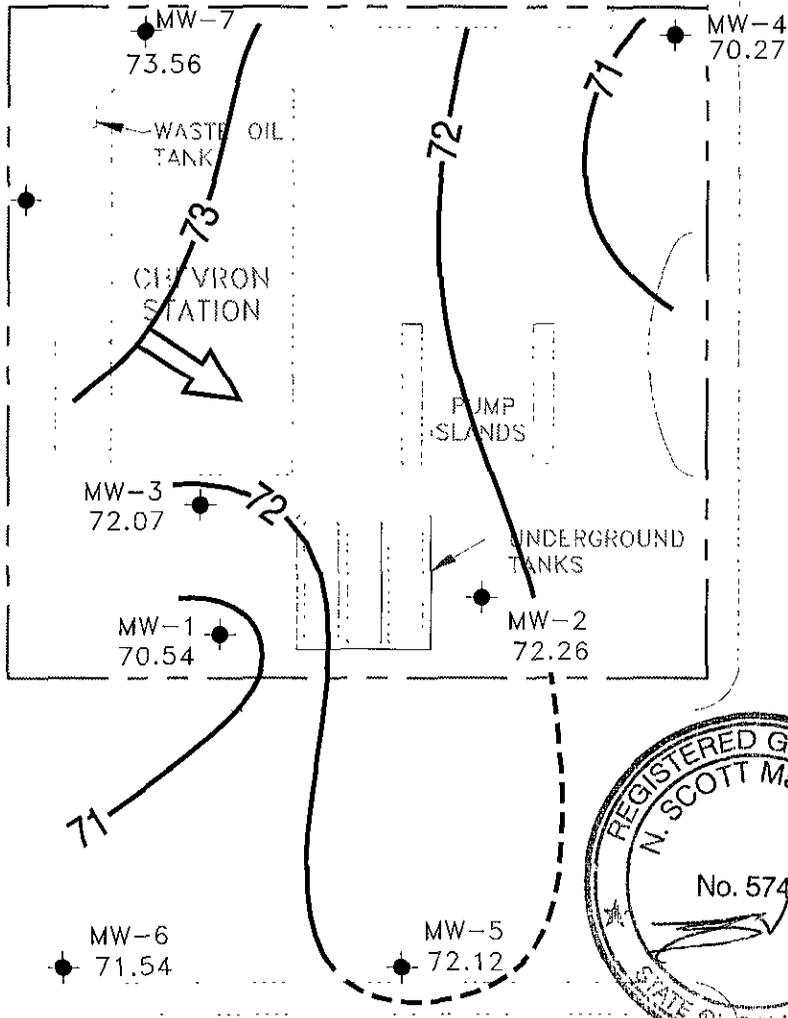
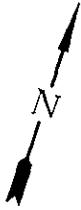
A handwritten signature in black ink, appearing to read "James Keller". The signature is written in a cursive style with a horizontal line above the first name.

James Keller  
Vice President

JPK/dk

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

# **Professional Engineering Appendix**



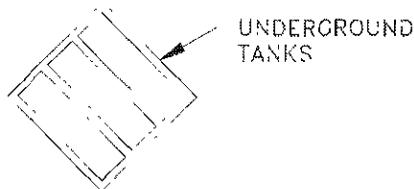
MARTIN LUTHER KING JR. WAY

PRIVATE RESIDENCE

55th STREET



APARTMENT COMPLEX

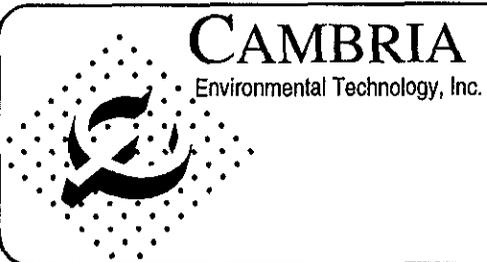


**LEGEND**

- PROPERTY LINE
- MONITORING WELL
- POTENTIOMETRIC SURFACE ELEVATION (FT)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUND WATER FLOW DIRECTION

**NOTE:**  
 1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.

Base map from Groundwater Technology, Inc.



**CHEVRON**  
 Chevron Station 9-1583  
 5509 Martin Luther King Jr. Way  
 Oakland, California  
 \CHEVRON\9-1583\1583-QM.DWG

Ground Water Elevation  
 October 11, 1995

FIGURE  
**1**

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

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>MW-1</b>													
12/22/83	81.97	71.72	10.25	--	--	--	--	--	--	--	--	--	--
12/30/83	81.97	72.80	9.17	--	--	--	--	--	--	--	--	--	--
03/12/90	81.97	71.89	10.08	--	50,000	3000	7300	1900	18,000	--	--	--	--
03/25/90	82.42	71.51	10.46	--	--	--	--	--	--	--	--	--	--
10/18/90	82.42	--	--	--	--	--	--	--	--	--	--	--	--
10/31/90	82.42	--	--	--	--	--	--	--	--	--	--	--	--
11/16/90	82.42	70.84	11.58	--	--	--	--	--	--	--	--	--	--
02/08/91	82.42	72.31	10.11	--	100,000	4200	8400	16,000	2600	--	--	--	--
05/08/91	82.42	71.97	10.45	--	31,000	200	66	670	2000	--	--	--	--
08/12/91	82.42	71.19	11.23	--	17,000	81	7.2	270	710	--	--	--	--
11/07/91	82.42	71.72	10.70	--	7100	24	6.0	130	170	--	--	--	--
02/05/92	82.42	72.05	10.37	--	110,000	8900	14,000	2700	12,000	--	--	--	--
05/13/92	82.42	71.84	10.58	--	19,000	450	85	480	870	--	--	--	--
07/17/92	82.42	71.37	11.05	--	8500	170	<10	360	600	--	--	--	--
10/05/92	82.42	71.01	11.41	--	22,000	4300	5100	570	2900	--	--	--	--
11/11/92	82.42	--	--	--	--	--	--	--	--	--	--	--	--
11/17/92	82.42	--	--	--	--	--	--	--	--	--	--	--	--
11/24/92	82.42	--	--	--	--	--	--	--	--	--	--	--	--
12/01/92	82.42	--	--	--	--	--	--	--	--	--	--	--	--
12/29/92	82.42	--	--	--	--	--	--	--	--	--	--	--	--
01/05/93	82.42	--	--	--	--	--	--	--	--	--	--	--	--
01/08/93	82.42	74.31	8.11	--	14,000,000	12,000	79,000	270,000	1,300,000	--	--	--	--
02/02/93	82.42	--	--	--	--	--	--	--	--	--	--	--	--
04/14/93	82.42	72.57	9.85	--	48,000	670	1100	1600	6300	--	--	--	--
08/06/93	82.42	71.59	10.83	--	44,000	660	990	1600	6100	--	--	--	--
10/21/93	82.42	71.52	10.90	--	18,000	270	460	1300	4700	--	--	--	--
01/05/94	82.42	72.09	10.33	--	22,000	160	160	630	2300	--	--	--	--
04/08/94	82.42	72.24	10.18	--	21,000	37	110	570	1400	--	--	--	--
07/06/94	82.42	71.78	10.64	--	28,000	210	100	540	1200	--	--	--	--
08/04/94	82.42	71.91	10.51	--	--	--	--	--	--	--	--	--	--
10/05/94	82.42	71.51	10.91	--	120,000	39	22	320	900	--	--	--	--
01/18/95	82.42	73.80	8.62	--	12,000	<20	<20	130	160	--	--	--	--
04/07/95	82.42	72.89	9.53	--	2500	<2.5	<2.5	71	38	--	--	--	--
07/06/95	82.42	72.03	10.39	--	5700	<0.5	<0.5	110	110	--	--	--	--
10/11/95	82.42	70.54	11.88	--	2700	13	<5.0	13	5.7	--	--	--	--

650

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>MW-2</b>													
12/22/83	83.48	72.98	10.50	--	--	--	--	--	--	--	--	--	--
12/30/83	83.48	73.56	9.92	--	--	--	--	--	--	--	--	--	--
03/12/90	83.48	72.46	11.02	--	800	400	22	18	55	--	--	--	--
03/25/90	83.48	72.15	11.33	--	--	--	--	--	--	--	--	--	--
10/18/90	83.48	71.17	12.31	--	--	--	--	--	--	--	--	--	--
10/31/90	83.48	--	--	--	--	--	--	--	--	--	--	--	--
11/16/90	83.48	--	--	--	--	--	--	--	--	--	--	--	--
02/08/91	83.48	72.43	11.05	--	4600	820	440	720	210	--	--	--	--
05/08/91	83.48	72.12	11.36	--	<50	5.0	<0.5	<0.5	<0.5	--	--	--	--
08/12/91	83.48	71.51	11.97	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/07/91	83.48	71.98	11.50	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/05/92	83.48	72.29	11.19	--	1700	390	170	60	200	--	--	--	--
05/13/92	83.48	71.99	11.49	--	74	9.3	<0.5	<0.5	<0.5	--	--	--	--
07/17/92	83.48	71.63	11.85	--	<50	2.0	<0.5	<0.5	<0.5	--	--	--	--
10/05/92	83.48	71.48	12.00	--	3500	1200	530	86	220	--	--	--	--
11/11/92	83.48	--	--	--	--	--	--	--	--	--	--	--	--
11/17/92	83.48	--	--	--	--	--	--	--	--	--	--	--	--
11/24/92	83.48	--	--	--	--	--	--	--	--	--	--	--	--
12/01/92	83.48	--	--	--	--	--	--	--	--	--	--	--	--
12/29/92	83.48	--	--	--	--	--	--	--	--	--	--	--	--
01/05/93	83.48	--	--	--	--	--	--	--	--	--	--	--	--
01/08/93	83.48	74.65	8.83	--	390	140	0.8	7.7	26	--	--	--	--
02/02/93	83.48	--	--	--	--	--	--	--	--	--	--	--	--
04/14/93	83.48	72.69	10.79	--	<50	5.0	<0.5	<0.5	<0.5	--	--	--	--
08/06/93	83.48	71.77	11.71	--	<50	1.0	<0.5	<0.5	<0.5	--	--	--	--
10/21/93	83.48	71.74	11.74	--	<50	1.0	<0.5	9.0	<0.5	--	--	--	--
01/05/94	83.48	72.30	11.18	--	<50	0.7	<0.5	<0.5	0.9	--	--	--	--
04/08/94	83.48	72.42	11.06	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/94	83.48	71.80	11.68	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/04/94	83.48	72.29	11.19	--	--	--	--	--	--	--	--	--	--
10/05/94	83.48	71.79	11.69	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
01/18/95	83.48	74.26	9.22	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
04/07/95	83.48	73.62	9.86	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/95	83.48	72.74	10.74	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/11/95	83.48	72.26	11.22	--	<50	<0.5	<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	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>MW-3</b>													
12/22/83	84.36	72.78	11.58	--	--	--	--	--	--	--	--	--	--
12/30/83	84.36	73.19	11.17	--	--	--	--	--	--	--	--	--	--
03/12/90	84.36	72.22	12.14	--	47,000	1000	9900	1700	9800	--	--	--	--
03/25/90	84.38	71.81	12.55	--	--	--	--	--	--	--	--	--	--
10/18/90	84.38	--	--	--	--	--	--	--	--	--	--	--	--
10/31/90	84.38	--	--	--	--	--	--	--	--	--	--	--	--
11/16/90	84.38	70.76	13.62	--	--	--	--	--	--	--	--	--	--
02/08/91	84.38	72.20	12.18	--	58,000	4900	5200	9500	2000	--	--	--	--
05/08/91	84.38	71.86	12.52	--	50,000	2100	1400	2000	9400	--	--	--	--
08/12/91	84.38	71.11	13.27	--	15,000	1300	160	920	1900	--	--	--	--
11/07/91	84.38	71.57	12.81	--	26,000	1000	310	1900	5900	--	--	--	--
02/05/92	84.38	71.91	12.47	--	35,000	2800	1300	1500	4700	--	--	--	--
05/13/92	84.38	71.76	12.62	--	47,000	1500	1200	1100	4800	--	--	--	--
07/17/92	84.38	71.25	13.13	--	15,000	120	11	88	140	--	--	--	--
10/05/92	84.38	70.95	13.62	Free Product (0.24')	--	--	--	--	--	--	--	--	--
11/11/92	84.38	71.63	12.89	Free Product (0.17')	--	--	--	--	--	--	--	--	--
11/17/92	84.38	71.54	12.89	Free Product (0.06')	--	--	--	--	--	--	--	--	--
11/24/92	84.38	71.56	12.86	Free Product (0.05')	--	--	--	--	--	--	--	--	--
12/01/92	84.38	71.48	12.92	Free Product (0.03')	--	--	--	--	--	--	--	--	--
12/29/92	84.38	73.14	11.24	Sheen	--	--	--	--	--	--	--	--	--
01/05/93	84.38	73.23	11.15	Sheen	--	--	--	--	--	--	--	--	--
01/08/93	84.38	74.28	10.10	--	250,000	5000	17000	5500	28,000	--	--	--	--
02/02/93	84.38	--	--	--	--	--	--	--	--	--	--	--	--
04/14/93	84.38	72.48	11.91	Free Product (0.01')	--	--	--	--	--	--	--	--	--
08/06/93	84.38	71.48	12.90	Free Product (0.01')	150,000	3800	6600	3700	17,000	--	--	--	--
10/21/93	84.38	71.41	12.97	--	22,000	2300	1700	1400	5100	--	--	--	--
01/05/94	84.38	71.96	12.42	--	37,000	1600	1100	1300	6500	--	--	--	--
04/08/94	84.38	72.51	11.87	--	16,000	250	310	500	2500	--	--	--	--
07/06/94	84.38	71.64	12.74	--	43,000	660	320	1900	6400	--	--	--	--
08/04/94	84.38	71.71	12.67	--	--	--	--	--	--	--	--	--	--
10/05/94	84.38	71.43	12.95	--	12,000	280	90	480	370	--	--	--	--
01/18/95	84.38	73.72	10.66	--	20,000	200	230	700	3500	--	--	--	--
04/07/95	84.38	72.84	11.54	--	22,000	120	120	810	4400	--	--	--	--
07/06/95	84.38	71.99	12.39	--	15,000	110	<50	630	2100	--	--	--	--
10/11/95	84.38	72.07	12.31	--	8600	24	<10	360	560	--	--	--	--

1100

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>MW-4</b>													
10/18/90	84.25	68.50	15.75	--	--	--	--	--	--	--	--	--	--
10/31/90	84.25	70.35	13.90	--	<50	<0.5	<0.5	<0.5	1.0	--	--	--	--
11/16/90	84.25	70.00	14.25	--	--	--	--	--	--	--	--	--	--
02/08/91	84.25	71.93	12.32	--	60	17	2.0	12	<0.5	--	--	--	--
05/08/91	84.25	72.02	12.23	--	65	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/12/91	84.25	70.32	13.93	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/07/91	84.25	70.83	13.42	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/05/92	84.25	71.42	12.83	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
05/13/92	84.25	70.97	13.28	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/17/92	84.25	70.27	13.98	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/05/92	84.25	70.02	14.23	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/11/92	84.25	--	--	--	--	--	--	--	--	--	--	--	--
11/17/92	84.25	--	--	--	--	--	--	--	--	--	--	--	--
11/24/92	84.25	--	--	--	--	--	--	--	--	--	--	--	--
12/01/92	84.25	--	--	--	--	--	--	--	--	--	--	--	--
12/29/92	84.25	--	--	--	--	--	--	--	--	--	--	--	--
01/05/93	84.25	--	--	--	--	--	--	--	--	--	--	--	--
01/08/93	84.25	74.09	10.16	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/02/93	84.25	--	--	--	--	--	--	--	--	--	--	--	--
04/14/93	84.25	72.21	12.04	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/06/93	84.25	70.34	13.91	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/21/93	84.25	70.26	13.99	--	<50	<0.5	<0.5	<0.5	1.0	--	--	--	--
01/05/94	84.25	71.30	12.95	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
04/08/94	84.25	71.31	12.94	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/94	84.25	70.57	13.68	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/04/94	84.25	70.71	13.54	--	--	--	--	--	--	--	--	--	--
10/05/94	84.25	70.65	13.60	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
01/18/95	84.25	74.77	9.48	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
04/07/95	84.25	72.70	11.55	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/95	84.25	71.25	13.00	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/11/95	84.25	70.27	13.98	--	<50	<0.5	<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	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>MW-5</b>													
10/18/90	81.95	71.17	10.78	--	--	--	--	--	--	--	--	--	--
10/31/90	81.95	71.32	10.63	--	110	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/16/90	81.95	71.27	10.68	--	--	--	--	--	--	--	--	--	--
02/08/91	81.95	72.78	9.17	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
05/08/91	81.95	73.27	8.68	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/12/91	81.95	71.62	10.33	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/07/91	81.95	72.19	9.76	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/05/92	81.95	72.48	9.47	--	69	<0.5	<0.5	<0.5	<0.5	--	--	--	--
05/13/92	81.95	72.25	9.70	--	74	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/17/92	81.95	71.74	10.21	--	880	2.6	<1.2	4.6	11	--	--	--	--
10/05/92	81.95	71.34	10.61	--	120	<0.5	<0.5	0.6	4.9	--	--	--	--
11/11/92	81.95	--	--	--	--	--	--	--	--	--	--	--	--
11/17/92	81.95	--	--	--	--	--	--	--	--	--	--	--	--
11/24/92	81.95	--	--	--	--	--	--	--	--	--	--	--	--
12/01/92	81.95	--	--	--	--	--	--	--	--	--	--	--	--
12/29/92	81.95	--	--	--	--	--	--	--	--	--	--	--	--
01/05/93	81.95	--	--	--	--	--	--	--	--	--	--	--	--
01/08/93	81.95	74.61	7.34	--	61	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/02/93	81.95	--	--	--	--	--	--	--	--	--	--	--	--
04/14/93	81.95	--	--	--	--	--	--	--	--	--	--	--	--
08/06/93	81.95	71.99	9.96	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/21/93	81.95	71.89	10.06	--	<50	<0.5	<0.5	2.0	4.0	--	--	--	--
01/05/94	81.95	72.52	9.43	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
04/08/94	81.95	72.56	9.39	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/94	81.95	72.19	9.76	--	<50	0.6	<0.5	<0.5	<0.5	--	--	--	--
08/04/94	81.95	72.13	9.82	--	--	--	--	--	--	--	--	--	--
10/05/94	81.95	71.89	10.06	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
01/18/95	81.95	--	--	Inaccessible	--	--	--	--	--	--	--	--	--
04/07/95	81.95	73.31	8.64	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/95	81.95	72.52	9.43	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/11/95	81.95	72.12	9.83	--	<50	<0.5	<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	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>MW-6</b>													
10/18/90	80.60	70.81	9.79	--	--	--	--	--	--	--	--	--	--
10/31/90	80.60	70.91	9.69	--	<50	<0.5	<0.5	<0.5	3.0	--	--	--	--
11/16/90	80.60	70.86	9.74	--	--	--	--	--	--	--	--	--	--
02/08/91	80.60	--	--	--	--	--	--	--	--	--	--	--	--
05/08/91	80.60	71.06	9.54	--	56	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/12/91	80.60	71.10	9.50	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/07/91	80.60	71.71	8.89	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/05/92	80.60	72.01	8.59	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
05/13/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
07/17/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
10/05/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
11/11/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
11/17/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
11/24/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
12/01/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
12/29/92	80.60	--	--	--	--	--	--	--	--	--	--	--	--
01/05/93	80.60	--	--	--	--	--	--	--	--	--	--	--	--
01/08/93	80.60	--	--	--	--	--	--	--	--	--	--	--	--
02/02/93	80.60	72.89	7.71	--	<50	2.1	<0.5	<0.5	2.2	--	--	--	--
04/14/93	80.60	72.41	8.19	--	<50	1.0	<0.5	<0.5	<0.5	--	--	--	--
08/06/93	80.60	71.52	9.08	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/21/93	80.60	71.46	9.14	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
01/05/94	80.60	72.06	8.54	--	<50	4.0	<0.5	<0.5	<0.5	--	--	--	--
04/08/94	80.60	--	--	--	--	--	--	--	--	--	--	--	--
07/06/94	80.60	--	--	Inaccessible	--	--	--	--	--	--	--	--	--
08/04/94	80.60	71.66	8.94	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/05/94	80.60	--	--	Inaccessible	--	--	--	--	--	--	--	--	--
01/18/95	80.60	73.50	7.10	--	<50	0.69	<0.5	<0.5	0.57	--	--	--	--
04/07/95	80.60	72.77	7.83	--	<50	1.8	<0.5	<0.5	<0.5	--	--	--	--
07/06/95	80.60	72.03	8.57	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/11/95	80.60	71.54	9.06	--	<125	<1.2	<1.2	<1.2	<1.2	--	--	--	--

540

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>MW-7</b>													
03/08/94	86.36	74.99	11.37	--	1200	440	31	73	200	<10	4100	--	--
07/06/94	86.36	--	--	--	--	--	--	--	--	--	--	--	--
08/04/94	86.36	73.86	12.50	--	120	15	<0.5	3.8	1.8	--	--	--	--
10/05/94	86.36	73.99	12.37	--	150	1.2	<0.5	1.2	1.7	--	--	--	--
01/18/95	86.36	74.82	11.54	--	260	11	<1.0	17	6.8	--	--	--	--
04/07/95	86.36	75.63	10.73	--	230	<0.5	<0.5	25	0.93	--	--	--	--
07/06/95	86.36	74.36	12.00	--	320	<1.0	<1.0	<1.0	<1.0	--	--	6900	--
10/11/95	86.36	73.56	12.80	--	<50	<0.5	<0.5	<0.5	<0.5	--	2300*	--	120
<b>MW-8</b>													
03/08/94	85.93	75.06	10.87	--	28,000	2900	1300	1200	6800	<10	<100	--	--
07/06/94	85.93	--	--	--	--	--	--	--	--	--	--	--	--
08/04/94	85.93	73.77	12.16	--	22,000	3000	260	870	4400	--	--	--	--
10/05/94	85.93	72.71	13.22	--	12,000	1800	34	4.6	890	--	--	--	--
01/18/95	85.93	75.51	10.42	--	19,000	1000	65	1100	3500	--	--	--	--
04/07/95	85.93	75.48	10.45	--	14,000	310	<25	720	1700	--	--	--	--
07/06/95	85.93	74.30	11.63	--	19,000	280	<50	1200	2600	--	--	--	--
10/11/95	85.93	73.51	12.42	--	6100	140	5.5	320	280	--	--	--	1200

\* Chromatogram pattern indicates an unidentified hydrocarbon.

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	TPH-Diesel	TPH-Motor Oil	Total Oil & Grease	MTBE
<b>TRIP BLANK</b>													
03/12/90	--	--	--	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--	--
02/08/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
05/08/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/12/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/07/91	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/05/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
05/13/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/17/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/05/92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
11/11/92	--	--	--	--	--	--	--	--	--	--	--	--	--
11/17/92	--	--	--	--	--	--	--	--	--	--	--	--	--
11/29/92	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/92	--	--	--	--	--	--	--	--	--	--	--	--	--
12/29/92	--	--	--	--	--	--	--	--	--	--	--	--	--
01/05/93	--	--	--	--	--	--	--	--	--	--	--	--	--
01/08/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
02/02/93	--	--	--	--	--	--	--	--	--	--	--	--	--
04/14/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/06/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/21/93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
01/05/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
04/08/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
08/04/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/05/94	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
01/18/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
04/07/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
07/06/95	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
10/11/95	--	--	--	--	<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 November 23, 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 9-1583, 951011-T1 Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510919-01	Sampled: 10/11/95 Received: 10/12/95 Analyzed: 10/17/95 Reported: 10/20/95
Attention: Jim Keller		

QC Batch Number: GC101795BTEX21A  
Instrument ID: GCHP21

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	2700
Methyl t-Butyl Ether	25	650
Benzene	5.0	13
Toluene	5.0	N.D.
Ethyl Benzene	5.0	13
Xylenes (Total)	5.0	5.7
Chromatogram Pattern: Weathered Gas		C6-C12

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                      130	110

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 9-1583, 951011-T1  
Sample Descript: MW-2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9510919-02

Sampled: 10/11/95  
Received: 10/12/95  
Analyzed: 10/13/95  
Reported: 10/20/95

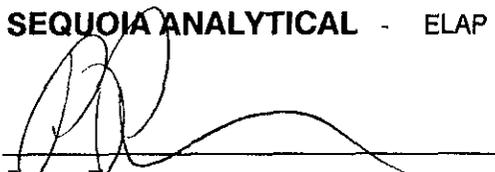
QC Batch Number: GC101395BTEX02B  
Instrument ID: GCHP02

**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	80

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 9-1583, 951011-T1 Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510919-03	Sampled: 10/11/95 Received: 10/12/95 Analyzed: 10/17/95 Reported: 10/20/95
Attention: Jim Keller		

QC Batch Number: GC101795BTEX21A  
Instrument ID: GCHP21

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

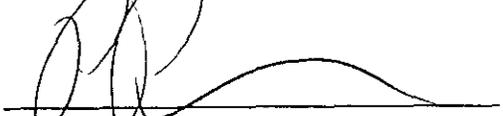
Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	8600
Methyl t-Butyl Ether	50	1100
Benzene	10	24
Toluene	10	N.D.
Ethyl Benzene	10	360
Xylenes (Total)	10	560
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
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

Client Proj. ID: Chevron 9-1583, 951011-T1  
Sample Descript: MW-4  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9510919-04

Sampled: 10/11/95  
Received: 10/12/95  
Analyzed: 10/13/95  
Reported: 10/20/95

Attention: Jim Keller

QC Batch Number: GC101395BTEX02B  
Instrument ID: GCHP02

**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	79

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 9-1583, 951011-T1 Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510919-05	Sampled: 10/11/95 Received: 10/12/95 Analyzed: 10/13/95 Reported: 10/20/95
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QC Batch Number: GC101395BTEX02B  
Instrument ID: GCHP02

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

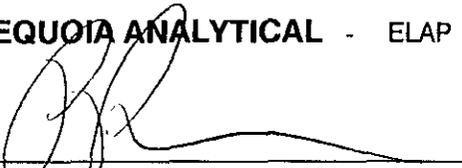
Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	82

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 9-1583, 951011-T1 Sample Descript: MW-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510919-06	Sampled: 10/11/95 Received: 10/12/95 Analyzed: 10/17/95 Reported: 10/20/95
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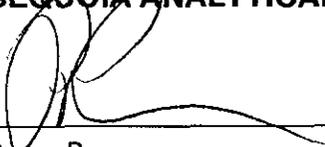
QC Batch Number: GC101795BTEX21A  
Instrument ID: GCHP21

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	125	N.D.
<b>Methyl t-Butyl Ether</b>	<b>6.2</b>	<b>540</b>
Benzene	1.2	N.D.
Toluene	1.2	N.D.
Ethyl Benzene	1.2	N.D.
Xylenes (Total)	1.2	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70                      130	83

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 9-1583, 951011-T1 Sample Descript: MW-7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510919-07	Sampled: 10/11/95 Received: 10/12/95 Analyzed: 10/17/95 Reported: 10/20/95
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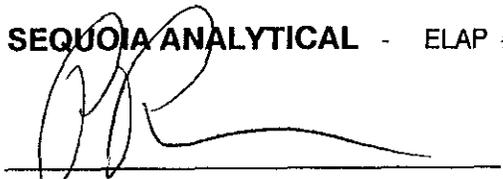
QC Batch Number: GC101795BTEX21A  
Instrument ID: GCHP21

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
<b>Methyl t-Butyl Ether</b>	<b>2.5</b>	<b>120</b>
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	91

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 9-1583, 951011-T1  
Sample Descript: MW-7  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9510919-07

Sampled: 10/11/95  
Received: 10/12/95  
Extracted: 10/15/95  
Analyzed: 10/19/95  
Reported: 10/20/95

Attention: Jim Keller

QC Batch Number: GC1015950HBPEXZ

Instrument ID: GCHP4A

**Fuel Fingerprint : Motor Oil**

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	500	2300
Chromatogram Pattern: Unidentified HC		C16-C36
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50 150	127

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 9-1583, 951011-T1 Sample Descript: MW-8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510919-08	Sampled: 10/11/95 Received: 10/12/95 Analyzed: 10/14/95 Reported: 10/20/95
--	--	---

QC Batch Number: GC101395BTEX02B  
Instrument ID: GCHP02

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	6100
Methyl t-Butyl Ether	25	1200
Benzene	5.0	140
Toluene	5.0	5.5
Ethyl Benzene	5.0	320
Xylenes (Total)	5.0	280
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
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 9-1583, 951011-T1 Sample Descript: TB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510919-09	Sampled: 10/11/95 Received: 10/12/95 Analyzed: 10/14/95 Reported: 10/20/95
Attention: Jim Keller		

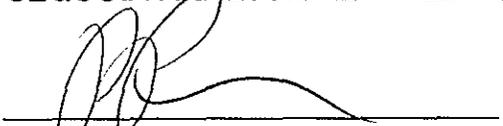
QC Batch Number: GC101395BTEX02B  
Instrument ID: GCHP02

**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	73

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 9-1583, 951011-T1  
Lab Proj. ID: 9510919

Received: 10/12/95  
Reported: 10/20/95

## LABORATORY NARRATIVE

TPPH Note: Sample 9510919-01 was diluted 10-fold.  
Sample 9510919-03 was diluted 20-fold.  
Sample 9510919-06 was diluted 2.5-fold.  
Sample 9510919-08 was diluted 10-fold.

**SEQUOIA ANALYTICAL**

  
Peggy Penner  
Project Manager





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

Client Project ID: Chevron 9-1583, 951011-T1  
Matrix: Liquid

Work Order #: 9510919 01, 03, 06-07

Reported: Oct 23, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC101795BTEX21A	GC101795BTEX21A	GC101795BTEX21A	GC101795BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	951038302	951038302	951038302	951038302
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/17/95	10/17/95	10/17/95	10/17/95
Analyzed Date:	10/17/95	10/17/95	10/17/95	10/17/95
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.5	9.8	30
MS % Recovery:	94	95	98	100
Dup. Result:	10	11	11	24
MSD % Recov.:	100	110	110	80
RPD:	6.2	15	12	22
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	71-133	72-128	72-130	71-120
Control Limits				

**SEQUOIA ANALYTICAL**

*[Signature]*  
Reggy Penner  
Project Manager

Please Note:  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

9510919.BLA <1>





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

Client Project ID: Chevron 9-1583, 951011-T1  
Matrix: Liquid

Work Order #: 9510919 02, 04-05, 08-09

Reported: Oct 23, 1995

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC101395BTEX02B	GC101395BTEX02B	GC101395BTEX02B	GC101395BTEX02B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	951038302	951038302	951038302	951038302
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/13/95	10/13/95	10/13/95	10/13/95
Analyzed Date:	10/13/95	10/13/95	10/13/95	10/13/95
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.4	8.5	8.5	25
MS % Recovery:	84	85	85	84
Dup. Result:	8.9	9.0	9.0	27
MSD % Recov.:	89	90	90	90
RPD:	5.8	5.7	5.7	6.5
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	71-133	72-128	72-130	71-120
Control Limits				

**SEQUOIA ANALYTICAL**

*Peggy Penner*  
Peggy Penner  
Project Manager

**Please Note:**

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

9510919.BLA <2>





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

Client Project ID: Chevron 9-1583, 951011-T1  
Matrix: Liquid

Work Order #: 9510919 07

Reported: Oct 23, 1995

**QUALITY CONTROL DATA REPORT**

**Analyte:** Diesel  
**QC Batch#:** GC1015950HBPEXZ  
**Analy. Method:** EPA 8015M  
**Prep. Method:** EPA 3520

**Analyst:** J. Minkel  
**MS/MSD #:** 951092101  
**Sample Conc.:** 70  
**Prepared Date:** 10/15/95  
**Analyzed Date:** 10/18/95  
**Instrument I.D.#:** GCHP4A  
**Conc. Spiked:** 1000 µg/L

**Result:** 930  
**MS % Recovery:** 86

**Dup. Result:** 860  
**MSD % Recov.:** 79

**RPD:** 2.0  
**RPD Limit:** 0-50

**LCS #:** BLK101595

**Prepared Date:** 10/15/95  
**Analyzed Date:** 10/18/95  
**Instrument I.D.#:** GCHP4A  
**Conc. Spiked:** 1000 µg/L

**LCS Result:** 890  
**LCS % Recov.:** 89

**MS/MSD**  
**LCS** 38-122  
**Control Limits**

**SEQUOIA ANALYTICAL**

Peggy Penner  
Project Manager

**Please Note:**  
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

9510919.BLA <3>



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

Chevron Facility Number 9-1583  
Facility Address 5509 Martin Luther King, Oakland  
Consultant Project Number 951011-71  
Consultant Name Blaine Tech Services, Inc.  
Address 985 Timothy Dr., San Jose, CA 95133  
Project Contact (Name) Jim Keller  
(Phone) 408 995-5535 (Fax Number) 408 293-8773

Chevron Contact (Name) Mark Miller  
(Phone) (510) 842-8134  
Laboratory Name Sequoia  
Laboratory Release Number 2172760  
Samples Collected by (Name) Mike Foll  
Collection Date 10-11-95  
Signature m/foll

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal A = Air	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											DO NOT BILL FOR TB-LB	Remarks	
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)	MTBE	TPH-MO				
MW1		3	W		13:25	HCL	Y	X										X			1
MW2		3	W		12:05	HCL	Y	X										X			2
MW3		3	W		13:45	HCL	Y	X										X			3
MW4		3	W		11:45	HCL	Y	X										X			4
MW5		3	W		12:38	HCL	Y	X										X			5
MW6		3	W		12:50	HCL	Y	X										X			6
MW7		5	W		13:10	HCL	Y	X										X	X		7
MW8		3	W		13:55	HCL	Y	X										X			8
TB		2	W			HCL	Y	X										X			9

9510919

Relinquished By (Signature) <u>m/foll</u>	Organization <u>BTS</u>	Date/Time <u>10/12/95</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Sequoia</u>	Date/Time <u>10/12/95</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time <u>10/12/95</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization <u>Sequoia</u>	Date/Time <u>10/12/95</u>

Turn Around Time (Circle Choice)

24 Hrs.  
48 Hrs.  
5 Days  
**10 Days**  
As Contracted

COC-3.0WVG/03 91/HCH

# **Field Data Sheets**



# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-71	Station #: 9-1583
Sampler: MT	Start Date: 10/11
Well I.D.: MW1	Well Diameter: (circle one) 2 <u>3</u> 4 6
Total Well Depth: Before 19.88 After	Depth to Water: Before 11.88 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>298</u>	Grade Other:

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

<u>3.0</u>	$\times$	<u>3</u>	$=$	<u>9.0</u>	gallons
1 Case Volume		Specified Volumes			

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
13:16	69.0	5.6	4340	-	3	
13:19	68.6	5.5	4010	-	6	
13:22	66.9	5.5	3980	✓	9	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 9

Sampling Time: 13:25 Sampling Date: 10/11

Sample I.D.: MW1 Laboratory: SEQ

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

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

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-T1	Station #: 9-1583
Sampler: MT	Start Date: 10/11
Well I.D.: MW2	Well Diameter: (circle one) 2 <u>3</u> 4 6
Total Well Depth: Before 18.62      After	Depth to Water: Before 11.22      After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <del>PVC</del>	Grade      Other:

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

<u>2.8</u>	x	<u>3</u>	=	<u>8.2</u>
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:
11:55	72.4	7.0	4050	-	3	
11:58	72.6	6.9	3980	-	6	
12:02	71.8	6.9	4020	-	8.5	

Did Well Dewater? NO If yes, gals.      Gallons Actually Evacuated: 8.5

Sampling Time: 12:05      Sampling Date: 10/11

Sample I.D.: MW2      Laboratory: SER

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

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

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-T <sub>2</sub>	Station #: 9-1583
Sampler: MT	Start Date: 10/11
Well I.D.: MW3	Well Diameter: (circle one) 2 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/>
Total Well Depth: Before 19.50 After	Depth to Water: Before 12.31 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVC</u>	Grade Other:

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

<u>2.7</u>	x	<u>3</u>	=	<u>8.1</u>	gallons
1 Case Volume		Specified Volumes			

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

Sampling: Bailer  
 Disposable Bailer ~~x~~  
 Extraction Port  
 Other \_\_\_\_\_

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
13:35	71.4	5.5	5000	-	3	
13:38	70.1	5.4	4870	-	6	
18:43	69.9	5.4	4870	-	8.5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 8.5

Sampling Time: 13:45 Sampling Date: 10/11

Sample I.D.: MW 3 Laboratory: SEQ

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

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

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-T <sub>1</sub>	Station #: 9-1583
Sampler: MT	Start Date: 10/11
Well I.D.: MW4	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: Before 24.97 After	Depth to Water: Before 13.98 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVG</u>	Grade Other:

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

<u>1.8</u>	$\times$	<u>3</u>	$=$	<u>5.3</u>	gallons
1 Case Volume		Specified Volumes			

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
11:40	70.8	7.5	4620	-	2	
11:42	69.6	7.3	4230	-	4	
11:44	69.4	7.2	4210	-	5.5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 5.5

Sampling Time: 11:45 Sampling Date: 10/11

Sample I.D.: MW A Laboratory: SEK

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

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

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-T1	Station #: 9-1583
Sampler: MW	Start Date: 10/11
Well I.D.: MW5	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: Before 19.82 After	Depth to Water: Before 9.83 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>EVE</u>	Grade Other:

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

<u>1.6</u>	x	<u>3</u>	=	gallons
1 Case Volume		Specified Volumes		

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

TIME	TEMP. (F)	PH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
12:20	70.2	6.5	3660	-	2	
12:22	69.4	6.2	3650	-	4	
12:24	69.8	6.2	3450	-	5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 5

Sampling Time: 12:30 Sampling Date: 10/11

Sample I.D.: MW5 Laboratory: SED

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

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

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-T1	Station #: 9-1583
Sampler: MT	Start Date: 10/11
Well I.D.: MWU	Well Diameter: (circle one) <u>3</u> 3 4 6
Total Well Depth: Before 19.82 After	Depth to Water: Before 9.06 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>PVO</u>	Grade Other:

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

<u>1.6</u>	$\times$	<u>3</u>	$=$	<u>4.9</u>	gallons
1 Case Volume		Specified Volumes			

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
12:38	68.2	6.3	3630	-	2	
12:40	67.2	6.3	3700	-	4	
12:42	66.8	6.3	3680	-	5	

Did Well Dewater? <u>NB</u> If yes, gals.	Gallons Actually Evacuated: <u>5</u>
Sampling Time: <u>12:50</u>	Sampling Date: <u>10/11</u>
Sample I.D.: <u>MWU</u>	Laboratory: <u>SEQ</u>
Analyzed for: <u>TPH-G BTEX</u> (Circle) TPH-D OTHER: <u>MTBE</u>	
Duplicate I.D.:	Cleaning Blank I.D.:
Analyzed for: <u>TPH-G BTEX</u> (Circle) TPH-D OTHER:	

# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-T1	Station #: 9-1583
Sampler: MT	Start Date: 10/11
Well I.D.: MW7	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: Before 19.37 After	Depth to Water: Before 1280 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: <u>EVC</u>	Grade Other:

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

<u>1.1</u>	$\times$	<u>3</u>	$=$	<u>3.3</u>	gallons
1 Case Volume		Specified Volumes			

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
13:07	68.4	5.6	5690	-	1.5	Skew / odor
13:08	66.4	5.1	5580	-	3	" / "
13:09	66.4	5.3	5240	-	3.5	" / "

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 3.5

Sampling Time: 13:10 Sampling Date: 10/11

Sample I.D.: MW7 Laboratory: SEQ

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

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

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: 951011-T1		Station #: 9-1583	
Sampler: MT		Start Date: 10/11	
Well I.D.: MWB		Well Diameter: (circle one) <del>2</del> 3 4 6	
Total Well Depth: Before 19.20 After		Depth to Water: Before 12.42 After	
Depth to Free Product:		Thickness of Free Product (feet):	
Measurements referenced to: <u>FVC</u> Grade Other:			

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

<u>1.1</u>	x	<u>3</u>	=	<u>3.3</u>
1 Case Volume		Specified Volumes		gallons

Purging: Bailer Disposable Bailer <input checked="" type="checkbox"/> Middleburg Electric Submersible Extraction Pump Other _____	Sampling: Bailer Disposable Bailer & Extraction Port Other _____
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TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
13:50	71.6	5.8	6320	—	1.5	
13:52	70.1	5.5	6200	✓	2	
13:54	69.0	5.6	6200	—	3.5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 3.5

Sampling Time: 13:55 Sampling Date: 10/11

Sample I.D.: MWB Laboratory: SEA

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

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

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