

April 16, 1996

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

**1st Quarter 1996 Monitoring at 9-4587**

First Quarter 1996 Groundwater Monitoring at  
Chevron Service Station Number 9-4587  
609 Oak Street  
Oakland, CA

Monitoring Performed on March 26, 1996

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**Groundwater Sampling Report 960326-K-2**

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

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

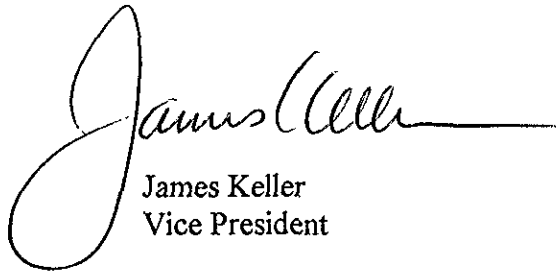
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater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

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

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

Please call if you have any questions.

Yours truly,

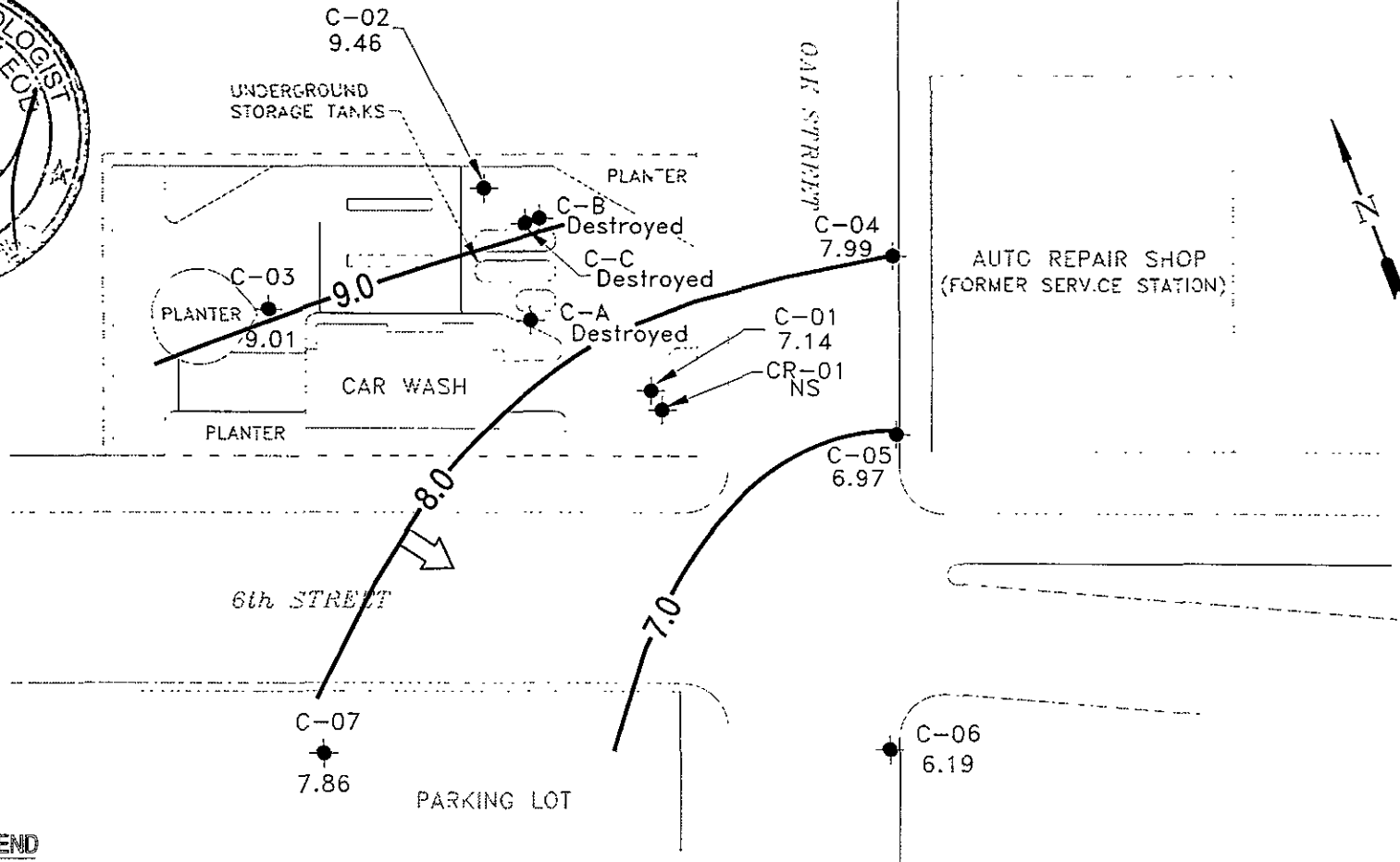
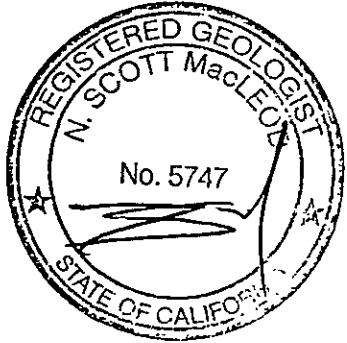


James Keller  
Vice President

JPK/dk

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

# **Professional Engineering Appendix**

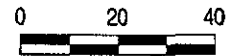


**LEGEND**

- PROPERTY LINE
- MONITORING WELL
- NOT SURVEYED
- POTENTIOMETRIC SURFACE ELEVATION (FT)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION

**NOTE:**

1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.



Scale (ft)

Base map from Groundwater Technology, Inc.



**CAMBRIA**  
Environmental Technology, Inc.

Chevron Service Station 9-4587  
609 Oak Street  
Oakland, California

VCHEVRON9-4587/4587-QM

Ground Water Elevation  
March 28, 1996

FIGURE

1

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

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	Analytical results are in parts per billion (ppb)					
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>C-A</b>													
12/06/89	--	--	--	--	--	--	--	44,000	20,000	66	1600	2220	--
10/30/90	--	--	11.20	--	--	--	Sheen	31,000	23,000	110	1100	160	--
10/30/90	--	--	11.20	--	--	--	Sheen	30,000	23,000	150	1000	180	--
01/14/91	--	--	11.25	--	--	--	--	12,000	30,000	540	1400	560	--
04/03/91	--	--	9.82	--	--	--	--	59,000	33,000	2400	2200	3100	--
07/17/91	--	--	10.93	--	--	--	--	52,000	38,000	380	1300	500	--
10/07/91	--	--	--	--	--	--	--	--	--	--	--	--	--
06/25/92	--	--	--	--	--	--	--	--	--	--	--	--	--
09/17/92	--	--	--	--	--	--	--	--	--	--	--	--	--
12/16/92	--	--	--	--	--	--	--	--	--	--	--	--	--
03/18/93	--	--	--	--	--	--	--	--	--	--	--	--	--
06/11/93	--	--	--	--	--	--	--	--	--	--	--	--	--
09/08/93	--	--	--	--	--	--	--	--	--	--	--	--	--
09/17/93	--	--	10.02	--	--	--	--	--	--	--	--	--	--
12/23/93	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/94	--	--	--	--	--	--	--	--	--	--	--	--	--
06/17/94	--	--	10.05	--	--	--	--	77,000	32,000	3600	3200	14,000	--
09/12/94	--	--	11.75	--	--	--	--	270	170	1.0	13	24	--
06/29/95	--	--	--	--	--	--	Destroyed	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed							
<b>C-B</b>													
12/06/89	--	--	--	0.01	--	--	--	--	--	--	--	--	--
10/30/90	--	--	11.19	0.01	--	--	--	--	--	--	--	--	--
01/14/91	--	--	11.40	0.01	--	--	--	--	--	--	--	--	--
04/03/91	--	--	9.55	1.00	--	--	--	--	--	--	--	--	--
04/04/91	--	--	10.54	1.06	--	--	--	--	--	--	--	--	--
07/17/91	--	--	10.84	0.03	--	--	--	--	--	--	--	--	--
10/07/91	--	--	11.10	0.04	--	--	--	--	--	--	--	--	--
02/04/92	--	--	10.78	0.01	--	--	--	--	--	--	--	--	--
03/06/92	--	--	--	--	--	--	--	--	--	--	--	--	--
04/01/92	--	--	10.33	1.02	--	--	--	--	--	--	--	--	--
06/25/92	--	--	11.20	0.68	--	--	--	--	--	--	--	--	--
09/17/92	--	--	11.07	0.13	--	--	--	--	--	--	--	--	--
12/16/92	--	--	10.41	0.38	--	--	--	--	--	--	--	--	--
03/18/93	--	--	9.19	0.05	--	--	--	--	--	--	--	--	--
06/11/93	--	--	9.54	0.70	--	--	--	--	--	--	--	--	--
09/08/93	--	--	--	--	--	--	--	--	--	--	--	--	--
09/17/93	--	--	9.85	0.52	--	--	--	--	--	--	--	--	--
12/23/93	--	--	9.37	0.20	--	--	--	--	--	--	--	--	--
03/07/94	--	--	9.24	0.85	--	--	--	--	--	--	--	--	--
06/17/94	--	--	9.38	0.02	--	--	--	--	--	--	--	--	--
09/12/94	--	--	11.13	0.49	--	--	--	--	--	--	--	--	--
06/29/95	--	--	--	--	--	--	Destroyed	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	Analytical results are in parts per billion (ppb)					
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed		TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE
<b>C-C</b>													
12/06/89	--	--	--	0.15	--	--	--	--	--	--	--	--	--
10/30/90	--	--	10.84	0.03	--	--	--	--	--	--	--	--	--
01/14/91	--	--	11.01	0.11	--	--	--	--	--	--	--	--	--
04/03/91	--	--	9.19	0.02	--	--	--	--	--	--	--	--	--
07/17/91	--	--	10.53	0.03	--	--	--	--	--	--	--	--	--
10/07/91	--	--	10.98	0.08	--	--	--	--	--	--	--	--	--
02/04/92	--	--	10.45	0.09	--	--	--	--	--	--	--	--	--
03/06/92	--	--	8.83	0.09	--	--	--	--	--	--	--	--	--
04/01/92	--	--	9.23	0.16	--	--	--	--	--	--	--	--	--
06/25/92	--	--	10.40	0.12	--	--	--	--	--	--	--	--	--
09/17/92	--	--	10.84	0.12	--	--	--	--	--	--	--	--	--
12/16/92	--	--	10.02	0.12	--	--	--	--	--	--	--	--	--
03/18/93	--	--	8.70	0.15	--	--	--	--	--	--	--	--	--
06/11/93	--	--	9.25	0.13	--	--	--	--	--	--	--	--	--
09/08/93	--	--	--	--	--	--	--	--	--	--	--	--	--
09/17/93	--	--	9.83	--	--	--	Sheen	--	--	--	--	--	--
12/23/93	--	--	9.66	0.07	--	--	--	--	--	--	--	--	--
03/07/94	--	--	8.93	0.28	--	--	--	--	--	--	--	--	--
06/17/94	--	--	10.13	0.03	--	--	--	--	--	--	--	--	--
09/12/94	--	--	11.20	0.13	--	--	--	--	--	--	--	--	--
06/29/95	--	--	--	--	--	--	Destroyed	--	--	--	--	--	--



## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	Analytical results are in parts per billion (ppb)					
	Head Elev.	Water Elev.	To Water	SPH	SPH	SPH		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>C-1</b>													
12/06/89	16.07	--	--	0.20	--	--	--	--	--	--	--	--	--
10/30/90	16.07	5.30	10.79	0.02	--	--	--	--	--	--	--	--	--
01/14/91	16.07	4.70	11.39	0.02	--	--	--	--	--	--	--	--	--
04/03/91	16.07	6.66	9.43	0.02	--	--	--	--	--	--	--	--	--
07/17/91	16.07	5.64	10.46	0.04	--	--	--	--	--	--	--	--	--
10/07/91	16.07	5.36	10.74	0.04	--	--	--	--	--	--	--	--	--
02/04/92	16.07	5.71	10.37	0.01	--	--	--	--	--	--	--	--	--
03/06/92	16.07	6.87	9.20	--	--	--	--	--	--	--	--	--	--
04/01/92	16.07	6.79	9.28	--	--	--	--	--	--	--	--	--	--
06/25/92	16.07	6.10	9.98	0.01	--	--	--	100,000	8800	7000	2800	19,000	--
09/17/92	16.07	5.56	10.51	--	--	--	Sheen	--	--	--	--	--	--
12/16/92	16.07	6.26	9.81	--	--	--	Sheen	--	--	--	--	--	--
03/18/93	16.07	7.19	8.88	--	--	--	Sheen	--	--	--	--	--	--
06/11/93	16.07	6.78	9.31	0.02	--	--	--	--	--	--	--	--	--
09/08/93	16.07	--	--	--	--	--	--	--	--	--	--	--	--
09/17/93	16.07	6.37	9.72	0.02	--	--	--	--	--	--	--	--	--
12/23/93	16.07	6.58	9.49	--	--	--	--	41,000	5400	590	710	5600	--
03/07/94	16.07	7.32	8.96	0.26	--	--	--	--	--	--	--	--	--
06/17/94	16.07	6.39	9.70	0.02	--	--	--	--	--	--	--	--	--
09/12/94	16.07	3.66	12.42	0.01	--	--	--	--	--	--	--	--	--
06/29/95	16.07	7.29	8.78	--	--	--	--	220,000	11,000	3600	3500	19,000	--
09/13/95	16.07	6.54	9.56	0.04	0.21	0.21	--	--	--	--	--	--	--
12/19/95	16.07	6.76	9.31	0.00	0.00	0.21	--	14,000	180	81	240	2200	440
03/26/96	16.07	7.14	8.93	0.00	0.00	0.21	--	790	22	5.3	21	96	<12

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Vertical Measurements are in feet.			Volumetric Measurements are in gallons.			Notes	Analytical results are in parts per billion (ppb)					
	Well Head Elev.	Ground Water Elev.	Depth To Water	SPH Thickness	SPH Removed	Total SPH Removed		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>C-2</b>													
12/06/89	16.84	--	--	--	--	--	--	16,000	250	1200	550	1400	--
10/30/90	16.84	5.68	11.16	--	--	--	--	28,000	3700	1900	1200	4300	--
01/14/91	16.84	5.73	11.11	--	--	--	--	24,000	3300	1200	1100	4100	--
01/14/91	16.84	5.73	11.11	--	--	--	--	30,000	3900	1500	1500	5000	--
04/03/91	16.84	7.31	9.53	--	--	--	--	12,000	1100	840	650	1800	--
04/03/91	16.84	7.31	9.53	--	--	--	--	14,000	1100	990	680	1800	--
07/17/91	16.84	6.16	10.68	--	--	--	--	13,000	1700	560	650	1700	--
07/17/91	16.84	6.16	10.68	--	--	--	--	14,000	1700	640	720	1900	--
10/07/91	16.84	5.82	11.02	--	--	--	--	25,000	3700	1300	1400	3800	--
02/04/92	16.84	6.24	10.60	--	--	--	--	16,000	2600	300	880	1900	--
04/01/92	16.84	7.54	9.30	--	--	--	--	15,000	1900	300	700	1500	--
06/25/92	16.84	6.39	10.45	--	--	--	--	23,000	3400	740	1300	3400	--
09/17/92	16.84	6.06	10.78	--	--	--	--	18,000	3500	550	1400	3900	--
12/16/92	16.84	6.90	9.94	--	--	--	--	12,000	1200	120	460	1100	--
03/18/93	16.84	8.04	8.80	--	--	--	--	5200	990	130	290	430	--
06/11/93	16.84	7.41	9.43	--	--	--	--	34,000	8200	910	2400	6600	--
09/08/93	16.84	--	--	--	--	--	--	3400	690	26	190	330	--
09/17/93	16.84	6.93	9.91	--	--	--	--	--	--	--	--	--	--
12/23/93	16.84	7.15	9.69	--	--	--	--	2500	830	26	130	260	--
03/07/94	16.84	7.87	8.97	--	--	--	--	1100	420	6.5	110	69	--
06/17/94	16.84	6.98	9.86	--	--	--	--	1400	290	8.6	60	63	--
09/12/94	16.84	5.74	11.10	--	--	--	--	370	96	1.3	9.4	16	--
06/29/95	16.84	7.84	9.00	--	--	--	--	4100	400	96	250	500	--
09/13/95	16.84	7.10	9.74	--	--	--	--	3500	200	50	57	290	--
12/19/95	16.84	7.74	9.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	16.84	9.46	7.38	--	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Volumetric Measurements			Notes	Analytical results					
				SPH Thickness	SPH Removed	Total SPH Removed		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>C-3</b>													
12/06/89	16.48	--	--	--	--	--	--	<500	<0.5	<0.5	<0.5	0.74	--
10/30/90	16.48	6.04	10.44	--	--	--	--	410	4.0	4.0	2.0	9.0	--
01/14/91	16.48	6.14	10.34	--	--	--	--	80	<0.5	<0.5	<0.5	1.0	--
04/03/91	16.48	7.47	9.01	--	--	--	--	53	<0.5	<0.5	<0.5	2.0	--
07/17/91	16.48	6.48	10.00	--	--	--	--	<50	5.9	<0.5	<0.5	<0.5	--
10/07/91	16.48	6.10	10.38	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/04/92	16.48	6.48	10.00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/01/92	16.48	7.65	8.83	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/25/92	16.48	6.63	9.85	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	16.48	6.28	10.20	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	16.48	7.08	9.40	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/18/93	16.48	8.36	8.12	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	16.48	7.89	8.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/08/93	16.48	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	16.48	7.48	9.00	--	--	--	--	--	--	--	--	--	--
12/23/93	16.48	7.65	8.83	--	--	--	--	<50	<0.5	0.8	<0.5	2.9	--
03/07/94	16.48	8.29	8.19	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/17/94	16.48	7.43	9.05	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/94	16.48	--	--	--	--	--	Inaccessible	--	--	--	--	--	--
06/29/95	16.48	8.18	8.30	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/13/95	16.48	7.64	8.84	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	16.48	8.02	8.46	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	16.48	9.01	7.47	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	SPH Thickness	SPH Removed	Total SPH Removed	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>C-4</b>													
12/06/89	16.53	--	--	--	--	--	--	--	--	--	--	--	--
10/30/90	16.53	4.97	11.56	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/14/91	16.53	5.09	11.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/03/91	16.53	6.53	10.00	--	--	--	--	150	3.0	<0.5	12	9.0	--
07/17/91	16.53	5.37	11.16	--	--	--	--	290	2.3	0.4	52	0.4	--
10/07/91	16.53	5.14	11.39	--	--	--	--	<50	<0.5	<0.5	4.6	<0.5	--
02/04/92	16.53	5.51	11.02	--	--	--	--	<50	<0.5	<0.5	2.8	<0.5	--
02/04/92	16.53	5.51	11.02	--	--	--	--	<50	<0.5	<0.5	2.5	0.5	--
04/01/92	16.53	6.70	9.83	--	--	--	--	480	4.9	<0.5	64	4.3	--
06/25/92	16.53	5.65	10.88	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	16.53	5.29	11.24	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	16.53	6.13	10.40	--	--	--	--	56	<0.5	<0.5	1.0	<0.5	--
03/18/93	16.53	7.05	9.48	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	16.53	6.92	9.61	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/08/93	16.53	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	16.53	6.46	10.07	--	--	--	--	--	--	--	--	--	--
12/23/93	16.53	6.70	9.83	--	--	--	--	<50	1.2	1.5	<0.5	3.2	--
03/07/94	16.53	7.33	9.20	--	--	--	--	60	0.7	1.1	6.7	1.8	--
06/17/94	16.53	6.56	9.97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/94	16.53	5.32	11.21	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/29/95	16.53	7.18	9.35	--	--	--	--	<50	<0.5	<0.5	1.4	<0.5	--
09/13/95	16.53	6.60	9.93	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	16.53	6.98	9.55	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	16.53	7.99	8.54	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed							
<b>C-5</b>													
12/06/89	14.70	4.73	9.97	--	--	--	--	--	--	--	--	--	--
10/30/90	14.70	--	--	--	--	--	--	<50	0.8	<0.5	<0.5	0.5	--
01/14/91	14.70	4.83	9.87	--	--	--	--	54	<0.5	<0.5	<0.5	<0.5	--
04/03/91	14.70	5.98	8.72	--	--	--	--	1800	330	200	52	170	--
07/17/91	14.70	5.07	9.63	--	--	--	--	170	120	5.3	12	20	--
10/07/91	14.70	4.87	9.83	--	--	--	--	<50	1.1	<0.5	<0.5	<0.5	--
02/04/92	14.70	5.17	9.53	--	--	--	--	91	16	<0.5	2.4	2.0	--
04/01/92	14.70	6.13	8.57	--	--	--	--	960	200	5.4	21	33	--
06/25/92	14.70	5.26	9.44	--	--	--	--	800	2.5	<0.5	1.3	7.3	--
09/17/92	14.70	4.98	9.72	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	14.70	5.63	9.07	--	--	--	--	81	5.4	1.2	1.5	4.3	--
03/18/93	14.70	6.26	8.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	14.70	6.17	8.53	--	--	--	--	<50	1.6	<0.5	<0.5	<1.5	--
09/08/93	14.70	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	14.70	5.81	8.89	--	--	--	--	--	--	--	--	--	--
12/23/93	14.70	6.02	8.68	--	--	--	--	<50	5.5	1.3	0.7	4.0	--
03/07/94	14.70	6.52	8.18	--	--	--	--	460	180	21	27	70	--
06/17/94	14.70	5.89	8.81	--	--	--	--	<50	10	0.5	1.4	3.3	--
09/12/94	14.70	4.83	9.87	--	--	--	--	<50	6.4	<0.5	<0.5	<0.5	--
06/29/95	14.70	6.33	8.37	--	--	--	--	65	10	<0.5	2.3	9.1	--
09/13/95	14.70	5.90	8.80	--	--	--	--	370	41	0.76	17	50	--
12/19/95	14.70	6.22	8.48	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	14.70	6.97	7.73	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE
	Head Elev.	Water Elev.	To Water	SPH	SPH Removed	SPH Removed							
<b>C-6</b>													
12/06/89	13.87	--	--	--	--	--	--	--	--	--	--	--	--
10/30/90	13.87	4.44	9.43	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
01/14/91	13.87	4.46	9.41	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
04/03/91	13.87	5.21	8.66	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
07/17/91	13.87	4.62	9.25	--	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
10/07/91	13.87	4.53	9.34	--	--	--	--	67	<0.5	0.6	<0.5	0.6	--
02/04/92	13.87	4.71	9.16	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/01/92	13.87	5.28	8.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/25/92	13.87	4.76	9.11	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	13.87	4.59	9.28	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	13.87	4.99	8.88	--	--	--	--	120	9.3	1.9	2.7	7.4	--
03/18/93	13.87	5.52	8.35	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	13.87	5.66	8.21	--	--	--	--	<50	<0.5	0.7	<0.5	<1.5	--
09/08/93	13.87	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	13.87	5.50	8.37	--	--	--	--	--	--	--	--	--	--
12/23/93	13.87	5.58	8.29	--	--	--	--	<50	1.4	1.0	<0.5	3.5	--
03/07/94	13.87	5.87	8.00	--	--	--	--	<50	0.8	<0.5	<0.5	<0.5	--
06/17/94	13.87	5.46	8.41	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/94	13.87	4.99	8.88	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/29/95	13.87	5.79	8.08	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/13/95	13.87	5.56	8.31	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	13.87	5.75	8.12	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	13.87	6.19	7.68	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	Analytical results are in parts per billion (ppb)					
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed		TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>C-7</b>													
02/07/91	15.78	5.90	9.88	--	--	--	--	<50	<0.5	0.8	<0.5	<0.5	--
04/03/91	15.78	6.74	9.04	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/17/91	15.78	5.92	9.86	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/07/91	15.78	5.68	10.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/04/92	15.78	6.04	9.74	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/01/92	15.78	6.82	8.96	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/25/92	15.78	6.16	9.62	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	15.78	6.03	9.75	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	15.78	6.37	9.41	--	--	--	--	--	--	--	--	--	--
03/18/93	15.78	7.33	8.45	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	15.78	7.07	8.71	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/08/93	15.78	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	15.78	6.73	9.05	--	--	--	--	--	--	--	--	--	--
12/23/93	15.78	6.93	8.85	--	--	--	--	<50	1.9	1.4	<0.5	3.6	--
03/07/94	15.78	7.35	8.43	--	--	--	--	<50	2.4	1.3	<0.5	0.6	--
06/17/94	15.78	6.71	9.07	--	--	--	--	<50	<0.5	<0.5	<0.5	1.2	--
09/12/94	15.78	5.98	9.80	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/29/95	15.78	7.14	8.64	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/13/95	15.78	6.86	8.92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	15.78	7.06	8.72	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/26/96	15.78	7.86	7.92	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well	Ground	Depth	Total			Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE
	Head Elev.	Water Elev.	To Water	SPH Thickness	SPH Removed	SPH Removed							
<b>CR-1</b>													
10/30/90	--	--	10.51	--	--	--	--	9600	7100	65	610	190	--
01/14/91	--	--	10.29	--	--	--	--	1500	3200	52	190	77	--
07/17/91	--	--	10.19	--	--	--	--	15,000	9300	220	680	530	--
10/07/91	--	--	10.46	--	--	--	--	17,000	7600	50	440	68	--
10/07/91	--	--	10.46	--	--	--	--	14,000	9400	52	430	110	--
02/04/92	--	--	10.12	--	--	--	--	19,000	6100	32	350	100	--
04/01/92	--	--	9.24	--	--	--	--	29,000	5300	820	380	1200	--
06/25/92	--	--	10.03	--	--	--	--	12,000	3300	280	210	460	--
09/17/92	--	--	10.30	--	--	--	--	--	--	--	--	--	--
12/16/92	--	--	9.59	--	--	--	Sheen	--	--	--	--	--	--
03/18/93	--	--	8.82	0.05	--	--	--	--	--	--	--	--	--
06/11/93	--	--	9.58	0.87	--	--	--	--	--	--	--	--	--
09/08/93	--	--	--	--	--	--	--	--	--	--	--	--	--
09/17/93	--	--	--	--	--	--	--	--	--	--	--	--	--
12/23/93	--	--	9.02	0.02	--	--	--	--	--	--	--	--	--
03/07/94	--	--	8.41	0.04	--	--	--	--	--	--	--	--	--
06/17/94	--	--	--	--	--	--	--	--	--	--	--	--	--
09/12/94	--	--	15.32	0.02	--	--	--	--	--	--	--	--	--
06/29/95	--	--	8.67	--	--	--	--	49,000	9400	310	2400	7200	--
09/13/95	--	--	9.93	0.03	0.13	0.13	--	--	--	--	--	--	--
12/19/95	--	--	8.75	0.00	0.00	0.13	--	19,000	880	48	1600	3100	4000
03/26/96	--	--	7.50	0.00	0.00	0.13	--	60	2.6	<0.5	0.86	6.3	67



## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Volumetric Measurements are in gallons.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	SPH Thickness	SPH Removed	Total SPH Removed	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE
<b>TRIP BLANK</b>													
10/30/90	--	--	--	--	--	--	--	--	--	--	--	--	--
01/14/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/07/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/03/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
07/17/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
10/07/91	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/04/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
04/01/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/25/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/17/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/16/92	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/18/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
06/11/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/08/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
09/17/93	--	--	--	--	--	--	--	--	--	--	--	--	--
12/23/93	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/07/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/17/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/12/94	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
06/29/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
09/13/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
12/19/95	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
03/26/96	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on June 29, 1995.  
 Earlier field data and analytical results are drawn from the October 14, 1994 Groundwater Technology, Inc. report.

**ABBREVIATIONS:**

TPH = Total Petroleum Hydrocarbons  
 SPH = Separate Phase Hydrocarbons  
 MTBE = Methyl t-Butyl Ether

# **Analytical Appendix**



Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron, 9-4587, 960326-K2 Sample Descript: C-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9603121-01	Sampled: 03/26/96 Received: 03/27/96 Analyzed: 03/28/96 Reported: 04/09/96
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QC Batch Number: GC032896BTEX07A  
Instrument ID: GCHP07

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

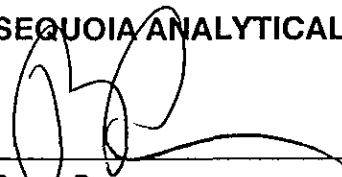
Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	790
Methyl t-Butyl Ether	12	N.D.
Benzene	2.5	22
Toluene	2.5	5.3
Ethyl Benzene	2.5	21
Xylenes (Total)	2.5	96
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	88

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, 9-4587, 960326-K2  
Sample Descript: C-3  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9603121-02

Sampled: 03/26/96  
Received: 03/27/96  
Analyzed: 03/28/96  
Reported: 04/09/96

Attention: Jim Keller


QC Batch Number: GC032896BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	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	115

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

SEQUOIA ANALYTICAL - ELAP #1210




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Peggy Penner  
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Chevron, 9-4587, 960326-K2 Sample Descript: C-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9603121-03	Sampled: 03/26/96 Received: 03/27/96 Analyzed: 03/28/96 Reported: 04/09/96
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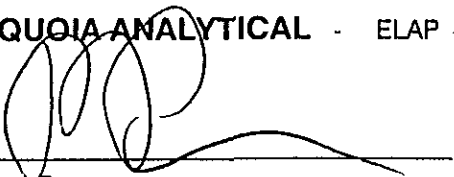
QC Batch Number: GC032896BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	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	117

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, 9-4587, 960326-K2 Sample Descript: C-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9603121-04	Sampled: 03/26/96 Received: 03/27/96 Analyzed: 03/28/96 Reported: 04/09/96
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QC Batch Number: GC032896BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPFH 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	113

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, 9-4587, 960326-K2 Sample Descript: C-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9603121-05	Sampled: 03/26/96 Received: 03/27/96  Analyzed: 03/28/96 Reported: 04/09/96
--	--	---

QC Batch Number: GC032896BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	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	115

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, 9-4587, 960326-K2 Sample Descript: C-7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9603121-06	Sampled: 03/26/96 Received: 03/27/96  Analyzed: 03/28/96 Reported: 04/09/96
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QC Batch Number: GC032896BTEX07A  
Instrument ID: GCHP07

**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	102

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, 9-4587, 960326-K2  
Sample Descript: CR-1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9603121-07

Sampled: 03/26/96  
Received: 03/27/96  
Analyzed: 03/28/96  
Reported: 04/09/96

Attention: Jim Keller

QC Batch Number: GC032896BTEX07A  
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	60
Methyl t-Butyl Ether	2.5	67
Benzene	0.50	2.6
Toluene	0.50	N.D.
Ethyl Benzene	0.50	0.86
Xylenes (Total)	0.50	6.3
Chromatogram Pattern:		Gas
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	109

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, 9-4587, 960326-K2  
Sample Descript: TB  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9603I21-08

Sampled: 03/26/96  
Received: 03/27/96  
Analyzed: 03/28/96  
Reported: 04/09/96

QC Batch Number: GC032896BTEX07A

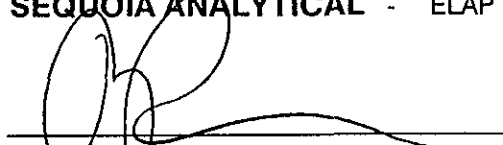
Instrument ID: GCHP07

**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	97

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





Sequoia  
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FAX (916) 921-0100

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

Client Proj. ID: Chevron, 9-4587, 960326-K2

Received: 03/27/96

Lab Proj. ID: 9603I21

Reported: 04/09/96

## LABORATORY NARRATIVE

TPPH Note: Sample 9603I21-01 was diluted 5-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 9-4587, 960326-K2  
Matrix: Liquid

Work Order #: 9603I21 -01, 06-08

Reported: Apr 11, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032896BTEX07A	GC032896BTEX07A	GC032896BTEX07A	GC032896BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9603F65-02	9603F65-02	9603F65-02	9603F65-02
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/28/96	3/28/96	3/28/96	3/28/96
Analyzed Date:	3/28/96	3/28/96	3/28/96	3/28/96
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	0.18	0.18	0.18	0.55
MS % Recovery:	90	90	90	92
Dup. Result:	0.19	0.19	0.18	0.56
MSD % Recov.:	95	95	90	93
RPD:	5.4	5.4	0.0	1.8
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK032896A	BLK032896A	BLK032896A	BLK032896A
Prepared Date:	3/28/96	3/28/96	3/28/96	3/28/96
Analyzed Date:	3/28/96	3/28/96	3/28/96	3/28/96
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Result:	0.19	0.19	0.19	0.56
LCS % Recov.:	95	95	95	93

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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**Please Note:**

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

SEQUOIA ANALYTICAL

Peggy Penner  
Project Manager

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

9603I21.BLA <1>





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

Client Project ID: Chevron 9-4587, 960326-K2  
Matrix: Liquid

Work Order #: 9603121 -02 - 05

Reported: Apr 11, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032896BTEX22A	GC032896BTEX22A	GC032896BTEX22A	GC032896BTEX22A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Lee	R. Lee	R. Lee	R. Lee
MS/MSD #:	9603F82-06B	9603F82-06B	9603F82-06B	9603F82-06B
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/28/96	3/28/96	3/28/96	3/28/96
Analyzed Date:	3/28/96	3/28/96	3/28/96	3/28/96
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
Result:	8.9	8.8	9.1	27
MS % Recovery:	89	88	91	90
Dup. Result:	9.0	8.9	9.1	27
MSD % Recov.:	90	89	91	90
RPD:	1.1	1.1	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	GBLK032896BS	GBLK032896BS	GBLK032896BS	GBLK032896BS
Prepared Date:	3/28/96	3/28/96	3/28/96	3/28/96
Analyzed Date:	3/28/96	3/28/96	3/28/96	3/28/96
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Result:	8.7	8.7	8.8	26
LCS % Recov.:	87	87	88	87

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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**SEQUOIA ANALYTICAL**  
  
Peggy Pernier  
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

9603121.BLA <2>





# **Field Data Sheets**





# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960326-K2</u>	Station #: <u>9-4587</u>
Sampler: <u>KEB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>C-1</u>	Well Diameter: (circle one) 2 <u>(3)</u> 4 6
Total Well Depth: Before <u>1230</u> After <u>1343</u>	Depth to Water: Before <u>893</u> After _____
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Measurements referenced to: <u>(PVC)</u>	Grade _____ Other: _____

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

<u>1.2</u>	x	<u>3</u>	=	<u>3.6</u>
1 Case Volume		Specified Volumes		gallons

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

TIME	TEMP. (F)	pH	COND. <u>W</u>	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
<u>1203</u>	<u>70.8</u>	<u>7.1</u>	<u>880</u>	—	<u>1.5</u>	<u>very silty sand</u>
<u>1206</u>	<u>71.4</u>	<u>7.2</u>	<u>1000</u>	—	<u>3.0</u>	
<u>1209</u>	<u>71.6</u>	<u>7.2</u>	<u>1100</u>	—	<u>4.0</u>	

Did Well Dewater? ✓ If yes, gals. \_\_\_\_\_ Gallons Actually Evacuated: 4.0

Sampling Time: <u>12:15</u>	Sampling Date: <u>3/26</u>
Sample I.D.: <u>C-1</u>	Laboratory: <u>Scr</u>
Analyzed for: <u>(TPH-G)</u> <u>(BTEX)</u> TPH-D OTHER: <u>(MIBE)</u>	
Duplicate I.D.: _____	Cleaning Blank I.D.: _____
Analyzed for: TPH-G BTEX TPH-D OTHER: _____	

# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960326-K2</u>	Station #: <u>9-4587</u>
Sampler: <u>KCB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>C-2</u>	Well Diameter: (circle one) 2 <u>(3)</u> 4 6
Total Well Depth: Before <u>824</u> After	Depth to Water: Before <u>738</u> 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

<del>_____</del> 1 Case Volume	x	<del>_____</del> Specified Volumes	=	<del>_____</del> gallons
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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:
<div style="font-size: 2em; font-family: cursive;">                     Insufficient Water                      to                      Sample                 </div>						

Did Well Dewater? / If yes, gals. \_\_\_\_\_ Gallons Actually Evacuated: /

Sampling Time: / Sampling Date: /

Sample I.D.: / Laboratory: /

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

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

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960326-12</u>	Station #: <u>9-4587</u>
Sampler: <u>KCB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>C-3</u>	Well Diameter: (circle one) 2 <u>3</u> 4 6
Total Well Depth: Before <u>1850</u> After	Depth to Water: Before <u>747</u> After
Depth to Free Product: _____ Thickness of Free Product (feet): _____	
Measurements referenced to: <u>VVC</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>4.0</u>	<u>x</u>	<u>3</u>	<u>=</u>	<u>12.0</u>	gallons
1 Case Volume		Specified Volumes			

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:
<u>1111</u>	<u>63.6</u>	<u>6.6</u>	<u>500</u>	—	<u>4.0</u>	<u>very silty/sandy</u>
<u>1116</u>	<u>64.8</u>	<u>6.8</u>	<u>420</u>	—	<u>8.0</u>	
<u>1121</u>	<u>65.0</u>	<u>6.9</u>	<u>430</u>	—	<u>12.0</u>	

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 12.0

Sampling Time: <u>1125</u>	Sampling Date: <u>3/26</u>
Sample I.D.: <u>C-3</u>	Laboratory: <u>Sox</u>
Analyzed for: (Circle) <u>TPH-G</u> <u>BTEX</u> TPH-D <u>OTHER</u> <u>XLTBE</u>	
Duplicate I.D.:	Cleaning Blank I.D.:
Analyzed for: (Circle) TPH-G BTEX TPH-D OTHER:	

# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960326-142</u>	Station #: <u>9-4587</u>
Sampler: <u>KCB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>2.4</u>	Well Diameter: (circle one) <u>(3)</u> 3 4 6
Total Well Depth: Before <u>2910</u> After _____	Depth to Water: Before <u>854</u> 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>33</u>	x	<u>3</u>	=	<u>9.9</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:
<u>1045</u>	<u>68.8</u>	<u>6.8</u>	<u>560</u>	<u>—</u>	<u>35</u>	<u>silly</u>
<u>1049</u>	<u>69.2</u>	<u>6.8</u>	<u>540</u>	<u>—</u>	<u>2.0</u>	
<u>1053</u>	<u>69.2</u>	<u>6.8</u>	<u>540</u>	<u>—</u>	<u>100</u>	

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 100

Sampling Time: <u>1055</u>	Sampling Date: <u>3/26</u>
Sample I.D.: <u>2.4</u>	Laboratory: <u>Seq</u>
Analyzed for: (Circle) <u>TPH-G</u> <u>BTEX</u> TPH-D OTHER: <u>MTBE</u>	
Duplicate I.D.: _____	Cleaning Blank I.D.: _____
Analyzed for: (Circle) TPH-G BTEX TPH-D OTHER:	

# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>980326-102</u>	Station #: <u>9-4587</u>
Sampler: <u>KCB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>2.5</u>	Well Diameter: (circle one) <u>(2)</u> 3 4 6
Total Well Depth: Before <u>2880</u> After	Depth to Water: Before <u>728</u> After
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Measurements referenced to: <u>(VCF)</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>3.3</u>	$\times$	<u>3</u>	$=$	<u>9.9</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:
<u>1028</u>	<u>68.0</u>	<u>7.2</u>	<u>580</u>	<u>—</u>	<u>3.5</u>	
<u>1032</u>	<u>68.4</u>	<u>6.9</u>	<u>560</u>	<u>—</u>	<u>7.0</u>	
<u>1037</u>	<u>68.4</u>	<u>6.9</u>	<u>560</u>	<u>—</u>	<u>10.0</u>	

Did Well Dewater?  If yes, gals. \_\_\_\_\_ Gallons Actually Evacuated: W.O.

Sampling Time: <u>1040</u>	Sampling Date: <u>3/26</u>
Sample I.D.: <u>2.5</u>	Laboratory: <u>SEA</u>
Analyzed for: <u>(TPH-G)</u> <u>(BTEX)</u> TPH-D OTHER: <u>X173E</u>	
Duplicate I.D.: _____	Cleaning Blank I.D.: _____
Analyzed for: TPH-G BTEX TPH-D OTHER: _____	

# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960326-102</u>	Station #: <u>9-4587</u>
Sampler: <u>KCB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>C-6</u>	Well Diameter: (circle one) <u>(2)</u> 3 4 6
Total Well Depth: Before <u>2865</u> After	Depth to Water: Before <u>768</u> After
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Measurements referenced to: <u>(VVC)</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>3.3</u>	x	<u>3</u>	=	<u>9.9</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:
<u>1008</u>	<u>67.0</u>	<u>7.0</u>	<u>600</u>	<u>—</u>	<u>3.5</u>	<u>silty</u>
<u>1011</u>	<u>67.0</u>	<u>6.9</u>	<u>580</u>	<u>—</u>	<u>7.0</u>	<u>tannish</u>
<u>1014</u>	<u>66.8</u>	<u>6.8</u>	<u>590</u>	<u>—</u>	<u>10.0</u>	

Did Well Dewater? N If yes, gals. \_\_\_\_\_ Gallons Actually Evacuated: 10.0

Sampling Time: 1020 Sampling Date: 3/26

Sample I.D.: C-6 Laboratory: BCY

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

Duplicate I.D.: \_\_\_\_\_ Cleaning Blank I.D.: \_\_\_\_\_

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

# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960326-102</u>	Station #: <u>9-4587</u>
Sampler: <u>KEB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>2.7</u>	Well Diameter: (circle one) <u>(2)</u> 3 4 6
Total Well Depth: Before <u>1273</u> After	Depth to Water: Before <u>792</u> 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>10</u>	$\times$	<u>3</u>	$=$	<u>30</u>	gallons
1 Case Volume		Specified Volumes			

Purging: Bailer Disposable Bailer 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:
<u>980</u>	<u>65.6</u>	<u>7.2</u>	<u>540</u>	<u>—</u>	<u>1.0</u>	
<u>981</u>	<u>65.8</u>	<u>7.4</u>	<u>540</u>	<u>—</u>	<u>2.0</u>	<u>roots in well</u>
<u>983</u>	<u>65.6</u>	<u>7.4</u>	<u>580</u>	<u>—</u>	<u>3.0</u>	<u>                    </u>

Did Well Dewater? N If yes, gals. ← Gallons Actually Evacuated: 3.0

Sampling Time: <u>1000</u>	Sampling Date: <u>3/26</u>
Sample I.D.: <u>2.7</u>	Laboratory: <u>84</u>
Analyzed for: (Circle) <u>TPH-G</u> <u>BTEX</u> TPH-D OTHER: <u>NATPBE</u>	
Duplicate I.D.:	Cleaning Blank I.D.:
Analyzed for: (Circle) TPH-G BTEX TPH-D OTHER:	

# CHEVRON WELL MONITORING DATA SHEET

Project #: <u>960328-K2</u>	Station #: <u>9-4587</u>
Sampler: <u>KCB</u>	Start Date: <u>3/26</u>
Well I.D.: <u>CR-1</u>	Well Diameter: (circle one) 2 3 4 <u>6</u>
Total Well Depth: Before <u>2720</u> After	Depth to Water: Before <u>750</u> 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>29.0</u>	x	<u>3</u>	=	<u>57.0</u>
1 Case Volume		Specified Volumes		gallons

Purging: Bailer Disposable Bailer 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:
<u>1224</u>	<u>71.4</u>	<u>7.0</u>	<u>660</u>	<u>—</u>	<u>300</u>	<u>odor</u>
<u>1227</u>	<u>69.6</u>	<u>7.2</u>	<u>520</u>	<u>—</u>	<u>60.0</u>	<u>(sewer?)</u>
<u>1230</u>	<u>69.8</u>	<u>7.2</u>	<u>540</u>	<u>—</u>	<u>90.0</u>	

Did Well Dewater? N If yes, gals. \_\_\_\_\_ Gallons Actually Evacuated: 60.0

Sampling Time: <u>1235</u>	Sampling Date: <u>3/26</u>
Sample I.D.: <u>CR-1</u>	Laboratory: <u>Seq</u>
Analyzed for: (Circle) <u>TPH-G</u> <u>BTEX</u> TPH-D OTHER: <u>XATBE</u>	
Duplicate I.D.: _____	Cleaning Blank I.D.: _____
Analyzed for: TPH-G BTEX TPH-D OTHER: _____	