



**Chevron**

ENVIRONMENTAL  
PERMITTING  
97 APR 22 PM 3:42

April 20, 1997

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

**Chevron Products Company**  
6001 Bollinger Canyon Road  
Building L  
San Ramon, CA 94583  
P.O. Box 6004  
San Ramon, CA 94583-0904

**Marketing - Sales West**  
Phone 510 842-9500

Re: **Chevron Service Station #9-2506**  
**2630 Broadway** *Site ID 459*  
**Oakland, California** *94602*

Dear Ms. Eberle:

Enclosed is the First Quarter (Semi-Annual) Groundwater Monitoring Report for 1997, prepared by our consultant Gettler-Ryan, Inc. for the above noted facility. Ground water samples were analyzed for TPH-g, BTEX, and MtBE. As previously agreed, sampling for monitoring wells B-2 and B-4 have been suspended.

Dissolved concentrations of BTEX constituents were below method detection limits in monitoring wells B-10, B-11 and B-12. Well B-8 was not sampled due to access restriction by a fence surrounding the restaurant, which is closed. Monitoring wells B-1, B-5, B-6, B-7 and B-9 showed an increase in the benzene constituent from the previous sampling event. Well B-3 showed a decrease of the benzene constituent from the previous sampling event.

Depth to ground water varied from 13.17 to 17.64 feet below grade, with a direction of flow northwesterly.

Chevron is still planning to reconstruct this site late 1997, depending on permit approval, however, there has been some public concern expressed to the City of Oakland, on the closer of the restaurant that could hold up issuing the building permit.

As previously noted the sampling frequency is biannually and the next sampling event is scheduled in September. If you have any questions or comments, call me at (510) 842-9136.

Sincerely,  
CHEVRON PRODUCTS COMPANY

*Philip R. Briggs*  
Philip R. Briggs  
Site Assessment and Remediation Project Manager

*Hughes M. B.*

Enclosure

cc. Mr. Bill Scudder, Chevron



# GETTLER-RYAN INC.

ENVIRONMENTAL  
PROTECTION  
S1 APR 22 PH 42

April 10, 1997

Job #5203.80

Mr. Phil Briggs  
Chevron Products Company  
P.O. Box 5004  
San Ramon, CA 94583

Re: Semi-Annual Groundwater Monitoring & Sampling Report  
Chevron Service Station #9-2506  
2630 Broadway  
Oakland, California

Dear Mr. Briggs:

This report documents the semi-annual groundwater sampling event performed by Gettler-Ryan Inc. (G-R). On March 6, 1997, field personnel were on-site to monitor and sample nine wells (B-1, B-3, B-5 through B-7, and B-9 through B-12) at Chevron Service Station #9-2506 located at 2630 Broadway in Oakland, California. One well, B-8, was not accessible.

Static groundwater levels were measured on March 6, 1997. All wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any of the site wells. Static water level data and groundwater elevations are presented in Table 1. A potentiometric map is included as Figure 1.

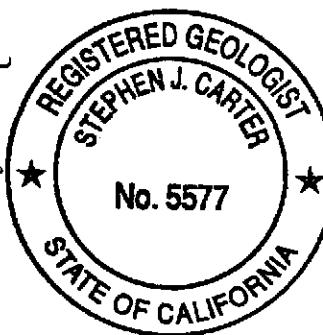
Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets for this event are also attached. The samples were analyzed by NEI/GTEL Environmental Laboratories, Inc. Analytical results are presented in Table 1. The chain of custody document and laboratory analytical reports are attached.

Thank you for allowing Gettler-Ryan Inc. to provide environmental services to Chevron. Please call if you have any questions or comments regarding this report.

Sincerely,

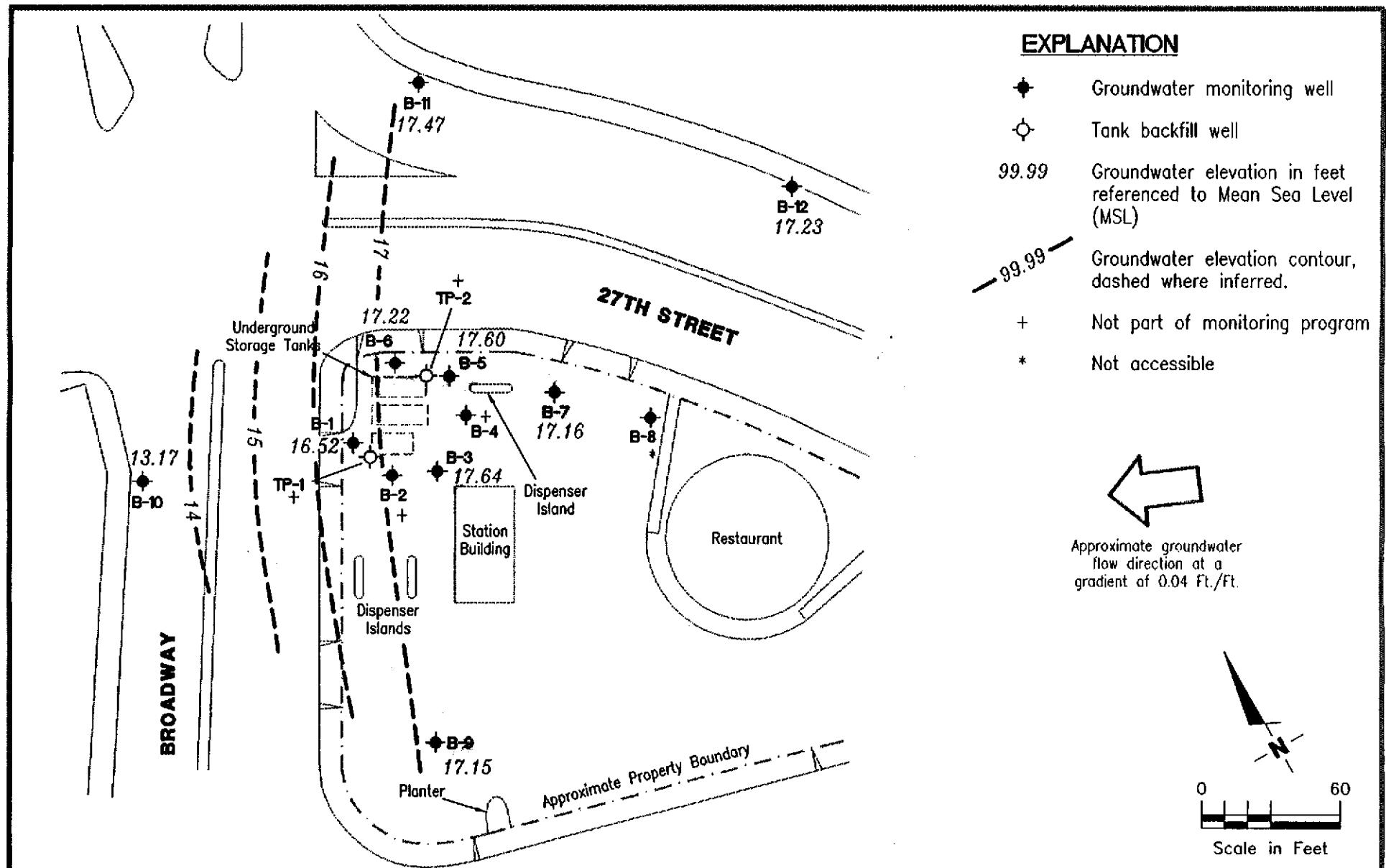
*Deanna L. Harding*  
Deanna L. Harding  
Project Coordinator

*Stephen J. Carter*  
Stephen J. Carter  
Senior Geologist, R.G. No. 5577



DLH/SJC/dh  
5203.QML

- Figure 1: Potentiometric Map  
Table 1: Water Level Data and Groundwater Analytical Results  
Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports



**Gettier - Ryan Inc.**

6747 Sierra Ct., Suite J      (510) 551-7555  
Dublin, CA 94568

JOB NUMBER  
5203

REVIEWED BY

DATE  
March 6, 1997

REVISED DATE

FIGURE

1



Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness*	TPH(G)	B	T	E	X	MTBE
						<	ppb	>		
<b>B-1/</b>										
23.00 <sup>1</sup>	3/18/82	7.81	15.19	0	—	—	—	—	—	—
	3/25/82	8.67	14.33	0	—	—	—	—	—	—
	5/21/82	9.30	13.70	0	—	—	—	—	—	—
	5/26/82	10.18	12.82	0	—	—	—	—	—	—
	6/24/82	9.92	13.08	0	—	—	—	—	—	—
	9/9/93	9.90	13.10	0	8,800 <sup>2</sup>	240	280	<2.5	<7.5	—
	12/2/93	9.10	13.90	0	1,100	100	7.9	3.4	3.9	—
	3/17/94	9.41	13.59	0	1,600	370	13	13	26	—
	6/10/94	9.89	13.11	0	1,400	270	24	18	78	—
	9/15/94	11.24	11.76	0	4,100	740	<5	270	300	—
25.67 <sup>3</sup>	12/28/94	9.25	16.42	0	1,200	200	32	37	79	—
	3/29/95	8.32	17.35	0	13,000	540	54	77	120	—
	6/5/95	9.72	15.95	0	3,000	610	<25	<25	<25	—
	9/21/95	10.92	14.75	0	630 <sup>4</sup>	5.4	<0.5	1.3	6.1	—
	12/22/95	10.14	15.53	0	<50	<0.50	<0.50	<0.50	<0.50	40,000
	3/22/96	8.83	16.84	0	<1,200 <sup>1a</sup>	150	<12	<12	<12	32,000
	9/25/96	10.80	14.87	0	28,000 <sup>1b</sup>	19	<12	<12	<12	38,000
	3/6/97	9.15	16.52	0	<5,000 <sup>1a</sup>	52	<50	<50	<50	18,000
<b>B-2/</b>										
22.28 <sup>1</sup>	3/18/82	3.83	18.45	0	—	—	—	—	—	—
	3/25/82	5.79	16.49	0	—	—	—	—	—	—
	5/21/82	4.85	17.43	0	—	—	—	—	—	—
	5/26/82	8.53	13.75	0	—	—	—	—	—	—
	6/24/82	8.40	13.88	0	—	—	—	—	—	—
	9/9/93	6.46	15.82	0	4,700	470	630	180	590	—
	12/2/93	5.41	16.87	0	2,200	59	27	110	350	—
	3/17/94	7.44	14.84	0	1,800	52	33	97	320	—
	6/10/94	8.15	14.13	0	1,200	37	48	20	93	—
	9/15/94	10.00	12.28	0	4,900	710	12	340	450	—
25.13 <sup>3</sup>	12/28/94	7.32	17.81	0	2,600	63	49	56	370	—
	3/29/95 <sup>5</sup>	--	--	--	--	--	--	--	--	—
<b>B-3/</b>										
21.78 <sup>1</sup>	3/18/82	5.65	16.13	0	—	—	—	—	—	—
	3/25/82	5.75	16.03	0	—	—	—	—	—	—
	5/21/82	5.58	16.20	0	—	—	—	—	—	—
	5/26/82	7.99	13.79	0	—	—	—	—	—	—
	6/24/82	7.68	14.10	0	—	—	—	—	—	—
	9/9/93	5.99	15.79	0	7,800	500	760	180	720	—
	12/2/93	5.70	16.08	0	9,800	790	870	380	1,500	—
	3/17/94	6.50	15.28	0	2,400	88	55	74	270	—



Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness*	TPH(G)	B	T	E	X	MTBE
						<	ppb	>		
B-3 (cont) 24.35 <sup>3</sup>	6/10/94	7.23	14.55	0	2,300	110	95	84	240	—
	9/15/94	9.16	12.62	0	5,000	670	9.3	340	410	—
	12/28/94	6.44	17.91	0	4,100	650	34	320	440	—
	3/29/95	5.47	18.88	0	3,300	170	2.2	51	8.9	—
	6/5/95	7.05	17.30	0	2,500	850	31	170	85	—
	9/21/95	8.92	15.43	0	2,900 <sup>7</sup>	1,300	280	140	100	—
	12/22/95	8.53	15.82	0	5,400 <sup>8</sup>	340	37	150	460	8,600
	3/22/96	5.98	18.37	0	2,200	79	50	58	200	1,600
	9/25/96	9.02	15.33	0	11,000	530	97	74	400	7,200
	3/6/97	6.71	17.64	0	<500 <sup>16</sup>	20	<5.0	<5.0	<5.0	420
B-4/ 21.35 <sup>1</sup>	3/18/82	4.65	16.70	0	—	—	—	—	—	—
	3/25/82	5.08	16.27	0	—	—	—	—	—	—
	5/21/82	—	—	2.5	—	—	—	—	—	—
	5/26/82	9.21	12.14	—	—	—	—	—	—	—
	6/24/82	8.22	13.13	0.5	—	—	—	—	—	—
	9/9/93	6.09	15.26	0	88,000	3,200	16,000	2,000	9,500	—
	12/2/93	5.54	15.81	0	110,000	3,600	25,000	2,800	15,000	—
	3/17/94	6.00	15.35	0	60,000	1,400	16,000	1,800	8,900	—
	6/10/94	6.87	14.48	0	25,000	770	880	190	1,100	—
	9/15/94	8.74	12.61	0	3,300	800	8.0	300	350	—
24.11 <sup>3</sup>	12/28/94	5.74	18.37	0	17,000	400	4,000	630	2,900	—
	3/29/95 <sup>5</sup>	—	—	—	—	—	—	—	—	—
B-5/ 21.53 <sup>1</sup>	3/18/82	5.13	16.40	0	—	—	—	—	—	—
	3/25/82	5.27	16.26	0	—	—	—	—	—	—
	5/21/82	4.40	17.13	0	—	—	—	—	—	—
	5/26/82	7.55	13.98	0	—	—	—	—	—	—
	6/24/82	7.27	14.26	0	—	—	—	—	—	—
	9/9/93	6.45	15.08	0	110,000	1,800	1,800	6,300	25,000	—
	12/2/93	5.13	16.40	0	81,000	4,400	3,800	6,700	28,000	—
	3/17/94	6.55	14.98	0	38,000	2,100	3,100	1,800	9,100	—
	6/10/94	7.34	14.19	0	110,000	5,100	7,000	5,400	27,000	—
	9/15/94	6.34	15.19	0	2,700	770	15	240	320	—
24.23 <sup>3</sup>	12/28/94	6.55	17.68	0	94,000	4,600	10,000	4,400	19,000	—
	3/29/95	5.59	18.64	0	59,000	1,500	3,100	2,100	8,100	—
	6/5/95	7.19	17.04	0	58,000	2,300	4,300	2,600	11,000	—
	9/21/95	9.10	15.13	0	3,500 <sup>6</sup>	300	30	260	330	—
	12/22/95	8.61	15.62	0	6,500 <sup>8</sup>	370	120	400	870	5,500
	3/22/96	6.02	18.21	0	13,000	410	1,000	750	2,900	5,400



Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	B	T	E	X	MTBE
						<	ppb	>		
B-5 (cont)	9/25/96	9.20	15.03	0	8,000	170	<5.0	140	110	7,200
	3/6/97	6.63	17.60	0	60,000	630	320	2,300	9,500	4,700
B-6/ 22.03 <sup>1</sup>	3/18/82	7.56	14.47	0	—	—	—	—	—	—
	3/25/82	6.08	15.95	0	—	—	—	—	—	—
	5/21/82	4.85	17.18	0	—	—	—	—	—	—
	5/26/82	8.31	13.72	0	—	—	—	—	—	—
	6/24/82	8.03	14.00	0	—	—	—	—	—	—
	9/9/93	8.12	13.91	0	6,800 <sup>2</sup>	<0.5	<0.5	<0.5	<1.5	—
	12/2/93	7.06	14.97	0	320	29	<0.5	<0.5	<0.5	—
	3/17/94	7.57	14.46	0	570	130	6.2	4.7	14	—
	6/10/94	8.21	13.82	0	1,500	100	81	51	240	—
	9/15/94	9.94	12.09	0	6,400	900	24	490	620	—
24.72 <sup>3</sup>	12/28/94	7.45	17.27	0	350	110	4.4	3.7	14	—
	3/29/95	6.40	18.32	0	3,300	46	<0.5	1.3	1.2	—
	6/5/95	8.07	16.65	0	230	<0.5	<0.5	<0.5	<0.5	—
	9/21/95	9.55	15.17	0	<50 <sup>4</sup>	<0.5	<0.5	<0.5	<0.5	—
	12/22/95	8.91	15.81	0	<50	<0.50	<0.50	<0.50	<0.50	15,000
	3/22/96	6.94	17.78	0	<1,200 <sup>10</sup>	<12	<12	<12	<12	18,000
	9/25/96	9.63	15.09	0	15,000 <sup>12</sup>	<10	<10	<10	<10	20,000
	3/6/97	7.50	17.22	0	<5,000 <sup>14</sup>	<50	<50	<50	<50	18,000
B-7/ 19.54 <sup>1</sup>	3/18/82	4.08	15.46	0	—	—	—	—	—	—
	3/25/82	4.00	15.54	0	—	—	—	—	—	—
	5/21/82	3.00	16.54	0	—	—	—	—	—	—
	5/26/82	4.96	14.58	0	—	—	—	—	—	—
	6/24/82	4.90	14.64	0	—	—	—	—	—	—
	9/9/93	6.54	13.00	0	230	1.3	2.3	0.6	2.1	—
	12/2/93	6.20	13.34	0	190	4.7	<0.5	1.1	1.9	—
	3/17/94	5.19	14.35	0	320	15	3.3	1.0	3.0	—
	6/10/94	5.97	13.57	0	210	6.1	5.7	2.3	5.8	—
22.22 <sup>1</sup>	9/15/94	7.78	11.76	0	<50	<0.5	<0.5	<0.5	<0.5	—
	12/28/94	5.04	17.18	0	520	17	4.8	2.5	2.1	—
	3/29/95	4.35	17.87	0	420	6.0	2.3	1.8	0.9	—
	6/5/95	5.79	16.43	0	65	<0.5	<0.5	<0.5	<0.5	—
	9/21/95	7.55	14.67	0	<50 <sup>4</sup>	<0.5	<0.5	<0.5	<0.5	—
	12/22/95	9.16	13.06	0	<50	<0.50	<0.50	<0.50	<0.50	930
	3/22/96	4.60	17.62	0	300	1.0	0.5	<0.5	0.6	280
	9/25/96	7.98	14.24	0	310 <sup>12</sup>	<0.5	0.6	<0.5	0.8	420
	3/6/97	5.06	17.16	0	1,200	9.0	<0.5	<0.5	2.9	1,000



Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	B	T	E	X	MTBE
						<———— ppb —————>				
<b>B-8/</b>										
18.49 <sup>1</sup>	3/18/82	4.27	14.22	0	—	—	—	—	—	—
	3/25/82	4.06	14.43	0	—	—	—	—	—	—
	5/21/82	4.86	13.63	0	—	—	—	—	—	—
	5/26/82	4.96	13.53	0	—	—	—	—	—	—
	6/24/82	4.87	13.62	0	—	—	—	—	—	—
	9/9/93	5.20	13.29	0	<50	3.4	<0.5	<0.5	<1.5	—
	12/2/93	5.31	13.18	0	<50	<0.5	<0.5	<0.5	<0.5	—
	3/17/94	4.87	13.62	0	<50	1.7	0.5	<0.5	0.6	—
	6/10/94	5.63	12.86	0	<50	<0.5	<0.5	<0.5	<0.5	—
	9/15/94	7.10	11.39	0	<50	<0.5	<0.5	<0.5	<0.5	—
21.01 <sup>3</sup>	12/28/94	4.63	16.38	0	<50	<0.5	<0.5	<0.5	<0.5	—
	3/29/95	4.20	16.81	0	<50	<0.5	<0.5	<0.5	<0.5	—
	6/5/95	5.18	15.83	0	<50	<0.5	<0.5	<0.5	<0.5	—
	9/21/95	6.80	14.21	0	<50 <sup>6</sup>	<0.5	<0.5	<0.5	<0.5	—
	12/22/95	6.48	14.53	0	<50	<0.50	<0.50	<0.50	<0.50	190
	3/22/96	4.49	16.52	0	<50	<0.5	<0.5	<0.5	<0.5	86
	9/25/96	7.18	13.83	0	90 <sup>2</sup>	<0.5	<0.5	<0.5	1.0	110
	3/6/97 <sup>3</sup>	—	—	—	—	—	—	—	—	—
<b>B-9/</b>										
	8/4/94	11.53	14.08	—	650	4.4	2.4	6.3	14	—
	11/2/94	9.42	16.19	—	—	—	—	—	—	—
25.61 <sup>3</sup>	12/28/94	8.35	17.26	0	2,400	290	8.4	90	36	—
	3/29/95	7.43	18.18	0	5,900	540	24	200	84	—
	6/5/95	8.47	17.14	0	3,000	130	<25	<25	<25	—
	9/21/95	8.99	16.62	0	240 <sup>6</sup>	1,500	14	62	55	—
	12/22/95	9.20	16.41	0	1,800	170	6.6	59	20	<6.0
	3/22/96	7.84	17.77	0	2,400	230	6.2	77	9.7	9.2
	9/25/96	9.24	16.37	0	1,800	28	4.7	39	13	56
	3/6/97	8.46	17.15	0	3,400	68	3.3	45	18	47
<b>B-10/</b>										
	8/4/94	10.95	12.20	—	<50	<0.5	<0.5	<0.5	<0.5	—
	11/2/94	11.19	11.96	—	—	—	—	—	—	—
23.15 <sup>3</sup>	12/28/94	10.30	12.85	0	<50	<0.5	<0.5	<0.5	<0.5	—
	3/29/95	9.68	13.47	0	<50	<0.5	<0.5	<0.5	<0.5	—
	6/5/95	10.59	12.56	0	<50	<0.5	<0.5	<0.5	<0.5	—
	9/21/95	10.87	12.28	0	<50	<0.5	<0.5	<0.5	<0.5	—
	12/22/95	10.41	12.74	0	<50	<0.50	<0.50	<0.50	<0.50	<0.60
	3/22/96	10.11	13.04	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/25/96	10.15	13.00	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	9.98	13.17	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0



Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	B	T	E	X	MTBE
						<	ppb			>
B-11 <sup>a</sup>  25.23 <sup>b</sup>	8/4/94	10.39	14.84	—	<50	<0.5	<0.5	<0.5	<0.5	—
	11/2/94	11.50	13.73	—	—	—	—	—	—	—
	12/28/94	9.09	16.14	0	<50	<0.5	<0.5	<0.5	<0.5	—
	3/29/95	7.40	17.83	0	<50	<0.5	<0.5	<0.5	<0.5	—
	6/5/95	8.26	16.97	0	<50	<0.5	<0.5	<0.5	<0.5	—
	9/21/95	9.79	15.44	0	<50	<0.5	<0.5	<0.5	<0.5	—
	12/22/95	9.55	15.68	0	<50	<0.50	<0.50	<0.50	<0.50	<0.60
	3/22/96	7.35	17.88	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/25/96	10.21	15.02	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	7.76	17.47	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
B-12 <sup>a</sup>  20.40 <sup>b</sup>	8/4/94	6.41	13.99	—	<50	<0.5	<0.5	<0.5	<0.5	—
	11/2/94	8.75	11.65	—	—	—	—	—	—	—
	12/28/94	2.76	17.64	0	74	1.0	2.6	1.3	4.4	—
	3/29/95	2.46	17.94	0	210	<0.5	<0.5	0.7	1.6	—
	6/5/95	4.59	15.81	0	<50	<0.5	<0.5	<0.5	0.7	—
	9/21/95	7.36	13.04	0	<50	<0.5	<0.5	<0.5	<0.5	—
	12/22/95	3.96	16.44	0	140 <sup>c</sup>	<0.50	<0.50	<0.50	0.93	<0.60
	3/22/96	2.92	17.48	0	150	<0.5	0.8	<0.5	2.0	<5.0
	9/25/96	7.84	12.56	0	90	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	3.17	17.23	0	270 <sup>d</sup>	<0.5	<0.5	<0.5	<0.5	<5.0
TP-1/ —	9/9/93	7.33	—	0	8,500	770	890	120	590	—
	—	—	—	—	—	—	—	—	—	—
TP-2/ —	9/9/93	6.18	—	0	13,000	2,400	3,200	380	1,900	—
	—	—	—	—	—	—	—	—	—	—
Trip-Lab Blank TB-LB	9/9/93	—	—	—	<50	<0.5	<0.5	<0.5	<1.5	—
	12/2/93	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	3/17/94	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	6/10/94	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	9/15/94	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	12/28/94	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	3/29/95	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	6/5/95	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	9/21/95	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—
	12/22/95	—	—	—	<50	<0.50	<0.50	<0.50	<0.50	<0.60
TB-LB	3/22/96	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/25/96	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	—	—	—	—	<50	<0.5	<0.5	<0.5	<0.5	—



Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	B	T	E	X	MTBE
						<	ppb	<0.5	<0.5	<1.5
<b>Bailer Blank</b>										
BB	9/9/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--
	12/2/93	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
	3/17/94	--	--	--	<50	<0.5	<0.5	<0.5	0.6	--



Table 1. Water Level Data and Groundwater Analytical Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

**EXPLANATION:**

TOC = Top of casing elevation

(ft) = feet

DTW = Depth to water

GWE = Groundwater elevation

msl = Measurements referenced relative to mean sea level

TPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl-tertiary-butyl ether

ppb = Parts per billion

— = Not analyzed/Not applicable

**ANALYTICAL METHODS:**

EPA Method 8015/5030 for TPH(G)

EPA Method 8020 for BTEX & MTBE

**NOTES:**

Water level data and laboratory analytical results prior to March 29, 1995, compiled from the quarterly monitoring reports prepared for Chevron by Sierra Environmental Services.

- \* Product thickness was measured on and after September 9, 1993, with an MMC flexi-dip interface probe.
- <sup>1</sup> Top of casing elevations were compiled from IT Enviroscience Program Report, August 2, 1982. TOC for MW-1 was assumed to be 23 feet MSL.
- <sup>2</sup> Laboratory indicates a non-typical gasoline pattern.
- <sup>3</sup> Wells were resurveyed. Top of casing elevations were compiled from RESNA Subsurface Investigation Report, October 19, 1994.
- <sup>4</sup> Water level and analytic data prior to 12/28/94 from RESNA Subsurface Investigation Report, October 19, 1994.
- <sup>5</sup> Well removed from monitoring program January 11, 1995, per approval of Alameda County Health Services.
- <sup>6</sup> Laboratory report indicates uncategorized compounds are not included in gasoline concentration.
- <sup>7</sup> Laboratory report indicates uncategorized compounds are not included in gasoline concentration. Data obtained from multiple dilutions. Dilution factor noted represents the dilution used for majority of results.
- <sup>8</sup> BFB recovery high due to interference of hydrocarbons.
- <sup>9</sup> Laboratory report indicates gasoline and discrete peaks.
- <sup>10</sup> Laboratory report indicates hydrocarbons in the gasoline range do not match the gasoline standard pattern. The TPH as gasoline value was 4,200 ug/L which was attributed to the presence of MTBE.
- <sup>11</sup> Laboratory report indicates hydrocarbons in the gasoline range do not match the gasoline standard pattern. The TPH as gasoline value was 9,600 ug/L which was attributed to the presence of MTBE.
- <sup>12</sup> Laboratory report indicates hydrocarbons in the gasoline range do not match the gasoline standard pattern.
- <sup>13</sup> Well was inaccessible.
- <sup>14</sup> Laboratory report indicates the TPH as Gasoline value was 22,000 ug/L which was attributed to the presence of a single target analyte.
- <sup>15</sup> Laboratory report indicates the TPH as Gasoline value was 21,000 ug/L which was attributed to the presence of a single target analyte.
- <sup>16</sup> Laboratory report indicates the TPH as Gasoline value was 770 ug/L which was attributed to the presence of a single target analyte.



## STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using Chevron-designated disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

B. Chivie

DATE

3-6-97

ADDRESS

263C Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-1

Well Condition

OK

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

Total Depth

29'

ft

Depth to Liquid

9.15

ft

# of casing  
Volume

3X

19.85

Volume	2" = 0.17	6" = 1.50	12" = 5.80
Factor	3" = 0.38		
(VF)	4" = 0.66		

$$\times \text{ (C/I)} \quad \times (\text{VF}) \quad \text{#Estimated} \quad 10.1 \text{ gal.}$$

purge

Volume

Purge Equipment

Barite Stick Suction

Sampling Equipment

Barite

Did well dewater

Yes

If yes, Time

10:14

Volume

7

Starting Time

10:08

Purging Flow Rate

1.5-2.5

gpm.

Sampling Time

10:35

Time

10:08

pH

Conductivity

Temperature

Volume

10:10

6.38

626

20.5

10:14

6.40

646

20.5

10:35

6.43

665

20.0

645

665

20.6

Sample

Weather Conditions

Cloudy cool to warming

Water Color:

brown/gray

Odor:

hydrocarbon

Sediment Description

Silt

## LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-1	3x4cm 1/2A	Y	HCl	GTVL	Vapor/Water Nitro

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

B-3

DATE

3-6-97

ADDRESS

2630 Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-3

Well Condition

Clay

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

C

Total Depth

14'

ft

Depth to Liquid

6.71

ft

# of casing  
Volume

3X

12.29 7.79

Volume	2" = 0.17	6" = 1.50	12" = 5.80
Factor	3" = 0.38		
(VF)	4" = 0.66		

x(VF) 2.11 x 1.1 = Estimated

6.3 gal.

purge

Purge Equipment

Bailey Stick Suction

Sampling Equipment

Bailey

Did well dewater

If yes, Time

Volume

Starting Time

10:23

Purging Flow Rate

gpm.

Sampling Time

10:30

Time

10:27

pH

7.13

Conductivity

201

Temperature

17.6

Volume

2.2

10:28

7.11

214

18.4

2.4

10:30

7.13

217

17.8

3.6

Weather Conditions

Cloudy cool no warming

Water Color:

Brown / grey

Odor:

Mild

Sediment Description

(light soil)

## LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-3	3x4cm dia	Y	H2O	GTVL	Cu, Bi, Fe, Mn, Ni, Zn

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

B, Chiv

DATE

3-6-97

ADDRESS

2630 Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-5

Well Condition

Well Location Description

Okay

Well Diameter

2"

in

Hydrocarbon Thickness

2'

Total Depth

19'

ft

Depth to Liquid

6.63

ft

# of casing  
Volume

3x

12.37

x 0.17

x (VF)

2" = 0.17

6" = 1.50

12" = 5.80

Factor

3" = 0.38

(VF)

4" = 0.66

Purge Equipment

Barite Stick Section

Sampling Equipment

Barite

Did well dewater

If yes, Time

Volume

Starting Time

1005

Purging Flow Rate

gpm.

Sampling Time

1014

Time

1008

pH

Conductivity

Temperature

Volume

1011

7.18

154

18.4

1014

7.12

160

19.3

7.12

162

18.12

Weather Conditions

Clear cool n. winds

Water Color:

Grey/taupe

Odor:

Mild

Sediment Description

Clayey silt

## LABORATORY INFORMATION

Sample ID	Container	Rating	Preservative Type	Lab	Analysis
B-5	3x4cm I.D.B	4	H2O	GTL	Ves B1X2 D/N130

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

B. Orlie

DATE

3-6-97

ADDRESS

263C Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-6

Well Condition

OK

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

Total Depth

19'

ft

Volume

2" = 0.17

6" = 1.50

12" = 5.80

Depth to Liquid

7.50

ft

Factor

3" = 0.38

(VF)

4" = 0.66

# of casing

3X

11.50

x 0.17

x(VF)

#Estimated

5.9

gal.

Volume

Purge Equipment

Barrel Stuck Section

Sampling Equipment

Barrel

Did well dewater

Yes

If yes, Time

10:01

Volume

3

Starting Time

10:00

Purging Flow Rate

gpm.

Sampling Time

10:30

Time

10:00

pH

6.65

10:30

6.45

Conductivity

915

763

Temperature

20.5

19.5

Volume

1

Sample

Weather Conditions

Clear cool to warm

Water Color:

brown

Odor:

hydrocarbon

Sediment Description

Silt

## LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-	3x4cm 1/2in	Y	HCl	GTVL	1m3 BTEX on Nitro

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

B1 Chiv

DATE

3-6-97

ADDRESS

263C Broadway

JOB #

5203

CITY

Oakland A

SS#

9-2506

Well ID

B-7

Well Condition

OK

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

C

Total Depth

19'

ft

Volume 2" = 0.17 6" = 1.50 12" = 5.80

Depth to Liquid

5.06

ft

Factor 3" = 0.38

# of casing  
Volume

3X

13.94

(VF) 4" = 0.66

x 0.117 x (VF) 2.4 #Estimated 2.1 gal.

Purge Equipment

Bailie Stuck Suction

Sampling Equipment

Bailie

Did well dewater

If yes, Time

Volume

Starting Time

9:44

Purging Flow Rate

gpm

Sampling Time

9:53

Time

9:47

pH

6.94

Conductivity

151

Temperature

20.4

Volume

2.8

9:50

7.05

150

20.4

4.6

9:53

7.06

154

20.4

9.4

Weather Conditions

Clear cool no warming

Water Color:

Grey

Odor:

Mild

Sediment Description

Light silt

## LABORATORY INFORMATION

Sample ID

Container

Refrig

Preservative Type

Lab

Analysis

B-7

3x4cm dish

Y

HCl

GTVL

Vans B142 w/Nitro

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

P. Chivé

DATE

3-6-97

ADDRESS

263C Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-8

Well Condition

Well Location Description

Well Diameter

2'

in

Total Depth

18

ft

Depth to Liquid

ft

# of casing  
Volume

3x

Hydrocarbon Thickness

Volume	2" = 0.17	6" = 1.50	12" = 5.80
Factor	3" = 0.38		
(VF)	4" = 0.66		

# Estimated purge Volume gal.

Purge Equipment

Baile Stuck Suction Sampling Equipment

Baile

Did well dewater

If yes, Time

Volume

Starting Time

Purging Flow Rate

gpm.

Sampling Time

Time

pH

Conductivity

Temperature

Volume

Unable access due to fence  
around neighbor

Weather Conditions

Clear cool no winds

Odor:

Water Color:

Sediment Description

## LABORATORY INFORMATION

Sample ID

Container

Refrig

Preservative Type

Lab

Analysis

13-	3x4cm 1/2" I.D.A	Y	ITC	GTEL	13-131220 Nitrate

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

B. Clark

DATE

3-6-97

ADDRESS

2630 Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-9

Well Condition

OK

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

Total Depth

19'

ft

Depth to Liquid

8.46

ft

Volume	2" = 0.17	6" = 1.50	12" = 5.80
Factor	3" = 0.38		
(VF)	4" = 0.66		

# of casing  
Volume

3X

10.54

x 0.17

x(VF)

#Estimated

5.4

gal.

purge

Volume

Purge Equipment

Bailey Stick Suction

Sampling Equipment

Bailey

Did well dewater

No

If yes, Time

Volume

Starting Time

9:37

Purging Flow Rate

2.5

gpm.

Sampling Time

9:49

Time

9:37

pH

6.33

Conductivity

1076

Temperature

21.5

Volume

9:38

6.38

1033

22.4

3

9:39

6.42

1002

22.6

3

9:40

6.41

996

22.5

6

9:49

6.59

974

22.6

Sample

Weather Conditions

Clear cool no warming

Water Color:

lt brown

Odor:

Sediment Description

silt

## LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-9	3x46ml DCA	Y	HCl	GTPC	V-3142 04/11/92

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

B. Chive

DATE

3-6-97

ADDRESS

263C Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-10

Well Condition

OK

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

t

Total Depth

18'

ft

Depth to Liquid

9.98

ft

Volume	2" = 0.17	6" = 1.50	12" = 5.80
Factor	3" = 0.38		
(VF)	4" = 0.66		

# of casing

3x

9.02

x (0.17)

x(VF)

1.2

#Estimated

purge

gal.

Purge Equipment

Baird Stark Suction Sampling Equipment

Baird

Did well dewater

If yes, Time

Volume

Starting Time

840

Purging Flow Rate

gpm.

Sampling Time

848

Time

844

848

pH

6.96

6.79

6.73

Conductivity

115

119

110

Temperature

18.6

20.1

19.3

Volume

3

6

Weather Conditions

Clear cool no wind/sun

Water Color:

Brown

Odor:

Alga

Sediment Description

brown silt

## LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-10	3x4cm vials	Y	IEC	GTVL	Gas Bire & Nitro

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

P. Chiv

DATE

3-6-97

ADDRESS

2630 Broadway

JOB #

5203

CITY

Oakland A

SS#

9.2506

Well ID

B-10

Well Condition

Clay

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

6"

Total Depth

18'

ft

Depth to Liquid

176

ft

# of casing  
Volume

3x

1024

x 0.117

(VF)

x(VF) 1.9

#Estimated

purge

5.7

gal.

Volume	2" = 0.17	6" = 1.50	12" = 5.80
Factor	3" = 0.38		
(VF)	4" = 0.66		

Purge Equipment

Balki Snack Station Sampling Equipment

Did well dewater

No

If yes, Time

Volume

Starting Time

4:15

Purging Flow Rate

gpm.

Sampling Time

8:27

Time

8:17

pH

7.16

Conductivity

16.4

Temperature

17.4

Volume

2

8:20

6.17

128

17.9

4

8:22

4.57

1.6

17.8

6

Weather Conditions

Clear (OC) no warnings

Water Color:

Brown

Odor:

None

Sediment Description

Light silt

## LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-11	3x4cm dish	Y	H2O	CETL	Analyses

Comments

## WELL SAMPLING FIELD DATA SHEET

SAMPLER

12, Olive

DATE

3-6-97

ADDRESS

2630 Broadway

JOB #

5203

CITY

Oakland A

SS#

9-2506

Well ID

B-12

Well Condition

Okay

Well Location Description

Well Diameter

2"

in

Hydrocarbon Thickness

0

Total Depth

18'

ft

Depth to Liquid

3.17

ft

# of casing  
Volume

3x

14.53

x 0.117

Volume	2" = 0.17	6" = 1.50	12" = 5.80
Factor	3" = 0.38		
(VF)	4" = 0.66		

#Estimated

7.5

gal.

purge

Volume

Purge Equipment

Bailei Stick Section

Sampling Equipment

Bailei

Did well dewater

No

If yes, Time

Volume

Starting Time

Purging Flow Rate

gpm.

Sampling Time

Time

pH

Conductivity

Temperature

Volume

0126

6.82

144

171

210

928

6.87

145

18.1

5.2

931

6.83

146

18.3

7.8

Weather Conditions

Clear cool no warnings

Water Color:

Brown

Odor:

None

Sediment Description

Light

silt

## LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-12	3x4cm vials	Y	HCl	GTEL	Vans B142 w/Ni/Fe

Comments

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Facility Number	#9-2506	Chevron Contact (Name)	Mr. Phil Briggs
	Facility Address	2630 Broadway, Oakland, CA	(Phone)	(510) 842-9136
	Consultant Project Number	5203	Laboratory Name	NEI/GTEL
	Consultant Name	Gettler-Ryan	Service Code:	ZZ02790
	Address	6747 Sierra Ct, Ste J, Dublin 94568	Laboratory Service Order #	9033193
	Project Contact (Name)	Deanna Harding	Samples Collected by (Name)	FIC/Inc.
(Phone)	551-7555	Collection Date	3-6-97	
	(Fax Number)	551-7888	Signature	

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water	A = Air C = Charcoal	Type G = Composite C = Grab D = Discrete	Time	Sample Preservation	Lead (Yes or No)	Analyses To Be Performed									DO NOT BILL TB-LB ANALYSIS
									TPH Gas + BTEX w/TBE (8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Hydrocarbons (5010)	Purgeable Aromatics (5020)	Purgeable Organics (5240)	Extractable Organics (5270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)		
TB-43	12	W	TB	-	HC	X	X											
B-10	23	G	848															
B-11	93																	
B-12	94																	
B-7	05																	
B-9	06																	
B-5	07																	
B-6	38																	
B-3	9																	
B-1	10	V	V															

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<i>D. Gettler-Ryan</i>	G-R Inc.	3/7/97 0846	<i>D. Harding</i>	G-R Inc.	3/7/97 8:00	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs.
<i>D. Gettler-Ryan</i>	G-R	3/7/97 11:15	<i>John Weber</i>	NEI/GTEL	3/7/97 11:15	6 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
<i>John Weber</i>	NEI/GTEL	3/7/97 6:30	<i>J. Steingrover</i>		3/8/97 0850	As Contracted



**Midwest Region**

4211 May Avenue

Wichita, KS 67209

(316) 945-2624

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March 14, 1997

Deanna Harding

GETTLER-RYAN

6747 Sierra Ct.

Suite J

Dublin, CA 94568

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RE: NEI/GTEL Client ID: GTR01CHV08

Login Number: W7030126

Project ID (number): 5203

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

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Dear Deanna Harding:

Enclosed please find the analytical results for the samples received by NEI/GTEL Environmental Laboratories, Inc. on 03/08/97.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by NEI/GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes. This report is to be reproduced only in full.

NEI/GTEL is certified by the California Department of Health Service under Certification Number 1845.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

NEI/GTEL Environmental Laboratories, Inc.

*Terry R. Loucks, Project Coordinator for  
Terry R. Loucks  
Laboratory Director*

ANALYTICAL RESULTS  
Volatile Organics

NEI/GTEL Client ID: GTR01CHV08

Login Number: W7030126

Project ID (number): 5203

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Method: EPA 8020A

Matrix: Aqueous

NEI/GTEL Sample Number	W7030126-01	W7030126-02	W7030126-03	W7030126-04
Client ID	TB-LB	B-10	B-11	B-12
Date Sampled		03/06/97	03/06/97	03/06/97
Date Analyzed	03/13/97	03/13/97	03/13/97	03/13/97
Dilution Factor	1.00	1.00	1.00	1.00

Reporting

Analyte	Limit	Units	Concentration:			
MTBE	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes (total)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
BTEX (total)	--	ug/L	--	--	--	--
TPH as Gasoline	50	ug/L	< 50	< 50	< 50	270

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. Analyte list modified to include additional compounds. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

W7030126-04:

Hydrocarbons in the gasoline range do not match the gasoline standard pattern.

ANALYTICAL RESULTS  
Volatile Organics

NEI/GTEL Client ID: GTR01CHV08

Login Number: W7030126

Project ID (number): 5203

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Method: EPA 8020A

Matrix: Aqueous

NEI/GTEL Sample Number	W7030126-05	W7030126-06	W7030126-07	W7030126-08
Client ID	B-7	B-9	B-5	B-6
Date Sampled	03/06/97	03/06/97	03/06/97	03/06/97
Date Analyzed	03/13/97	03/13/97	03/13/97	03/13/97
Dilution Factor	1.00	1.00	25.0	100.

Analyte	Reporting			Concentration:	
	Limit	Units			
MTBE	5.0	ug/L	1000	47.	4700
Benzene	0.5	ug/L	9.0	68.	630
Toluene	0.5	ug/L	< 0.5	3.3	320
Ethylbenzene	0.5	ug/L	< 0.5	45.	2300
Xylenes (total)	0.5	ug/L	2.9	18.	9500
BTEX (total)	--	ug/L	12.	130	13000
TPH as Gasoline	50	ug/L	1200	3400	60000

Notes:

**Dilution Factor:**

Dilution factor indicates the adjustments made for sample dilution.

**EPA 8020A:**

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. Analyte list modified to include additional compounds. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

**W7030126-08:**

The TPH as Gasoline value was 22000 ug/L which was attributed to the presence of a single target analyte.

ANALYTICAL RESULTS  
Volatile Organics

NEI/GTEL Client ID: GTR01CHV08

Login Number: W7030126

Project ID (number): 5203

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Method: EPA 8020A

Matrix: Aqueous

NEI/GTEL Sample Number	W7030126-09	W7030126-10	--	--
Client ID	B-3	B-1	--	--
Date Sampled	03/06/97	03/06/97	--	--
Date Analyzed	03/13/97	03/13/97	--	--
Dilution Factor	10.0	100.	--	--

Analyte	Reporting			Concentration:
	Limit	Units		
MTBE	5.0	ug/L	420	18000
Benzene	0.5	ug/L	20.	52.
Toluene	0.5	ug/L	< 5.0	< 50.
Ethylbenzene	0.5	ug/L	< 5.0	< 50.
Xylenes (total)	0.5	ug/L	< 5.0	< 50.
BTEX (total)	--	ug/L	20.	52.
TPH as Gasoline	50	ug/L	< 500	< 5000

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

**EPA 8020A:**

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. Analyte list modified to include additional compounds. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846, Third Edition including promulgated Update II.

**W7030126-09:**

The TPH as Gasoline value was 770 ug/L which was attributed to the presence of a single target analyte.

**W7030126-10:**

The TPH as Gasoline value was 21000 ug/L which was attributed to the presence of a single target analyte.

NEI/GTEL Client ID: GTR01CHV08

Login Number: W7030126

Project ID (number): 5203

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

QUALITY CONTROL RESULTS

Volatile Organics

Method: EPA 8020A

Matrix: Aqueous

Conformance/Non-Conformance Summary

(X = Requirements Met \* = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:

NEI/GTEL Client ID: GTR01CHV08

QUALITY CONTROL RESULTS

Login Number: W7030126

Volatile Organics

Project ID (number): 5203

Method: EPA 8020A

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Matrix: Aqueous

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A		Acceptability Limits:	43-136%
031297GC14-1	CV0312972014	Calibration Verifi	123.
031297GC14-4	BW03129714	Method Blank Water	121.
031297GC14-8	MS03012602	Matrix Spike	90.9
031297GC14-9	DP03012603	Duplicate	81.9
--	03012601	TB-LB	86.1
--	03012602	B-10	85.7
--	03012603	B-11	83.0
--	03012604	B-12	85.1
--	03012605	B-7	100.
--	03012606	B-9	114.
--	03012607	B-5	99.6
--	03012608	B-6	92.8
--	03012609	B-3	131.
--	03012610	B-1	90.4

Notes:

\*: Indicates values outside of acceptability limits. See Nonconformance Summary.

Project ID (Number): 5203  
Project ID (Name): Chevron SS #9-2506  
2630 Broadway  
Oakland, CA  
Work Order Number: W7-03-0126  
Date Reported: 03-14-97

METHOD BLANK REPORT

Volatile Organics in Water  
EA Method 8020A

Date of Analysis: 12-Mar-97 QC Batch No: 031297GC14-4

Analyte	Concentration, ug/L
MTBE	<5.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
Xylene (total)	<0.5
TPH as Gasoline	<50

NEI/GTEL Client ID: GTR01CHV08  
Login Number: W7030126  
Project ID (number): 5203  
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Aqueous

Calibration Verification Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:ug/L	QC Batch:031297GC14-1		
Benzene	20.0	18.5	92.5	77-123%
Toluene	20.0	17.8	89.0	77.5-122.5%
Ethylbenzene	20.0	16.7	83.5	63-137%
Xylenes (Total)	60.0	57.2	95.3	85-115%
TPH as Gasoline	500.	487.	97.4	80-120%

Notes:

QC check source: Supelco #LA12389

NEI/GTEL Client ID: GTR01CHV08

## QUALITY CONTROL RESULTS

Login Number: W7030126

Volatile Organics

Project ID (number): 5203

Method: EPA 8020A

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Matrix: Aqueous

## Duplicate Sample Results

Analyte	Original Concentration	Duplicate Concentration	Acceptability		Client ID: B-11
			RPD, %	Limits, %	
EPA 8020A	Units: ug/L	QC Batch: 031297GC14-9	GTEL Sample ID: W7030126-03		
MTBE	< 10.0	< 10.0	NA	20	
Benzene	< 0.500	< 0.500	NA	23.9	
Toluene	< 1.00	< 1.00	NA	27.2	
Ethylbenzene	< 1.00	< 1.00	NA	21.6	
Xylenes (Total)	< 2.00	< 2.00	NA	22.0	
TPH as Gasoline	< 100.	< 100.	NA	20	

Notes:

NA - The concentration of the analyte is less than the reporting limit.

NEI/GTEL Client ID: GTR01CHV08

QUALITY CONTROL RESULTS

Login Number: W7030126

Volatile Organics

Project ID (number): 5203

Method: EPA 8020A

Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Matrix: Aqueous

Matrix Spike(MS) Results

GTEL Sample ID:W7030126-02			MS ID:MS03012602		
Analysis Date: 13-MAR-97			13-MAR-97		
Units: ug/L	Sample Conc.	Spike Added	MS Conc.	MS % Rec.	Acceptability Limits %Rec.
Benzene	< 0.5 (0.000)	20.0	18.9	94.5	67-110
Toluene	< 0.5 (0.000)	20.0	18.3	91.5	68-115
Ethylbenzene	< 0.5 (0.000)	20.0	16.9	84.5	65-120
Xylenes (Total)	< 0.5 (0.000)	60.0	57.0	95.0	62-119

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.