Chevron

February 24, 1997

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

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

Re: Chevron Service Station #9-2506
2630 Broadway
Oakland, California

Dear Ms. Eberle:

Enclosed is the Third Quarter (Semi-Annual) Groundwater Monitoring Report for 1996, 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. In wells B-7 and B-8 the concentrations of BTE constituents were below method detection limits. Monitoring wells B-1, B-5, B-6 and B-9 showed a decline in the benzene constituent from the previous sampling event. Only well B-3 showed an increase of the benzene constituent from the previous sampling event.

Depth to ground water varied from 12.56 to 16.37 feet below grade, with a direction of flow appearing to be divided, i.e. to the northwest and easterly.

For your information, **this site is planned to be reconstructed late this year, depending on permit approval. As previously noted the sampling frequency is biannually and the next sampling event is scheduled in March.**

If you have any questions or comments, call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Mr. Bill Scudder, Chevron

GETTLER-RYAN INC.

October 30, 1996 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 September 25, 1996, field personnel were on-site to monitor and sample ten wells (B-1, B-3, B-5 through B-12) at Chevron Service Station #9-2506 located at 2630 Broadway in Oakland, California.

Static groundwater levels were measured on September 25, 1996. 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 to provide environmental services to Chevron. Please call if you have any questions or comments regarding this report.

Sincerely,

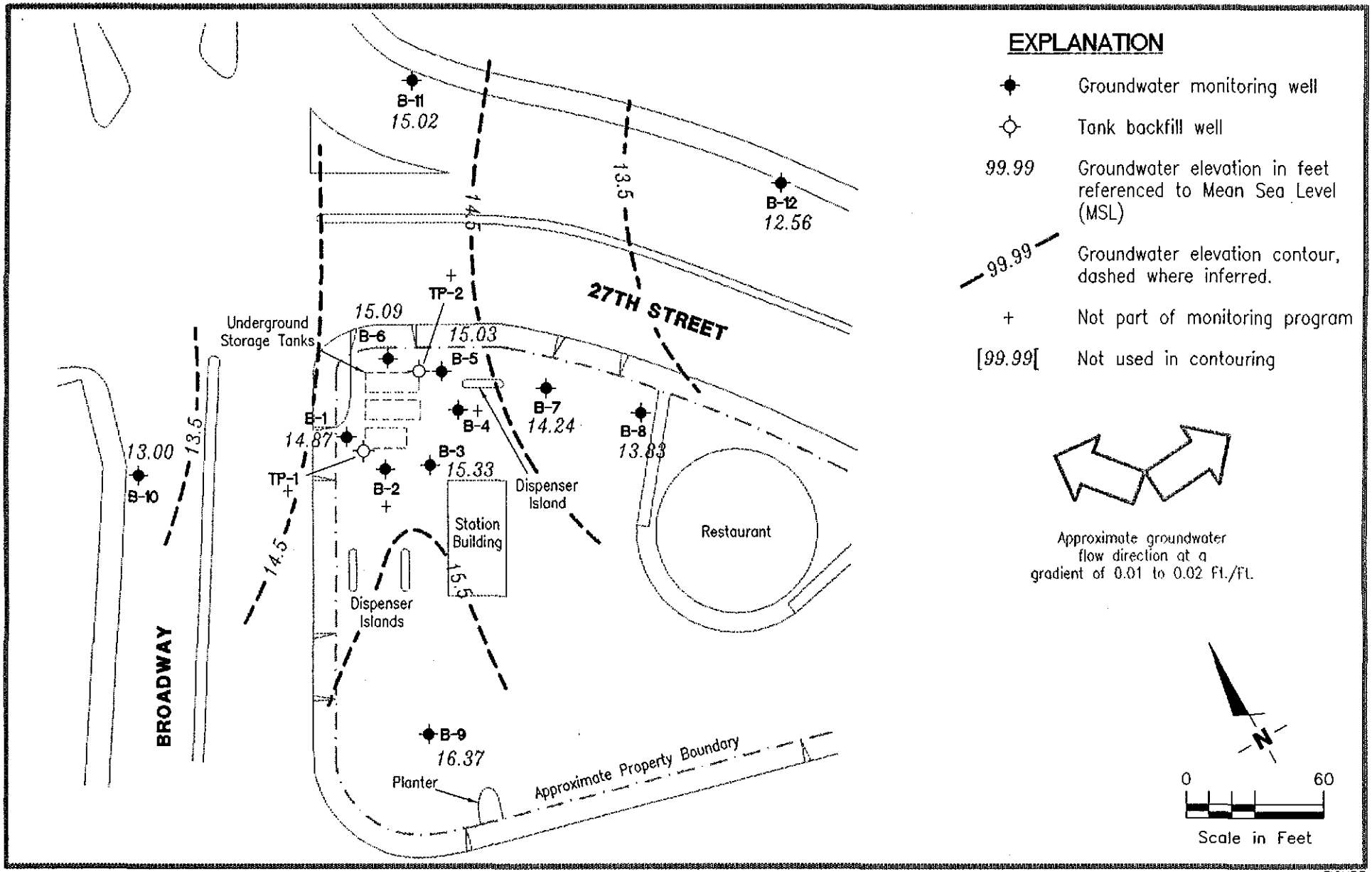
Deanna L. Harding
Project Coordinator

Penny L. Silzer
Senior Geologist, R.G. No. 5523

REGISTERED GEOLOGIST
Penny L. Silzer
No. 5523
STATE OF CALIFORNIA

DLH/PLS/dlh
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



Gettler - Ryan Inc.

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

POTENTIOMETRIC MAP
Chevron Service Station No. 9-2506
2630 Broadway
Oakland, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
5203		September 25, 1996	

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* (ft)	TPH(G)	B	T	E	X	MTBE
						<——— ppb ———>				
B-1/										
23.00[1]	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[2]	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[3]	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[6]	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[11]	150	<12	<12	<12	32,000
	9/25/96	**10.80**	**14.87**	**0**	**28,000[12]**	**19**	**<12**	**<12**	**<12**	**38,000**
					weird DS					
B-2/										
22.28[1]	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[3]	12/28/94	7.32	17.81	0	2,600	63	49	56	370	---
	3/29/95[5]	---	---	---	---	---	---	---	---	---
B-3/										
21.78[1]	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* (ft)	TPH(G)	B	T	E	X	MTBE
						<——— ppb ——— >				
B-3	6/10/94	7.23	14.55	0	2,300	110	95	84	240	---
(cont)	9/15/94	9.16	12.62	0	5,000	670	9.3	340	410	---
24.35[3]	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[7]	1,300	280	140	100	---
	12/22/95	8.53	15.82	0	5,400[9]	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**
B-4/										
21.35[1]	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[3]	12/28/94	5.74	18.37	0	17,000	400	4,000	630	2,900	---
	3/29/95[5]	---	---	---	---	---	---	---	---	---
B-5/										
21.53[1]	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[3]	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[6]	300	30	260	330	---
	12/22/95	8.61	15.62	0	6,500[9]	370	120	400	870	5,500

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	3/22/96	6.02	18.21	0	13,000	410	1,000	750	2,900	5,400
(cont)	**9/25/96**	**9.20**	**15.03**	**0**	**8,000**	**170**	**<5.0**	**140**	**110**	**7,200**
B-6/										
22.03[1]	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[2]	<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[3]	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[6]	<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[10]	<12	<12	<12	<12	18,000
	9/25/96	**9.63**	**15.09**	**0**	**15,000[12]**	**<10**	**<10**	**<10**	**<10**	**20,000**
B-7/										
19.54[1]	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	—
	9/15/94	7.78	11.76	0	<50	<0.5	<0.5	<0.5	<0.5	—
22.22[3]	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[6]	<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

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-7	3/22/96	4.60	17.62	0	300	1.0	0.5	<0.5	0.6	280
(cont)	**9/25/96**	**7.98**	**14.24**	**0**	**310[12]**	**<0.5**	**0.6**	**<0.5**	**0.8**	**420**
B-8/										
18.49[1]	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[3]	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[6]	<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[12]**	**<0.5**	**<0.5**	**<0.5**	**1.0**	**110**
B-9/[4]	8/4/94	11.53	14.08	---	650	4.4	2.4	6.3	14	---
	11/2/94	9.42	16.19	---	---	---	---	---	---	---
25.61[3]	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[8]	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**
B-10/[4]	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[3]	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	---

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-10	12/22/95	10.41	12.74	0	<50	<0.50	<0.50	<0.50	<0.50	<0.60
(cont)	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**
B-11[4]	8/4/94	10.39	14.84	---	<50	<0.5	<0.5	<0.5	<0.5	---
	11/2/94	11.50	13.73	---	---	---	---	---	---	---
25.23[3]	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**
B-12[4]	8/4/94	6.41	13.99	---	<50	<0.5	<0.5	<0.5	<0.5	---
	11/2/94	8.75	11.65	---	---	---	---	---	---	---
20.40[3]	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[9]	<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**
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	---

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---------->				
TB-LB	6/5/95	—	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
(cont)	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
	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
Bailer Blank										
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.

[1] 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.
[2] Laboratory indicates a non-typical gasoline pattern.
[3] Wells were resurveyed. Top of casing elevations were compiled from RESNA Subsurface Investigation Report, October 19, 1994.
[4] Water level and analytic data prior to 12/28/94 from RESNA Subsurface Investigation Report, October 19, 1994.
[5] Well removed from monitoring program January 11, 1995, per approval of Alameda County Health Services.
[6] Laboratory report indicates uncategorized compounds are not included in gasoline concentration.
[7] 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.
[8] BFB recovery high due to interference of hydrocarbons.
[9] Laboratory report indicates gasoline and discrete peaks.
[10] 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.
[11] 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.
[12] Laboratory report indicates hydrocarbons in the gasoline range do not match the gasoline standard pattern.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan 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 USA 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: G Sanchez / F. Cline — DATE: 9-25-96

ADDRESS: 2630 Broadway — JOB #: 5207.85

CITY: Oakland — SS#: 9-2506

Well ID: B-1 — Well Condition: ok

Well Location Description:

Well Diameter: 2 in — Hydrocarbon Thickness: ~

Total Depth: 29.0 ft

Depth to Liquid: 10.80 ft

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

3 # of casing Volume: 18.20 x .17 x(VF) 3.1 #Estimated purge Volume: 9-3 gal.

Purge Equipment: Stack Pump — Sampling Equipment: Disposable Bailer

Did well dewater: Yes — If yes, Time: 1154 — Volume: 6 gal

Starting Time: 1150 — Purging Flow Rate: 1.5 gpm.

Sampling Time: 1306

Time	pH	Conductivity	Temperature	Volume
1152	6.76	762	22.4	3.0 gal
1154	6.75	739	22.1	6.0 "
1306	6.80	745	22.7	7.0 "

Weather Conditions: sunny

Water Color: clear — Odor: mild

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-1	3x40 ml	Y	HCl	GTEL	Gas BTEX + MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline — DATE: 9-25-96

ADDRESS: 2630 Broadway — JOB #: 520J.85

CITY: Oakland — SS#: 9-2506

Well ID: B-3 — Well Condition: OK

Well Location Description:

Well Diameter: 2 in — Hydrocarbon Thickness: 0

Total Depth: 19.0 ft

Depth to Liquid: 9.02 ft

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

3 # of casing Volume: 9.98 x .17 x(VF) 1.7 #Estimated purge Volume: 5-1 gal.

Purge Equipment: Stack pump — Sampling Equipment: Disposable Bailer

Did well dewater: Yes — If yes, Time: 1232 — Volume: 3.4 gal

Starting Time: 1230 — Purging Flow Rate: 1.7 gpm.

Sampling Time: 1317

Time	pH	Conductivity	Temperature	Volume
1231	6.74	876	22.6	1.7 gal
1232	6.86	902	21.8	3.4 L
1317	6.89	899	20.9	4.5 L

Weather Conditions: sunny

Water Color: clear — Odor: mild

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-3	3x40ml	Y	HCl	GTEL	Gas BTEX MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline | DATE: 9-25-96

ADDRESS: 2630 Broadway | JOB #: 5203.85

CITY: Oakland | SS#: 9-2506

Well ID: B-5 | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness: 0

Total Depth: 19.0 ft

Depth to Liquid: 9.20 ft

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

3 # of casing Volume: 9.80 x .17 x(VF) 1.7 #Estimated purge Volume: 5.1 gal.

Purge Equipment: Stack Pump | Sampling Equipment: Disposable bailer

Did well dewater: Yes | If yes, Time: 1245 Volume: 3-4

Starting Time: 1243 | Purging Flow Rate: 1.7 gpm.

Sampling Time: 1335

Time	pH	Conductivity	Temperature	Volume
1244	6.87	876	20.2	1.7 gal
1245	6.86	870	22.4	3.4 "
1335	6.81	894	22.0	4.5 "

Weather Conditions: sunny

Water Color: Clear | Odor: mild

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-5	3x40 ml	Y	HCl	GTEL	Gas BTEX MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline — DATE: 9-25-96

ADDRESS: 2630 Broadway — JOB #: 5203.85

CITY: Oakland — SS#: 9-2506

Well ID: B-6 — Well Condition: Okay

Well Location Description:

Well Diameter: 2" in — Hydrocarbon Thickness: 0

Total Depth: 19' ft

Depth to Liquid: 9.63 ft

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

# of casing Volume: 3Y 9.37 x 0.17 x(VF) 1.6 — #Estimated purge Volume: 4.8 gal.

Purge Equipment: Stack — Sampling Equipment: Disposable bailer

Did well dewater: No — If yes, Time: ___ Volume: ___

Starting Time: 1130 — Purging Flow Rate: 1.0 gpm.

Sampling Time: 1139

Time	pH	Conductivity	Temperature	Volume
1132	7.14	482	22.5	2
1134	7.17	952	23.3	4
1136	7.13	471	23.2	6
1139	7.12	469	23.1	7

Weather Conditions: Partly Cloudy warming

Water Color: Clear — Odor: Mild

Sediment Description: Mem-

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-6	3x40 ml	Y	HCl	GTEL	Gas BTEX + MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline | DATE: 9-25-96

ADDRESS: 2630 Broadway | JOB #: 5203.85

CITY: Oakland | SS#: 9-2506

Well ID: B-7 | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness: 0

Total Depth: 19.0 ft

Depth to Liquid: 7.98 ft

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

# of casing Volume: 11.02 x .17 x(VF) 1.9 | #Estimated purge Volume: 5.7 gal.

Purge Equipment: Stack Pump | Sampling Equipment: Disposable Bailer

Did well dewater: NO | If yes, Time: | Volume:

Starting Time: 1212 | Purging Flow Rate: 2 gpm.

Sampling Time: 1220

Time	pH	Conductivity	Temperature	Volume
1213	6.77	776	23.7	2
1214	6.79	771	24.3	4
1215	6.80	781	24.4	6
1220	6.80	780	24.5	7

Weather Conditions: sunny

Water Color: clear | Odor: mild

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-7	3x40 ml	Y	HCl	GTEL	Gas BTEX + MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline — DATE: 9-25-96

ADDRESS: 2630 Broadway — JOB #: 5203.85

CITY: Oakland — SS#: 9-2506

Well ID: B-8 — Well Condition: ok

Well Location Description: ~~⊖~~

Well Diameter: 2 in — Hydrocarbon Thickness: ~~⊖~~

Total Depth: 18.0 ft

Depth to Liquid: 7.18 ft

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

3 # of casing Volume: 10.82 x .17 x(VF) 1.8 #Estimated purge Volume: 5-5 gal.

Purge Equipment: Stack Pump — Sampling Equipment: Disposable Bailer

Did well dewater: Yes — If yes, Time: 1132 — Volume: 4 gal

Starting Time: 1130 — Purging Flow Rate: 2 gpm.

Sampling Time: 1300

Time	pH	Conductivity	Temperature	Volume
1131	6.87	850	21.5	2 gal
1132	6.85	856	21.7	4 "
1300	6.88	908	22.9	5 "

Weather Conditions: Sunny

Water Color: clear — Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-8	3x40 ml	Y	HCl	GTEL	GAL BTEX & MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline | DATE: 9-25-96

ADDRESS: 2630 Broadway | JOB #: 5203.85

CITY: Oakland | SS#: 9-2506

Well ID: B-9 | Well Condition: okay

Well Location Description:

Well Diameter: 2" in | Hydrocarbon Thickness:

Total Depth: 19' ft

Depth to Liquid: 9.24 ft

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

# of casing Volume: 3x 9.76 x 0.17 x(VF) 1.66 #Estimated purge Volume: 4.97 gal.

Purge Equipment: Stack | Sampling Equipment: Disposable Bailer

Did well dewater: NO | If yes, Time: ___ Volume:

Starting Time: 11:50 | Purging Flow Rate: 1 gpm.

Sampling Time: 1159

Time	pH	Conductivity	Temperature	Volume
1152	7.14	621	24.9	3
1154	7.09	644	24.9	4
1156	7.10	646	24.8	6
1159	7.12	642	25.0	9

Weather Conditions: Partly Sunny Warming

Water Color: Clear | Odor: Mild

Sediment Description: Non

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-9	3x40 ml	Y	HCl	GTEL	Gas BTEX & MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline DATE: 9-25-96

ADDRESS: 2630 Broadway JOB #: 520.85

CITY: Oakland SS#: 9-2506

Well ID: B-10 Well Condition: Okay

Well Location Description:

Well Diameter: 2" in Hydrocarbon Thickness: 0

Total Depth: 19' ft

Depth to Liquid: 10.15 ft

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

# of casing Volume: 3x 8.85 x 0.17 x(VF) 1.5 #Estimated $ purge Volume: 4.5 gal.

Purge Equipment: Stack Sampling Equipment: Disposable bailer

Did well dewater: NO If yes, Time: ___ Volume:

Starting Time: 1035 Purging Flow Rate: 1.5 gpm.

Sampling Time: 1040

Time	pH	Conductivity	Temperature	Volume
1036	7.20	361	23.7	1.5
1037	7.21	337	22.6	3.0
1038	7.21	340	22.6	4.5
1040	7.21	340	22.5	5.0

Weather Conditions: ~~S~~ Cloudy cool

Water Color: Odor: None

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-10	3x40 ml	Y	HCl	GTEL	Gas BTEX & MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline — DATE: 9-25-96

ADDRESS: 2630 Broadway — JOB #: 5203.85

CITY: Oakland — SS#: 9-2506

Well ID: B-11 — Well Condition: Okay

Well Location Description:

Well Diameter: 2" in — Hydrocarbon Thickness: 0

Total Depth: 18' ft

Depth to Liquid: 10.21 ft

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

# of casing Volume: 3 x 7.79 x 0.17 x(VF) 1.3 — #Estimated purge Volume: 3.9 gal.

Purge Equipment: Stack — Sampling Equipment: Disposable bailer

Did well dewater: — If yes, Time: — Volume:

Starting Time: 1050

Sampling Time: 1055

Purging Flow Rate: 1.5 gpm.

Time	pH	Conductivity	Temperature	Volume
1051	7.27	332	23.3	1.5
1052	7.26	329	23.2	3.0
1053	7.26	327	22.9	4.5
1055	7.26	328	23.0	5.0

Weather Conditions: Partly Sunny Cool

Water Color: — Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-11	3x40 ml	Y	HCl	GTEL	Gas BTEX & MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G Sanchez / F. Cline — DATE: 9-25-96

ADDRESS: 2630 Broadway — JOB #: 5203.85

CITY: Oakland — SS#: 9-2506

Well ID: B-~~11~~12 — Well Condition: Okay

Well Location Description:

Well Diameter: 2" in — Hydrocarbon Thickness: 0

Total Depth: 18' ft

Depth to Liquid: 7.84 ft

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

# of casing Volume: 3x 10.16 x 0.17 x(VF) 1.72 — #Estimated purge Volume: 5.2 gal.

Purge Equipment: Stack — Sampling Equipment: Disposable Bailer

Did well dewater: No — If yes, Time: ___ Volume: ___

Starting Time: 1114 — Purging Flow Rate: 1 gpm.

Sampling Time: 1123

Time	pH	Conductivity	Temperature	Volume
1116	7.13	391	23.2	2
1118	7.10	382	22.8	4
1120	7.10	372	22.3	6
1123	7.12	375	22.4	7

Weather Conditions: Partly Sunny warming

Water Color: Clear — Odor: None

Sediment Description: None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
B-12	3x40 ml	Y	HCl	GTEL	Gas BTEX MTBE

Comments:

Fax copy of Lab Report and COC to Chevron Contact: [ ] No

Chain-of-Custody

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

Chevron Facility Number: 9-2506
Facility Address: 2630 Broadway, Oakland
Consultant Project Number: 5203.85
Consultant Name: Gettler-Ryan
Address: 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name): Deanna Harding
(Phone): 510 551-7555 (Fax Number): 510 551-7888

Chevron Contact (Name): Phil Briggs
(Phone): (510) 842-9136
Laboratory Name: GTEL
Laboratory Release Number: 3471000
Samples Collected by (Name): Guadalupe Sanchez
Collection Date: 9-25-96
Signature: Guadalupe S

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX w/MTBE (8015) (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
TB-LB	01	2	W	G	—	HCl	Yes	X													DO NOT BILL TB-LB ANALYSIS 7026500471 6°C no seals
B-10	02	3			1040																
B-11	03				1055																
B-12	04				1123																
B-8	05				1300																
B-6	06				1139																
B-1	07				1306																
B-7	08				1220																
B-3	09				1317																
B-9	10				1159																
B-5	11				1335																
	3																				

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Guadalupe S	G/R	9-25-96 1600	D. Harding	G/R	9/26/96
D. Harding	G-R	9/26/96 1320	John Weber	NEI/GTEL	9/26/96 1330
John Weber	NEI/GTEL	9/26/96 1530	Received For Laboratory By (Signature): Matthew Ward		Date/Time: 0845

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

COC-3.5WGW03 91/nCH

NEI/GTEL
ENVIRONMENTAL LABORATORIES, INC.

Midwest Region
4211 May Avenue
Wichita, KS 67209
(316) 945-2624
(800) 633-7936
(316) 945-0506 (FAX)

October 16, 1996

Deanna Harding
GETTLER-RYAN
6747 Sierra Ct.
Suite J
Dublin, CA 94568

RE: GTEL Client ID: GTR01CHV08
Login Number: W6090488
Project ID (number): 5203.85
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Dear Deanna Harding:

This report, previously dated 10/07/96, is a reissue.

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 09/27/96.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by 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,
GTEL Environmental Laboratories, Inc.

Justin Ward, Project Coordinator for
Terry R. Loucks
Laboratory Director

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6090488
Project ID (number): 5203.85
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Method: EPA 8020A
Matrix: Aqueous

GTEL Sample Number	W6090488-01	W6090488-02	W6090488-03	W6090488-04
Client ID	TB-LB	B-10	B-11	B-12
Date Sampled		09/25/96	09/25/96	09/25/96
Date Analyzed	10/05/96	10/05/96	10/05/96	10/05/96
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting 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	90

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.

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6090488
Project ID (number): 5203.85
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Method: EPA 8020A
Matrix: Aqueous

GTEL Sample Number	W6090488-05	W6090488-06	W6090488-07	W6090488-08
Client ID	B-8	B-6	B-1	B-7
Date Sampled	09/25/96	09/25/96	09/25/96	09/25/96
Date Analyzed	10/05/96	10/05/96	10/05/96	10/05/96
Dilution Factor	1.00	20.0	25.0	1.00

Analyte	Reporting Limit	Units	Concentration:			
MTBE	5.0	ug/L	110	20000	38000	420
Benzene	0.5	ug/L	< 0.5	< 10.	19.	< 0.5
Toluene	0.5	ug/L	< 0.5	< 10.	< 12.	0.6
Ethylbenzene	0.5	ug/L	< 0.5	< 10.	< 12.	< 0.5
Xylenes (total)	0.5	ug/L	1.0	< 10.	< 12.	0.8
BTEX (total)	--	ug/L	1.0	--	19.	1.4
TPH as Gasoline	50	ug/L	90	15000	28000	310

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.

W6090488-05:

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

W6090488-06:

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

W6090488-07:

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

W6090488-08:

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

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6090488
Project ID (number): 5203.85
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA

Method: EPA 8020A
Matrix: Aqueous

	GTEL Sample Number	W6090488-09	W6090488-10	W6090488-11	--
	Client ID	B-3	B-9	B-5	--
	Date Sampled	09/25/96	09/25/96	09/25/96	--
	Date Analyzed	10/05/96	10/05/96	10/05/96	--
	Dilution Factor	1.00	1.00	10.0	--

Analyte	Reporting Limit	Units	Concentration:			
MTBE	5.0	ug/L	7200	56.	7200	--
Benzene	0.5	ug/L	530	28.	170	--
Toluene	0.5	ug/L	97.	4.7	< 5.0	--
Ethylbenzene	0.5	ug/L	74.	39.	140	--
Xylenes (total)	0.5	ug/L	400	13.	110	--
BTEX (total)	--	ug/L	1100	85.	420	--
TPH as Gasoline	50	ug/L	11000	1800	8000	--

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.

GTEL Client ID: GTR01CHV08
Login Number: W6090488
Project ID (number): 5203.85
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:

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6090488 Volatile Organics
Project ID (number): 5203.85 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%
100596GC17-1	CV1005962017	Calibration Verifi	99.9
100596GC17-3	BW10059617	Method Blank Water	98.8
100596GC17-5	DP10003006	Duplicate	115.
100596GC17-6	MS10003002	Matrix Spike	101.
--	09048801	TB-LB	99.3
--	09048802	B-10	98.0
--	09048803	B-11	98.3
--	09048804	B-12	99.5
--	09048805	B-8	97.6
--	09048806	B-6	98.0
--	09048807	B-1	101.
--	09048808	B-7	99.3
--	09048809	B-3	120.
--	09048810	B-9	116.
--	09048811	B-5	99.9

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

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6090488 Volatile Organics
Project ID (number): 5203.85 Method: EPA 8020A
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA Matrix: Aqueous

Method Blank Results

QC Batch No: 100596GC17-3
Date Analyzed: 05-OCT-96

Analyte	Method: EPA 8020A Concentration: ug/L
MTBE	< 2.00
Benzene	< 0.400
Toluene	< 0.500
Ethylbenzene	< 0.400
Xylenes (Total)	< 0.800
TPH as Gasoline	< 50.0

Notes:

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6090488 Volatile Organics
Project ID (number): 5203.85 Method: EPA 8020A
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA 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:100596GC17-1			
Benzene	20.0	20.0	100.	77-123%
Toluene	20.0	20.7	104.	77.5-122.5%
Ethylbenzene	20.0	20.9	105.	63-137%
Xylenes (Total)	60.0	60.1	100.	85-115%
TPH as Gasoline	500.	490.	98.0	80-120%

Notes:
QC check source: Supelco #LA12389

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6090488 Volatile Organics
Project ID (number): 5203.85 Method: EPA 8020A
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA Matrix: Aqueous

Duplicate Sample Results

Analyte	Original Concentration	Duplicate Concentration	RPD, %	Acceptability Limits, %
EPA 8020A Units: ug/L	QC Batch: 100596GC17-5	GTEL Sample ID: W6100030-06		Client ID: Batch QC
MTBE	< 1000	< 1000	NA	20
Benzene	4320	4220	2.34	23.9
Toluene	2340	2280	2.60	27.2
Ethylbenzene	3580	3490	2.55	21.6
Xylenes (Total)	13500	13200	2.25	22.0
TPH as Gasoline	67900	60100	12.2	20

Notes:

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

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6090488 Volatile Organics
Project ID (number): 5203.85 Method: EPA 8020A
Project ID (name): CHEVRON/9-2506/2630 BROADWAY/OAKLAND/CA Matrix: Aqueous

Matrix Spike(MS) Results

GTEL Sample ID:W6100030-02 MS ID:MS10003002
Analysis Date: 05-OCT-96 05-OCT-96

Units: ug/L Analyte	Sample Conc.	Spike Added	MS Conc.	MS % Rec.	Acceptability Limits %Rec.
Benzene	< 0.5 (0.000)	20.0	20.6	103.	67-110
Toluene	< 0.5 (0.000)	20.0	21.0	105.	68-115
Ethylbenzene	< 0.5 (0.000)	20.0	20.8	104	65-120
Xylenes (Total)	< 0.5 (0.140)	60.0	59.1	98.3	62-119

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