

ENVIRONMENTAL  
PROTECTION  
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**Chevron**

February 24, 1997

510 467  
Ms. Susan Hugo  
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: Former Chevron Service Station # 9-1026  
3701 Broadway  
Oakland, California**

Dear Ms. Hugo:

Enclosed is a copy of the Third Quarter (Semi-Annual) Groundwater Monitoring report for 1996 that was prepared by our consultant Gettler-Ryan Inc. for the above noted site. Monitoring wells were sampled and analyzed for TPH-g, BTEX and MtBE constituents.

Only monitoring wells B, B-1 through B-4 were sampled in this sampling event. Concentrations of BTEX constituents were detected in wells B-1 and B-4, while separate phase hydrocarbons (SPH) were detected in monitoring wells B, B-2, and B-3. All three wells were bailed and approximately 1.5 gals., 1/4 gals., and 1 gals., were removed from the respective wells.

Depth to the groundwater varied from 13.76 feet to 16.28 feet below grade with a direction of flow to the southwest.

Monitoring well B-4 continues to be impacted by BTEX, TPH-g and MtBE constituents, which may indicate the presence of a source located upgradient of Chevron's site. Chevron's portion of the plume appears to stable and contained.

Chevron implemented the sampling program outlined in the Comprehensive Site Evaluation and Proposed Future Action Plan, dated December 20, 1994, which initiated semi-annual monitoring, with the first and third quarters being the sampling periods.

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

Enclosure

February 24, 1997  
Ms. Susan Hugo  
Former Service Station 9-1026  
Page 2

cc. Ms. Bette Owen, Chevron

Mr. W. Bruce Bercovich  
Kay & Merkel  
100 The Embarcadero, 3rd Floor  
San Francisco, CA 94105



# GETTLER-RYAN Inc.

---

October 30, 1996

Job #5127.80

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

Re: Semi-Annual Groundwater Monitoring & Sampling Report  
Former Chevron Service Station #9-1026  
3701 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 five wells (B, B-1 through B-4), and sample two wells (B-1 and B-4) at the Former Chevron Service Station #9-1026 located at 3701 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 present in three site wells (B, B-2 and B-3). Static water level data and groundwater elevations are presented in Table 1. Separate-phase hydrocarbon removal data is presented in Table 2. A potentiometric map is included as Figure 1.

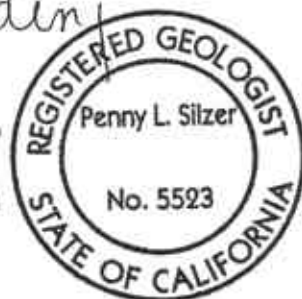
Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets for this event are also attached. The samples were analyzed by NEI/GTEL Environmental Laboratories, Inc. Analytical results are presented 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,

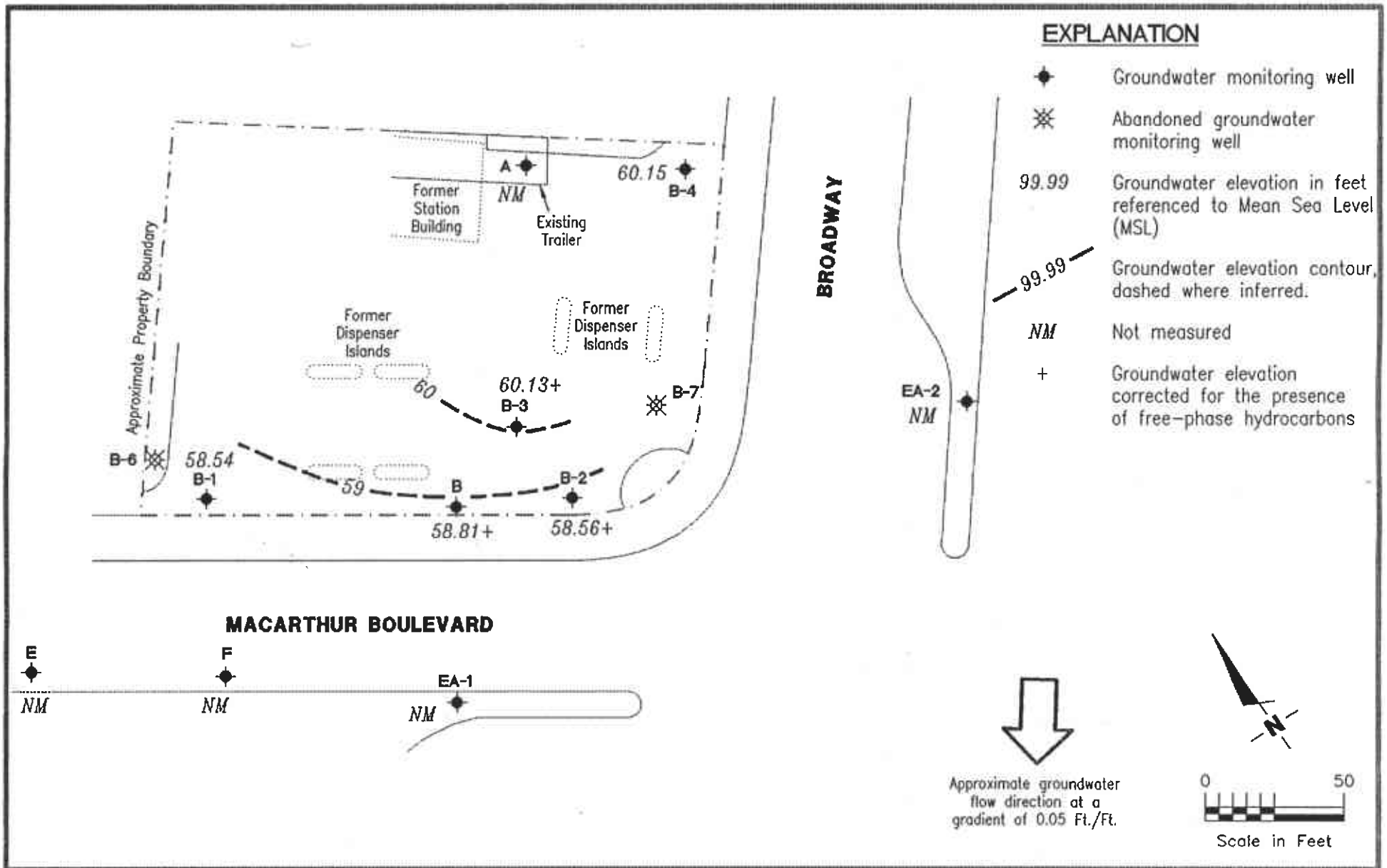
  
Deanna L. Harding  
Project Coordinator

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



DLH/PLS/dlh  
5127.QML

Figure 1: Potentiometric Map  
Table 1: Water Level Data and Groundwater Analytical Results  
Table 2: Separate-phase Hydrocarbon Removal Data  
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 (510) 551-7555  
 Dublin, CA 94568

**POTENTIOMETRIC MAP**  
 Former Chevron Service Station No. 9-1026  
 3701 Broadway  
 Oakland, California

FIGURE  
**1**

JOB NUMBER  
 5127

REVIEWED BY

DATE  
 September 25, 1996

REVISED DATE



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	←-----ppb----->					
						B	T	E	X	MTBE	
A 75.28	5/9/89	13.92	61.36	0	11,000	260	<2	94	230	---	
	8/9/89	15.62	59.66	0	12,000	370	<1.5	100	240	---	
	11/9/89	15.95	59.33	0	16,000	690	10	180	350	---	
	2/8/90	14.73	60.55	0	14,000	600	7	120	270	---	
	5/10/90	15.48	59.80	0	16,000	840	4.8	140	340	---	
	8/9/90	15.66	59.62	0	17,000	510	40	170	280	---	
	11/13/90	16.48	58.80	0	9,000	570	3.1	86	170	---	
	3/27/91	---	---	---	8,000	660	<5	110	250	---	
	4/5/91	13.22	62.06	0	---	---	---	---	---	---	
	6/19/91	15.37	59.91	0	8,900	740	<3	120	280	---	
	8/21/91	15.99	59.29	0	6,800	620	23	85	200	---	
	11/8/91	16.15	59.13	0	4,000	640	<5	77	160	---	
	2/13/92	14.58	60.70	0	8,000	860	<5	120	390	---	
	5/1/92	14.26	61.02	0	13,000	870	19	220	780	---	
	75.29	11/18/92	16.38	58.91	0	12,000	1,500	83	360	530	---
	3/19/93	12.16	63.13	0	14,000	820	6.1	180	420	---	
	6/10/93	14.25	61.04	0	9,000	700	13	170	310	---	
	9/8/93	---	---	---	---	---	---	---	---	---	
	12/21/93	---	---	---	---	---	---	---	---	---	
	3/9/94	13.34	61.95	0	9,600	860	21	200	390	---	
9/21/94 <sup>2</sup>	---	---	---	---	---	---	---	---	---		
12/20/94 <sup>2</sup>	---	---	---	---	---	---	---	---	---		
3/28/95 <sup>2</sup>	---	---	---	---	---	---	---	---	---		
6/22/95 <sup>2</sup>	---	---	---	---	---	---	---	---	---		
9/21/95 <sup>7</sup>	---	---	---	---	---	---	---	---	---		
3/22/96 <sup>7</sup>	---	---	---	---	---	---	---	---	---		
9/25/96 <sup>7</sup>	---	---	---	---	---	---	---	---	---		
B 73.39	5/9/89	13.97	59.58	0.20	---	---	---	---	---	---	
	8/9/89	15.69	57.86	0.20	---	---	---	---	---	---	
	11/9/89	15.29	58.16	0.08	---	---	---	---	---	---	
	2/8/90	14.46	58.93	0	---	---	---	---	---	---	
	5/10/90	14.07	58.32	0	---	---	---	---	---	---	
	8/9/90	15.12	58.27	0	---	---	---	---	---	---	
	11/13/90	15.76	57.63	0	---	---	---	---	---	---	
	4/5/91	13.38	60.01	0	---	---	---	---	---	---	
	6/19/91	15.14	58.25	0	26,000	7,100	370	430	1,000	---	
	8/21/91	15.58	57.81	0	16,000	4,900	270	390	640	---	
	11/8/91	15.71	57.68	0	11,000	2,400	48	280	160	---	
2/13/92	14.66	58.73	0	6,800	2,400	60	220	140	---		
5/1/92	14.50	58.89	Sheen	16,000	6,000	180	370	460	---		



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	←-----ppb----->					
						B	T	E	X	MTBE	
B (cont)	11/18/92	15.60	57.79	0	28,000	2,200	150	920	4,300	---	
	3/19/93	13.29	60.12	0.03	---	---	---	---	---	---	
	6/10/93	14.30	59.11	0.03	---	---	---	---	---	---	
	9/8/93	15.33	58.25	0.24	---	---	---	---	---	---	
	12/21/93	14.73	58.76	0.12	---	---	---	---	---	---	
	3/9/94	14.07	59.35	0.04	---	---	---	---	---	---	
	9/21/94	15.50	57.91 <sup>1</sup>	0.02 <sup>4</sup>	---	---	---	---	---	---	
	12/20/94	13.75	59.88 <sup>3</sup>	0.12	---	---	---	---	---	---	
	3/28/95 <sup>2</sup>	---	---	---	---	---	---	---	---	---	
	6/22/95	14.56	58.92 <sup>3</sup>	0.11	---	---	---	---	---	---	
	9/21/95	15.88	58.41 <sup>3</sup>	1.12	---	---	---	---	---	---	
	3/22/96	13.02	61.19 <sup>3</sup>	1.02	---	---	---	---	---	---	
	9/25/96	15.76	58.81 <sup>3</sup>	1.47	---	---	---	---	---	---	
	B-1	5/9/89	12.58	59.19	0	16,000	2,300	260	81	740	---
		8/9/89	14.09	57.68	0	12,000	2,600	340	100	870	---
71.77	11/9/89	14.06	57.71	0	17,000	340	140	110	760	---	
	2/8/90	12.65	59.12	0	5,500	70	19	17	150	---	
	5/10/90	13.62	58.15	0	18,000	770	110	73	600	---	
	8/9/90	13.87	57.90	0	82,000	750	66	95	980	---	
	11/13/90	14.38	57.39	0	43,000	1,300	120	74	760	---	
	3/27/91	---	---	---	18,000	580	92	94	770	---	
	4/5/91	11.73	60.04	0	---	---	---	---	---	---	
	6/19/91	13.56	58.21	0	21,000	910	56	96	810	---	
	8/21/91	13.90	57.87	0	50,000	2,400	610	300	1,800	---	
	11/8/91	14.05	57.72	0	540,000	3,600	1,500	1,900	5,900	---	
72.30	2/13/92	12.68	59.09	0	20,000	500	100	150	920	---	
	5/1/92	12.92	58.85	Sheen	27,000	2,800	200	310	1,900	---	
	11/18/92	14.30	58.00	0	300	9.7	3.4	2.3	21	---	
	3/19/93	12.28	60.02	0	130	23	.9	<0.5	5.6	---	
	6/10/93	13.04	59.26	0	170	21	1.1	.8	6.6	---	
	9/8/93	13.88	58.46	0.05	---	---	---	---	---	---	
	12/21/93	13.53	58.77	0	<50	6.7	.5	<0.5	1.2	---	
	3/9/94	12.65	59.65	0	1,300	520	8.8	2.4	53	---	
	9/21/94	14.40	57.90	0	390	130	2.7	2.4	7.7	---	
	12/20/94	12.35	59.95	0	1,600	520	9.9	8.9	34	---	
3/28/95	10.76	61.54	0	160	38	2.1	1.4	5.4	---		
6/22/95	12.60	59.70	0	340	73	3.1	2.4	7.5	---		
9/21/95	13.65	58.65	0	140	19	1.0	1.2	6.1	---		



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	←-----ppb----->					
						B	T	E	X	MTBE	
B-1 (cont)	3/22/96	10.94	61.36	0	200	<0.5	0.6	2.1	2.2	<5.0	
	9/25/96	13.76	58.54	0	690	5.4	1.2	1.6	6.8	<5.0	
B-2	5/9/89	14.58	59.93	0	170,000	30,000	8,400	2,300	12,000	---	
	8/9/89	16.06	58.45	0	60,000	29,000	8,700	2,400	12,000	---	
74.51	11/9/89	16.95	57.56	0	110,000	32,000	5,500	2,800	12,000	---	
	2/8/90	15.56	58.95	0	67,000	28,000	5,900	2,300	11,000	---	
	5/10/90	15.94	58.57	0	69,000	24,000	4,800	2,000	11,000	---	
	8/9/90	15.97	58.54	0	100,000	33,000	4,000	2,100	12,000	---	
	11/13/90	16.70	57.81	0	110,000	33,000	4,300	2,900	13,000	---	
	3/27/91	---	---	---	160,000	26,000	3,200	2,600	15,000	---	
	4/5/91	14.20	60.31	0	---	---	---	---	---	---	
	6/19/91	15.83	58.68	0	100,000	22,000	2,500	2,000	11,000	---	
	8/21/91	16.31	58.20	0	80,000	28,000	2,800	2,400	12,000	---	
	11/8/91	16.60	57.91	0	94,000	29,000	1,900	2,200	11,000	---	
	2/13/92	15.93	58.58	0	280,000	34,000	2,500	4,600	23,000	---	
	5/1/92	14.94	59.57	Sheen	29,000	1,700	300	1,100	4,300	---	
	74.52	11/18/92	16.71	57.81	0	26,000	11,000	170	870	950	---
		3/19/93	14.06	60.46	0	110,000	28,000	1,200	2,200	12,000	---
6/10/93		14.88	59.64	0	140,000	15,000	930	1,900	8,800	---	
9/8/93		16.03	58.52	0.04	---	---	---	---	---	---	
12/21/93		15.61	58.91	0	980,000	21,000	30,000	9,100	71,000	---	
3/9/94		14.53	59.99	Sheen	110,000	23,000	920	1,300	7,800	---	
9/21/94 <sup>s</sup>		---	---	---	---	---	---	---	---	---	
12/20/94		14.65	59.86	0	70,000	25,000	710	920	5,300	---	
3/28/95		12.30	62.22	0	76,000	20,000	920	1,200	5,200	---	
6/22/95		14.22	60.30	0	89,000	21,000	3,800	1,500	6,800	---	
9/21/95		15.80	58.72	0	84,000	24,000	2,900	1,800	9,800	---	
3/22/96		12.85	61.69 <sup>s</sup>	0.02	---	---	---	---	---	---	
9/25/96		15.98	58.56 <sup>s</sup>	0.03	---	---	---	---	---	---	
B-3		5/9/89	14.02	60.01	0	70,000	12,000	9,500	400	8,900	---
	8/9/89	15.38	58.74	0	---	---	---	---	---	---	
74.12	11/9/89	15.55	58.61	0.05	---	---	---	---	---	---	
	2/8/90	14.68	59.44	<0.01	---	---	---	---	---	---	
	5/10/90	15.15	58.99	0.02	---	---	---	---	---	---	
	8/9/90	15.27	58.85	<0.01	---	---	---	---	---	---	
	11/13/90	16.04	58.13	0.06	---	---	---	---	---	---	



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	←-----ppb----->					MTBE
						B	T	E	X		
B-3 (cont)	4/5/91	13.30	60.82	<0.01	---	---	---	---	---	---	
	6/19/91	15.16	58.96	0	260,000	20,000	9,000	2,200	16,000	---	
	8/21/91	15.61	58.51	0	70,000	28,000	11,000	1,800	11,000	---	
	11/8/91	15.77	58.35	0	150,000	29,000	9,700	2,200	13,000	---	
	2/13/92	14.88	59.24	0	100,000	27,000	9,906	2,000	11,000	---	
74.13	5/1/92	14.20	59.93	0.01	---	---	---	---	---	---	
	11/18/92	15.68	58.47	0.03	---	---	---	---	---	---	
	3/19/93	13.75	61.24	1.08	---	---	---	---	---	---	
	6/10/93	14.79	60.04	0.87	---	---	---	---	---	---	
	9/8/93	15.38	58.81	0.08	---	---	---	---	---	---	
	12/21/93	14.74	59.39	0	1,100,000	18,000	29,000	8,900	59,000	---	
	3/9/94	13.53	60.60	0	130,000	11,000	20,000	1,700	15,000	---	
	9/21/94	15.70	58.45 <sup>3</sup>	0.02 <sup>4</sup>	---	---	---	---	---	---	
	12/20/94	13.48	60.67 <sup>3</sup>	0.03	---	---	---	---	---	---	
	3/28/95	---	---	1.54	---	---	---	---	---	---	
	6/22/95	14.25	60.86 <sup>3</sup>	1.23	---	---	---	---	---	---	
	9/21/95	15.25	59.12 <sup>3</sup>	0.30	---	---	---	---	---	---	
	3/22/96	11.46	62.97 <sup>3</sup>	0.37	---	---	---	---	---	---	
	9/25/96	14.82	60.13 <sup>3</sup>	1.02	---	---	---	---	---	---	
	B-4	5/9/89	14.93	61.50	0	3,600	840	34	120	200	---
8/9/89		16.65	59.78	0	<500	4,200	130	370	260	---	
76.43	11/9/89	---	---	---	5,000	4,200	83	400	250	---	
	2/8/90	16.99	59.44	0	14,000	6,000	70	530	300	---	
	5/10/90	16.05	60.38	0	12,000	5,400	130	460	320	---	
	8/9/90	16.49	59.94	0	16,000	7,400	120	530	350	---	
	11/13/90	16.64	59.79	0	21,000	7,000	100	550	320	---	
	3/27/91	17.42	59.01	0	17,000	8,500	120	500	300	---	
	4/5/91	14.66	61.77	0	14,000	7,700	75	610	210	---	
	6/19/91	16.48	59.95	0	16,000	7,800	110	550	340	---	
	8/21/91	17.00	59.43	0	18,000	11,000	110	450	340	---	
	11/8/91	17.38	59.05	0	18,000	6,800	98	500	620	---	
	2/13/92	16.42	60.01	0	15,000	9,100	86	570	350	---	
	5/1/92	15.50	60.93	0	36,000	16,000	180	990	690	---	
	3/19/93	14.11	62.32	0	26,000	15,000	150	900	790	---	
	6/10/93	15.44	60.99	0	35,000	14,000	180	940	590	---	
	9/8/93	16.65	59.78	0	34,000	15,000	170	1,100	870	---	
	12/21/93	16.45	59.98	0	30,000	12,000	74	610	340	---	
	3/9/94	14.88	61.55	0	37,000	15,000	140	1,000	580	---	





Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	←-----ppb----->				
						B	T	E	X	MTBE
B-4 (cont)	9/21/94	17.14	59.29	0	32,000	14,000	110	660	190	---
	12/20/94	14.99	61.44	0	23,000	8,400	97	640	530	---
	3/28/95	11.33	65.10	0	27,000	9,900	120	880	540	---
	6/22/95	14.59	61.84	0	33,000	12,000	84	650	150	---
	9/21/95	16.19	60.24	0	20,000 <sup>a</sup>	12,000	72	540	68	---
	3/22/96	12.00	64.43	0	29,000	10,000	72	560	170	400
	9/25/96	16.28	60.15	0	53,000	11,000	<50	160	74	<500
B-6 72.66	5/9/89	12.11	60.55	0	26,000	120	110	250	1,300	---
	8/9/89	14.72	57.94	0	19,000	470	150	440	1,400	---
	11/9/89	13.85	58.81	0	13,000	70	36	36	440	---
	2/8/90	7.73	64.93	0	2,900	16	5	10	58	---
	5/10/90	---	---	---	---	---	---	---	---	---
	8/9/90	14.51	58.15	0	14,000	55	3	130	500	---
	11/13/90	14.86	57.80	0	---	---	---	---	---	---
	4/5/91	10.43	62.23	0	---	---	---	---	---	---
6/19/91 <sup>1</sup>	---	---	---	---	---	---	---	---	---	
B-7 75.40	5/9/89	14.73	60.67	0	210,000	13,000	19,000	2,000	20,000	---
	8/9/89	16.36	59.04	0	672,000	8,7000	17,000	2,700	30,000	---
	11/9/89	16.64	58.76	0	150,000	7,000	12,000	1,800	16,000	---
	2/8/90	15.69	59.71	0	41,000	2,500	6,900	1,100	11,000	---
	5/10/90	---	---	---	---	---	---	---	---	---
	8/9/90	16.31	59.09	0	50,000	1,100	3,900	640	7,200	---
	11/13/90	17.09	58.31	0	---	---	---	---	---	---
	4/5/91	14.36	61.04	0	---	---	---	---	---	---
6/19/91 <sup>1</sup>	---	---	---	---	---	---	---	---	---	
E 70.07	11/18/92	12.20	57.87	0	280	2.7	2.4	3	12	---
	3/19/93	9.97	60.10	0	<50	<0.5	<0.5	<0.5	<1.5	---
	6/10/93	10.98	59.09	0	<50	<0.5	<0.5	<0.5	<1.5	---
	9/8/93	11.80	58.29	0.03	---	---	---	---	---	---
	12/21/93	11.25	58.82	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/9/94	10.67	59.40	0	<50	<0.5	0.7	<0.5	0.7	---
	9/21/94	12.29	57.78	0	<50	2.5	<0.5	1.0	<0.5	---
	12/20/94	15.53	54.54	0	<50	0.5	<0.5	<0.5	<0.5	---
	3/28/95	8.45	61.62	0	<50	<0.5	<0.5	<0.5	<0.5	---



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	←-----ppb----->					
						B	T	E	X	MTBE	
E (cont)	6/22/95	10.57	59.50	0	<50	<0.5	<0.5	<0.5	<0.5	--	
	9/21/95	11.59	58.48	0	<50	<0.5	<0.5	<0.5	<0.5	--	
	3/22/96	9.02	61.05	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
F 72.01	5/9/89	18.70	53.31	0	<500	<0.5	<0.5	0.6	1	--	
	8/9/89	19.03	52.98	0	--	--	--	--	--	--	
	11/9/89	19.02	52.99	0	--	--	--	--	--	--	
	2/8/90	18.70	53.31	0	<50	0.4	<0.3	0.3	<0.6	--	
	5/10/90	18.98	53.03	0	--	--	--	--	--	--	
	8/9/90	18.95	53.06	0	--	--	--	--	--	--	
	11/13/90	19.10	52.91	0	--	--	--	--	--	--	
	3/27/91	--	--	--	64	<0.5	<0.5	<0.5	1	--	
	6/19/91	18.95	53.06	0	--	--	--	--	--	--	
	8/21/91	>19.94	<52.07	0	--	--	--	--	--	--	
	11/8/91	>19.94	<52.07	0	--	--	--	--	--	--	
	2/13/92	18.60	53.41	0	<50	<0.5	<0.5	<0.5	<0.5	--	
	5/1/92	Dry	--	--	--	--	--	--	--	--	
	71.72	11/18/92	14.85	56.87	0	<50	<0.5	<0.5	<0.5	<0.5	--
		3/19/93	14.25	57.47	0	<50	<0.5	<0.5	<0.5	<1.5	--
		6/10/93	13.92	57.80	0	<50	<0.5	<0.5	<0.5	<1.5	--
		9/8/93	14.80	56.95	0.04	--	--	--	--	--	--
12/21/93		13.31	58.41	0	<50	<0.5	<0.5	<0.5	<0.5	--	
3/9/94		12.99	58.73	0	<50	<0.5	<0.5	<0.5	<0.5	--	
9/21/94		16.30	55.42	0	<50	<0.5	<0.5	<0.5	<0.5	--	
12/20/94		12.57	59.15	0	<50	<0.5	<0.5	<0.5	<0.5	--	
3/28/95		8.95	62.77	0	<50	<0.5	<0.5	<0.5	<0.5	--	
6/22/95		13.77	57.95	0	<50	<0.5	<0.5	<0.5	<0.5	--	
9/21/95		13.45	58.27	0	<50	<0.5	<0.5	<0.5	<0.5	--	
3/22/96	11.16	60.56	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
EA-1 73.94	5/9/89	14.56	59.38	0	<500	<0.5	<0.5	<0.5	<0.5	--	
	8/9/89	16.09	57.85	0	<500	<0.5	<0.5	<0.5	<0.5	--	
	11/9/89	15.84	58.10	0	<500	<0.5	<0.5	<0.5	<0.5	--	
	2/8/90	15.05	58.89	0	<50	<0.3	<0.3	<0.3	<0.6	--	
	5/10/90	15.65	58.29	0	<50	1	0.3	<0.3	<0.6	--	
	8/9/90	15.67	58.27	0	<50	<0.3	<0.3	<0.3	<0.6	--	
	11/13/90	16.32	57.62	0	<50	<0.4	<0.3	<0.3	<0.4	--	
3/27/91	--	--	--	<50	0.7	0.5	<0.5	<0.5	--		



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	E	X	MTBE	ppb		
											----->		
EA-1 (cont)	4/5/91	14.03	59.91	0	---	---	---	---	---	---			
	6/19/91	15.56	58.38	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	8/21/91	15.99	57.95	0	<50	<0.4	<0.3	<0.3	<0.4	<0.4			
	11/08/91	16.13	57.81	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	2/13/92	15.10	58.84	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	5/1/92	18.80	55.14	0	<50	2.7	<0.5	<0.5	<0.5	<0.5			
71.85	11/18/92	15.97	55.88	0	<10	<0.3	<0.3	<0.3	<0.3	<0.5			
	3/19/93	13.66	58.19	0	<50	<0.5	<0.5	<0.5	<0.5	<1.5			
	6/10/93	14.71	57.14	0	<50	<0.5	<0.5	<0.5	<0.5	<1.5			
	9/8/93	15.58	56.33	0.08	---	---	---	---	---	---			
	12/21/93	15.02	56.83	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	3/9/94	14.38	57.47	0	<50	<0.5	1.0	<0.5	<0.5	<0.5			
	9/21/94	16.12	55.73	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	12/20/94	14.05	57.80	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	3/28/95	12.05	59.80	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	6/22/95	14.35	57.50	0	<50	2.0	<0.5	<0.5	<0.5	<0.5			
	9/21/95	15.36	56.49	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	3/22/96	12.71	59.14	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0		
	EA-2	5/9/89	15.95	59.29	0	760	<0.5	<0.5	1.1	<0.5	<0.5		
		8/9/89	17.45	57.79	0	<500	<0.5	<0.5	<0.5	<0.5	<0.5		
	75.24	11/9/89	17.41	57.83	0	<500	<0.5	1	<0.5	<0.5	<0.5		
2/8/90		16.57	58.67	0	190	<0.3	<0.3	<0.3	<0.3	<0.6			
5/10/90		17.12	58.12	0	<50	<0.3	<0.3	<0.3	<0.3	<0.6			
8/9/90		17.20	58.04	0	120	<0.3	<0.3	<0.3	<0.3	<0.6			
11/13/90		17.88	57.36	0	160	<0.4	1	<0.3	<0.3	<0.4			
3/27/91		---	---	---	110	<0.5	<0.5	<0.5	<0.5	<0.5			
4/5/91		15.54	59.70	0	---	---	---	---	---	---			
6/19/91		17.07	58.17	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
8/21/91		17.46	57.78	0	70	0.8	1.4	<0.3	<0.3	<0.4			
11/8/91		17.58	57.66	0	<50	<0.5	0.7	<0.5	<0.5	<0.5			
76.24	2/13/92	16.69	58.55	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5			
	5/1/92	16.16	59.08	0	340	<0.5	2.6	0.7	<0.5	<0.5			
	11/18/92	17.61	58.63	0	450	<0.5	3.3	<0.5	<0.5	0.8			
	3/19/93	15.00	61.24	0	450	<0.5	2.3	0.6	<1.5	<1.5			
	6/10/93	16.08	60.16	0	250	<0.5	1.3	<0.5	<1.5	<1.5			
	9/8/93	17.07	59.17	0	<50	<0.5	<0.5	<0.5	<1.5	<1.5			
	12/21/93	16.60	59.64	0	170	<0.5	1.3	<0.5	<0.5	<0.5			
	3/9/94	15.83	60.41	0	200	1.8	1.4	<0.5	<0.5	<0.5			



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G)	ppb					MTBE
						B	T	E	X		
EA-2 (cont)	9/21/94	17.60	58.64	0	<50	<0.5	<0.5	<0.5	<0.5	--	
	12/20/94	15.53	60.71	0	950	31	15	1.7	<0.5	--	
	3/28/95	13.28	62.96	0	71	2.0	0.6	<0.5	<0.5	--	
	6/22/95	15.62	60.62	0	300	<0.5	3.7	<0.5	0.6	--	
	9/21/95	16.78	59.46	0	170	<0.5	<0.5	<0.5	<0.5	--	
	3/22/96	13.88	62.36	0	90	<0.5	<0.5	<0.5	<0.5	<5.0	
Trip Blank	5/9/89	--	--	--	<500	<0.5	<0.5	<0.5	<0.5	--	
TBLB	8/9/89	--	--	--	<500	<0.5	<0.5	<0.5	<0.5	--	
	11/9/89	--	--	--	<500	<0.5	<0.5	<0.5	<0.5	--	
	2/8/90	--	--	--	<50	<0.3	<0.3	<0.3	<0.6	--	
	5/10/90	--	--	--	<50	<0.3	<0.3	<0.3	<0.6	--	
	8/9/90	--	--	--	<50	<0.3	<0.3	<0.3	<0.6	--	
	11/13/90	--	--	--	<50	<0.4	<0.3	<0.3	<0.4	--	
	3/27/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	6/19/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	8/21/91	--	--	--	<50	<0.4	<0.3	<0.3	<0.4	--	
	11/8/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	2/13/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	5/1/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	11/18/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	3/19/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	
	6/10/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	
	9/8/93	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	--	
	12/21/93	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	3/9/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	9/21/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	12/20/94	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	3/28/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	6/22/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	9/21/95	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	
	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	



Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California  
(continued)

EXPLANATION:

TOC = Top of casing elevation  
(ft) = feet

DTW = Depth to water

GWE = Groundwater elevation

msl = 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:

Analytical results and groundwater data prior to 1995 were compiled from the quarterly groundwater monitoring reports prepared for Chevron by Sierra Environmental Services.

Analytical methods prior to September 21, 1994 are assumed to be 8015/8020.

\* Product thickness measurements on and after September 21, 1994 were measured using an MMC flexi-dip interface probe.

<sup>1</sup> Well abandoned. Exact date unknown.

<sup>2</sup> Well inaccessible on this date.

<sup>3</sup> GWE corrected for the presence of free-phase hydrocarbons using:  $GWE = [(TOC - DTW) + (0.8)(Product\ Thickness)]$ . 0.8 is the assumed specific gravity of free-phase hydrocarbons.

<sup>4</sup> Approximate thickness; equipment not functioning properly.

<sup>5</sup> Well not located this event.

<sup>6</sup> Laboratory report indicates data obtained from multiple dilutions. Dilution factor noted represents the dilution used for majority of results.

<sup>7</sup> Well inaccessible due to office trailer positioned over well.

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Table 2. Separate-phase Hydrocarbon Thickness and Product Removal -  
Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California

WELL ID	DATE	PRODUCT THICKNESS (ft)	AMOUNT BAILED (gals./ prod. & water)
B	6/22/95	0.11	1.0
	9/21/95	1.12	2.0
	3/22/96	1.02	2.0
	9/25/96	1.47	1.5
B-2	3/22/96	0.02	0.25
	9/25/96	0.03	0.25
B-3	3/28/95	1.54	2.0
	6/22/95	1.23	0.5
	9/21/95	0.30	0.5
	3/22/96	0.37	0.25
	9/25/96	1.02	1.0

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Explanation:

(ft) = feet  
gals. = gallons  
prod = product



## 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.

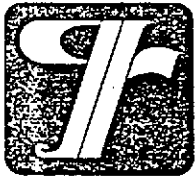
After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. 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 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID B Well Condition OK

Well Location Description \_\_\_\_\_

Well Diameter 4 in Hydrocarbon Thickness 1.47'

Total Depth \_\_\_\_\_ ft

Depth to Liquid 15.76 ft

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

# of casing Volume \_\_\_\_\_ x \_\_\_\_\_ x(VF) #Estimated \_\_\_\_\_ gal.  
 Purge Volume \_\_\_\_\_

Purge Equipment \_\_\_\_\_ Sampling Equipment Disposable Bailer

Did well dewater \_\_\_\_\_ If yes, Time \_\_\_\_\_ Volume \_\_\_\_\_

Starting Time \_\_\_\_\_ Purging Flow Rate \_\_\_\_\_ gpm.

Sampling Time \_\_\_\_\_

Time	pH	Conductivity	Temperature	Volume
<u>Not sampled due to floating product</u>				
<u>bailed ≈ 1.5 gal</u>				

Weather Conditions Sunny

Water Color: dark brown Odor: strong

Sediment Description \_\_\_\_\_

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
	<u>3x40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gen BTEX w/MSDE</u>

Comments \_\_\_\_\_





### WELL SAMPLING FIELD DATA SHEET

SAMPLER G. Sanchez / F. Cline DATE 9-25-96  
 ADDRESS 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID B-1 Well Condition OK

Well Location Description \_\_\_\_\_

Well Diameter 4 in Hydrocarbon Thickness 0

Total Depth 33.0 ft

Depth to Liquid 13.76 ft

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

# of casing Volume 19.24 x 0.66 x (VF) 12.7 #Estimated 38.0 gal.  
 Purge Volume

Purge Equipment Stack Pump Sampling Equipment Disposable Bailer

Did well dewater No If yes, Time \_\_\_\_\_ Volume \_\_\_\_\_

Starting Time 1400 Purging Flow Rate 2.1 gpm.

Sampling Time 1420

Time	pH	Conductivity	Temperature	Volume
<u>1406</u>	<u>6.79</u>	<u>1002</u>	<u>20.6</u>	<u>12.6 gal</u>
<u>1412</u>	<u>6.70</u>	<u>993</u>	<u>20.4</u>	<u>25.2</u>
<u>1418</u>	<u>6.66</u>	<u>990</u>	<u>20.0</u>	<u>27.8</u>
<u>1423</u>	<u>6.65</u>	<u>989</u>	<u>20.0</u>	<u>35.0</u>

Weather Conditions Sunny

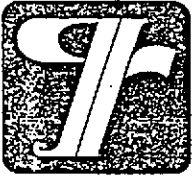
Water Color: clear Odor: none

Sediment Description none

### LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>B-1</u>	<u>3X40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTCL</u>	<u>Gen BTEX w/MTBE</u>

Comments \_\_\_\_\_



WELL SAMPLING FIELD DATA SHEET

SAMPLER G. Sanchez / F. Cline DATE 9-25-96  
 ADDRESS 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID B-2 Well Condition OK

Well Location Description \_\_\_\_\_

Well Diameter 2 in Hydrocarbon Thickness .03

Total Depth \_\_\_\_\_ ft

Depth to Liquid 15.98 ft

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

# of casing Volume \_\_\_\_\_ x \_\_\_\_\_ x(VF) \_\_\_\_\_ #Estimated \_\_\_\_\_ gal.

Purge Equipment \_\_\_\_\_ Sampling Equipment Disposable Bailer

Did well dewater \_\_\_\_\_ If yes, Time \_\_\_\_\_ Volume \_\_\_\_\_

Starting Time \_\_\_\_\_ Purging Flow Rate \_\_\_\_\_ gpm.

Sampling Time \_\_\_\_\_

Time	pH	Conductivity	Temperature	Volume
<u>Not</u>	<u>sampled</u>	<u>due to</u>	<u>floating</u>	<u>product</u>
	<u>.03</u>	<u>baited</u>	<u>~ 1/4 gal</u>	

Weather Conditions Sunny

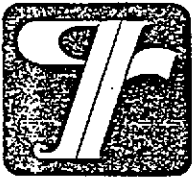
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_

Sediment Description \_\_\_\_\_

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
	<u>3x40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gen BTEX w/MTBE</u>

Comments \_\_\_\_\_



WELL SAMPLING FIELD DATA SHEET

SAMPLER G. Sanchez / F. Cline DATE 9-25-96  
 ADDRESS 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID B-3 Well Condition OK

Well Location Description \_\_\_\_\_

Well Diameter 2 in Hydrocarbon Thickness 1.02

Total Depth \_\_\_\_\_ ft

Depth to Liquid 14.82 ft

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

# of casing Volume \_\_\_\_\_ x \_\_\_\_\_ x(VF) \_\_\_\_\_ #Estimated purge Volume \_\_\_\_\_ gal.

Purge Equipment \_\_\_\_\_ Sampling Equipment Disposable Bailer

Did well dewater \_\_\_\_\_ If yes, Time \_\_\_\_\_ Volume \_\_\_\_\_

Starting Time \_\_\_\_\_ Purging Flow Rate \_\_\_\_\_ gpm.

Sampling Time \_\_\_\_\_

Time	pH	Conductivity	Temperature	Volume
<u>Not sampled due to floating product (1.02')</u>				
<u>bailed ~ 1 gal</u>				

Weather Conditions Sunny

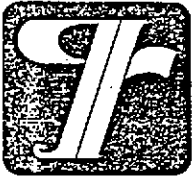
Water Color: dark brown Odor: strong

Sediment Description \_\_\_\_\_

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
	<u>3x40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTCL</u>	<u>Gen BTEX w/MTBE</u>

Comments \_\_\_\_\_



WELL SAMPLING FIELD DATA SHEET

SAMPLER G. Sanchez / F. Clive DATE 9-25-96  
 ADDRESS 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID B-4 Well Condition OK

Well Location Description \_\_\_\_\_

Well Diameter 2 in Hydrocarbon Thickness 6

Total Depth 19.0 ft

Depth to Liquid 16.28 ft

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

# of casing Volume 2.72 x .17 x(VF) 0.5 #Estimated 1.5 gal. <sup>1</sup>purge Volume

Purge Equipment Bailer Sampling Equipment Disposable Bailer

Did well dewater No If yes, Time \_\_\_\_\_ Volume \_\_\_\_\_

Starting Time 1439 Purging Flow Rate \_\_\_\_\_ gpm.

Sampling Time 1446

Time	pH	Conductivity	Temperature	Volume
<u>1441</u>	<u>6.78</u>	<u>2820</u>	<u>19.1</u>	<u>0.5 gal</u>
<u>1443</u>	<u>6.81</u>	<u>2250</u>	<u>19.0</u>	<u>1.0 gal</u>
<u>1446</u>	<u>6.84</u>	<u>2770</u>	<u>19.0</u>	<u>1.5 gal</u>

Weather Conditions Sunny

Water Color: clear Odor: mild

Sediment Description none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>R-4</u>	<u>3X40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gas BTEX w/MSBE</u>

Comments \_\_\_\_\_



# NEI/GTEL

ENVIRONMENTAL  
LABORATORIES, INC.

## Midwest Region

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

# RECEIVED

OCT 11 1996

GETTLER-RYAN INC.  
GENERAL CONTRACTORS

October 7, 1996

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

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RE: GTEL Client ID:	GTR01CHV08
Login Number:	W6090487
Project ID (number):	5127.85
Project ID (name):	CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

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Dear Deanna Harding:

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.

*A-E. Denty project coordinator for*

Terry R. Loucks  
Laboratory Director

ANALYTICAL RESULTS  
Volatile Organics

GTEL Client ID: GTR01CHV08  
 Login Number: W6090487  
 Project ID (number): 5127.85  
 Project ID (name): CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

Method: EPA 8020A  
 Matrix: Aqueous

GTEL Sample Number	W6090487-01	W6090487-02	W6090487-03	--
Client ID	TB-LB	B-1	B-4	--
Date Sampled		09/25/96	09/25/96	--
Date Analyzed	10/04/96	10/04/96	10/04/96	--
Dilution Factor	1.00	1.00	100.	--

Analyte	Reporting		Concentration:			
	Limit	Units				
MTBE	5.0	ug/L	< 5.0	< 5.0	< 500	--
Benzene	0.5	ug/L	< 0.5	5.4	11000	--
Toluene	0.5	ug/L	< 0.5	1.2	< 50	--
Ethylbenzene	0.5	ug/L	< 0.5	1.6	160	--
Xylenes (total)	0.5	ug/L	< 0.5	6.8	74	--
BTEX (total)	--	ug/L	--	15.	11000	--
TPH as Gasoline	50	ug/L	< 50	690	53000	--

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

QUALITY CONTROL RESULTS

Login Number: W6090487

Volatile Organics

Project ID (number): 5127.85

Method: EPA 8020A

Project ID (name): CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

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:



Project ID (Number): 5127.85  
Project ID (Name): Chevron SS #9-1026  
3701 Broadway  
Oakland, CA  
Work Order Number: W6-09-0487  
Date Reported: 10-07-96

METHOD BLANK REPORT

Volatile Organics in Water  
EPA Method 8020A

Date of Analysis: 04-Oct-96      QC Batch No: 100496GC4-3

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

GTEL Client ID: GTR01CHV08  
Login Number: W6090487  
Project ID (number): 5127.85  
Project ID (name): CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Aqueous

Matrix Spike(MS) Results

GTEL Sample ID:W6090477-08		MS ID:MS09047708			
Analysis Date: 05-OCT-96		05-OCT-96			
Units: ug/L	Sample	Spike	MS	MS	Acceptability Limits
Analyte	Conc.	Added	Conc.	% Rec.	%Rec.
Benzene	< 0.5 (0.0800)	40.0	34.6	86.3	67-110
Toluene	< 0.5 (0.000)	40.0	36.3	90.8	68-115
Ethylbenzene	< 0.5 (0.000)	40.0	35.1	87.8	65-120
Xylenes (Total)	< 0.5 (0.000)	120.	108.	90.0	62-119

Notes:

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

GTEL Client ID: GTR01CHV08

QUALITY CONTROL RESULTS

Login Number: W6090487

Volatile Organics

Project ID (number): 5127.85

Method: EPA 8020A

Project ID (name): CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

Matrix: Aqueous

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A			Acceptability Limits: 43-136%
100496GC4-1	CV100496204	Calibration Verifi	92.5
100496GC4-3	BW1004964	Method Blank Water	80.2
100496GC4-4	DP09043202	Duplicate	118
100496GC4-7	MS09047708	Matrix Spike	95.6
100496GC4-8	LW1004964	Laboratory Control	93.0
--	09048701	TB-LB	91.0
--	09048702	B-1	82.6
--	09048703	B-4	86.5

Notes:

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

GTEL Client ID: GTR01CHV08                      QUALITY CONTROL RESULTS  
Login Number: W6090487  
Project ID (number): 5127.85  
Project ID (name): CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

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:100496GC4-1		
Benzene	20.0	20.2	101	77-123%
Toluene	20.0	22.2	111	77.5-122.5%
Ethylbenzene	20.0	22.0	110	63-137%
Xylenes (Total)	60.0	67.3	112	85-115%
TPH as Gasoline	500	579	116	80-120%

Notes:  
QC check source: Supelco #LA12389

GTEL Client ID: GTR01CHV08

QUALITY CONTROL RESULTS

Login Number: W6090487

Volatile Organics

Project ID (number): 5127.85

Method: EPA 8020A

Project ID (name): CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

Matrix: Aqueous

Laboratory Control Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:ug/L	QC Batch:100496GC4-8		
Benzene	20.0	21.9	110	39-150%
Toluene	20.0	24.0	120	46-148%
Ethylbenzene	20.0	24.4	122	32-160%
Xylenes (Total)	60.0	71.4	119	51-145%

Notes:

GTEL Client ID: GTR01CHV08  
 Login Number: W6090487  
 Project ID (number): 5127.85  
 Project ID (name): CHEVRON/9-1026/3701 BROADWAY/OAKLAND/CA

QUALITY CONTROL RESULTS

Volatile Organics  
 Method: EPA 8020A  
 Matrix: Aqueous

Duplicate Sample Results

Analyte	Original Concentration	Duplicate Concentration	RPD, %	Acceptability Limits, %
EPA 8020A	Units: ug/L	QC Batch: 100496GC4-4	GTEL Sample ID: W6090432-02	Client ID: Batch QC
Benzene	3870	3940	1.79	23.9
Toluene	16700	16900	1.19	27.2
Ethylbenzene	9270	9410	1.50	21.6
Xylenes (Total)	50500	51300	1.57	22.0
TPH as Gasoline	862000	864000	0.232	20

Notes:

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