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**Chevron**

November 19, 1995

**Chevron U.S.A. Products Company**  
6001 Bollinger Canyon Rd., Bldg. L  
P.O. Box 5004  
San Ramon, CA 94583-0804

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

**Mark A. Miller**  
SAR Engineer  
Phone No. 510 842-8134  
Fax No. 510 842-8252

**Re: Former Chevron Service Station #9-1026  
3701 Broadway, Oakland, CA**

Dear Ms. Hugo:

Enclosed is the Quarterly Groundwater Sampling Report dated October 30, 1995, prepared by our consultant Gettler-Ryan, Inc. for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. Concentrations of dissolved hydrocarbon constituents in the ground water samples analyzed were consistent with previous observations at the site. Depth to ground water was measured at approximately 11.6 feet to 16.8 feet below grade and the direction of flow is to the south-southwest.

Separate phase hydrocarbons (SPH) were observed in monitor wells B and B-3 at measured thicknesses of 1.12 and 0.30 feet, respectively. The SPH was bailed, removed from the site, and transported to Chevron's facility in Richmond for recycling.

As indicated in Chevron's September 5, 1995, letter, we are eager to implement modifications to the sampling program recommended in the Comprehensive Site Evaluation and Proposed Future Action Plan of December 20, 1994. A copy of these modifications is enclosed for your reference. We will move forward with modifications to the sampling plan unless we hear differently from your office.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Sincerely,  
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller  
Site Assessment and Remediation Engineer

Ms. Susan Hugo  
November 19, 1995  
Page 2

Enclosure

cc: Ms. B.C. Owen

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

## FUTURE ACTION PLAN

**Continued Ground Water Monitoring:** Chevron's portion of the hydrocarbon plume at this site has remained stable during the six years since monitoring was initiated in 1989, and continued monitoring of the wells is unlikely to yield significant additional information. The goal of this future action plan is to 1) confirm that a portion of hydrocarbons detected in ground water at this site are due to offsite sources; 2) assist the ACDEH in identifying these sources; and 3) confirm that Chevron's plume is stable and contained. To achieve these goals, Chevron will:

- 1) Sample upgradient onsite well B-4, and cross-/downgradient site wells B, B-1, B-2 and B-3 semi-annually in the spring and fall through 1996.
- 2) Sample cross-gradient well EA-2 and downgradient offsite wells EA-1, E and F annually in the spring through 1996. Wells EA-1, E and F have not contained hydrocarbons for almost two years.

If the data continue to indicate that a significant source is located upgradient of the Chevron site, and the Chevron portion of the plume is stable and contained, we will cease monitoring while the upgradient source is identified and addressed by the responsible parties. Otherwise, the contingency plan described below will be activated.

Table 1. Proposed Monitoring and Sampling Schedule. Chevron Service Station #9-2782

Well ID	1995				1996			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
B	G&S		G&S		G&S		G&S	
B-1	G&S		G&S		G&S		G&S	
B-2	G&S		G&S		G&S		G&S	
B-3	G&S		G&S		G&S		G&S	
B-4	G&S		G&S		G&S		G&S	
EA-1	G&S				G&S			
EA-2	G&S				G&S			
E	G&S				G&S			
F	G&S				G&S			

G&S = Gauging and Sampling

**Contingency Plan:** For each of these sampling points, "baseline" and "trigger" conditions have been defined (Appendix D). Should monitoring indicate that "trigger" concentrations occur in any



# GETTLER-RYAN INC.

ENVIRONMENTAL  
REGISTRATION  
95 NOV 21 PM 2:49

October 30, 1995

Mark Miller  
Chevron USA Products Company  
P.O. Box 5004  
San Ramon, CA 94583

Re: Former Chevron Service Station #9-1026  
3701 Broadway  
Oakland, CA  
Job #5127.80

Dear Mr. Miller:

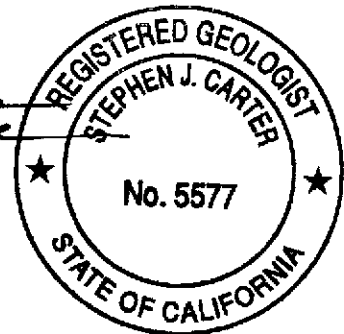
This report documents the quarterly groundwater sampling event performed by Gettler-Ryan Inc. (G-R). On September 21, 1995, field personnel were on-site to gauge nine wells (B, B-1 through B-4, E, EA-1, EA-2, and F), and sample seven wells (B-1, B-2, B-4, E, EA-1, EA-2 and F) at the Former Chevron Service Station #9-1026 located at 3701 Broadway in Oakland, California.

Static groundwater levels were measured on September 21, 1995. All wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were present in two site wells (B 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 - Quarterly Groundwater Sampling (attached). The field data sheets for this event are also attached. The samples were analyzed by Groundwater Technology Environmental Laboratories, Inc.. Analytic results are presented in Table 1. The chain of custody document and laboratory analytic reports are attached. G-R is not responsible for laboratory omissions or errors.

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,  
*Argy Leyton*  
Argy Leyton  
Environmental Project Manager  
*Stephen J. Carter*  
Stephen J. Carter  
Senior Geologist, R.G. 5577



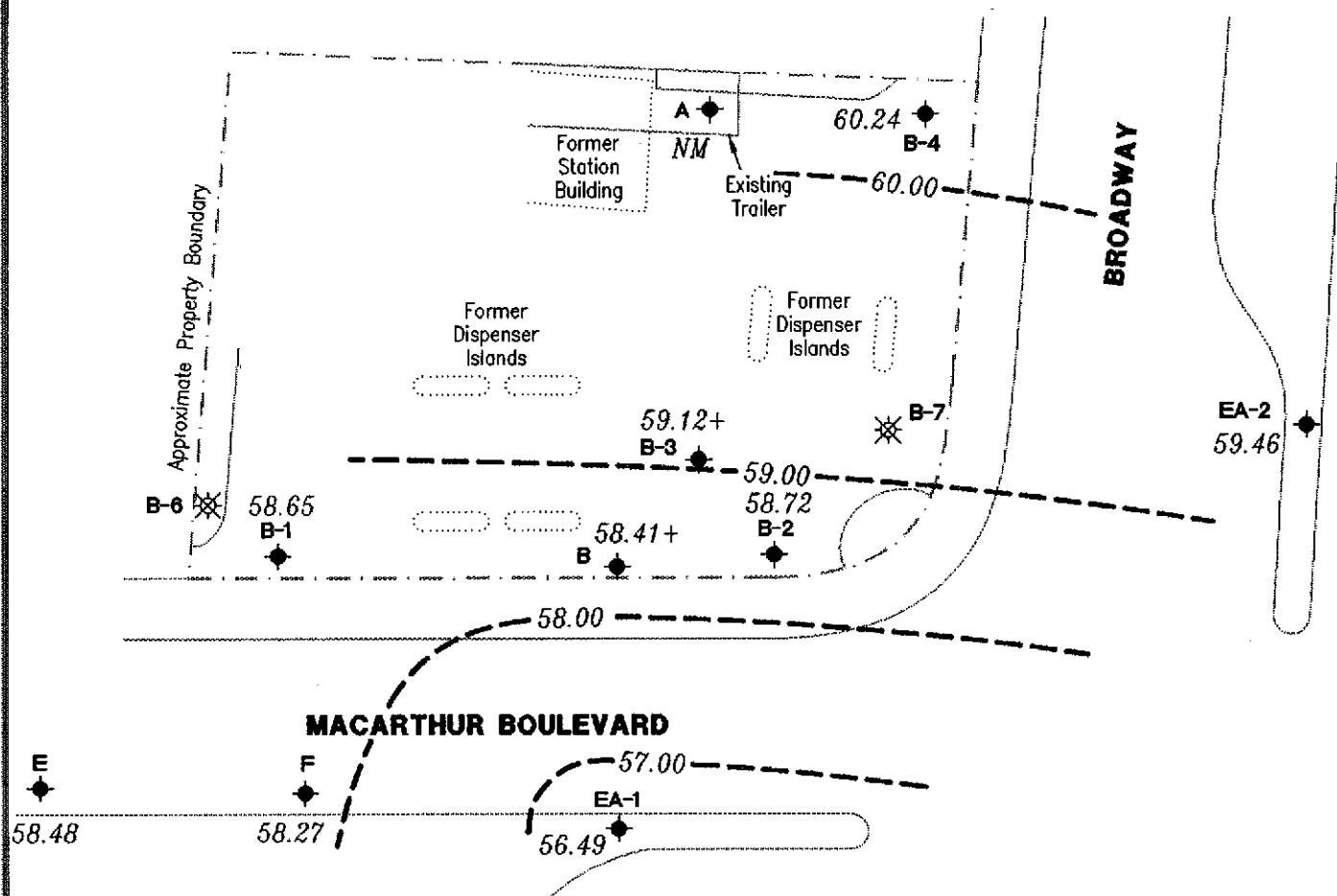
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- Figure 1: Potentiometric Map
- Table 1: Water Level Data and Groundwater Analytic Results
- Table 2: Separate-phase Hydrocarbon Removal Data
- Attachments: Standard Operating Procedure  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytic Reports

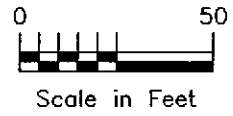
6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568  
95 NOV 21 PM 2:49

**EXPLANATION**

- ◆ Groundwater monitoring well
- ⊗ Abandoned groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- - - - - Groundwater elevation contour, dashed where inferred.
- [99.99] Not used in contouring
- NM Not measured
- + Groundwater elevation corrected for the presence of free-phase hydrocarbons



Approximate groundwater flow direction at a gradient of 0.01 to 0.03 Ft./Ft.



E  
58.48

F  
58.27

EA-1  
56.49

Approximate Property Boundary

BROADWAY

**MACARTHUR BOULEVARD**



**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  
5127.80

REVIEWED BY

DATE  
September 21, 1995

REVISED DATE



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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B T E X				
							←-----ppb----->				
A  75.28	5/9/89	13.92	61.36	0	8015/8020	11,000	260	<2	94	230	
	8/9/89	15.62	59.66	0	8015/8020	12,000	370	<1.5	100	240	
	11/9/89	15.95	59.33	0	8015/8020	16,000	690	10	180	350	
	2/8/90	14.73	60.55	0	8015/8020	14,000	600	7	120	270	
	5/10/90	15.48	59.80	0	8015/8020	16,000	840	4.8	140	340	
	8/9/90	15.66	59.62	0	8015/8020	17,000	510	40	170	280	
	11/13/90	16.48	58.80	0	8015/8020	9,000	570	3.1	86	170	
	3/27/91	---	---	---	8015/8020	8,000	660	<5	110	250	
	4/5/91	13.22	62.06	0	---	---	---	---	---	---	
	6/19/91	15.37	59.91	0	8015/8020	8,900	740	<3	120	280	
	8/21/91	15.99	59.29	0	8015/8020	6,800	620	23	85	200	
	11/8/91	16.15	59.13	0	8015/8020	4,000	640	<5	77	160	
	2/13/92	14.58	60.70	0	8015/8020	8,000	860	<5	120	390	
	5/1/92	14.26	61.02	0	8015/8020	13,000	870	19	220	780	
	75.29	11/18/92	16.38	58.91	0	8015/8020	12,000	1,500	83	360	530
		3/19/93	12.16	63.13	0	8015/8020	14,000	820	6.1	180	420
		6/10/93	14.25	61.04	0	8015/8020	9,000	700	13	170	310
		9/8/93	---	---	---	---	---	---	---	---	---
		12/21/93	---	---	---	---	---	---	---	---	---
3/9/94		13.34	61.95	0	8015/8020	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>	---	---	---	---	---	---	---	---	---		
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	8015/8020	26,000	7,100	370	430	1,000	
	8/21/91	15.58	57.81	0	8015/8020	16,000	4,900	270	390	640	
	11/8/91	15.71	57.68	0	8015/8020	11,000	2,400	48	280	160	
	2/13/92	14.66	58.73	0	8015/8020	6,800	2,400	60	220	140	
	5/1/92	14.50	58.89	Sheen	8015/8020	16,000	6,000	180	370	460	
11/18/92	15.60	57.79	0	8015/8020	28,000	2,200	150	920	4,300		



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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)				
						-----ppb----->				
						B	T	E	X	
B	3/19/93	13.29	60.12	0.03	---	---	---	---	---	
(cont)	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>3</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	---	---	---	---	---	
B-1	5/9/89	12.58	59.19	0	8015/8020	16,000	2,300	260	81	740
	8/9/89	14.09	57.68	0	8015/8020	12,000	2,600	340	100	870
71.77	11/9/89	14.06	57.71	0	8015/8020	17,000	340	140	110	760
	2/8/90	12.65	59.12	0	8015/8020	5,500	70	19	17	150
	5/10/90	13.62	58.15	0	8015/8020	18,000	770	110	73	600
	8/9/90	13.87	57.90	0	8015/8020	82,000	750	66	95	980
	11/13/90	14.38	57.39	0	8015/8020	43,000	1,300	120	74	760
	3/27/91	---	---	---	8015/8020	18,000	580	92	94	770
	4/5/91	11.73	60.04	0	---	---	---	---	---	---
	6/19/91	13.56	58.21	0	8015/8020	21,000	910	56	96	810
	8/21/91	13.90	57.87	0	8015/8020	50,000	2,400	610	300	1,800
	11/8/91	14.05	57.72	0	8015/8020	540,000	3,600	1,500	1,900	5,900
	2/13/92	12.68	59.09	0	8015/8020	20,000	500	100	150	920
	5/1/92	12.92	58.85	Sheen	8015/8020	27,000	2,800	200	310	1,900
72.30	11/18/92	14.30	58.00	0	8015/8020	300	9.7	3.4	2.3	21
	3/19/93	12.28	60.02	0	8015/8020	130	23	.9	<0.5	5.6
	6/10/93	13.04	59.26	0	8015/8020	170	21	1.1	.8	6.6
	9/8/93	13.88	58.46	0.05	---	---	---	---	---	---
	12/21/93	13.53	58.77	0	8015/8020	<50	6.7	.5	<0.5	1.2
	3/9/94	12.65	59.65	0	8015/8020	1,300	520	8.8	2.4	53
	9/21/94	14.40	57.90	0	8015/8020	390	130	2.7	2.4	7.7
	12/20/94	12.35	59.95	0	8015/8020	1,600	520	9.9	8.9	34
	3/28/95	10.76	61.54	0	8015/8020	160	38	2.1	1.4	5.4
	6/22/95	12.60	59.70	0	8015/8020	340	73	3.1	2.4	7.5
	9/21/95	13.65	58.65	0	8015/8020	140	19	1.0	1.2	6.1



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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)				
						B	T	E	X	
B-2	5/9/89	14.58	59.93	0	8015/8020	170,000	30,000	8,400	2,300	12,000
	8/9/89	16.06	58.45	0	8015/8020	60,000	29,000	8,700	2,400	12,000
74.51	11/9/89	16.95	57.56	0	8015/8020	110,000	32,000	5,500	2,800	12,000
	2/8/90	15.56	58.95	0	8015/8020	67,000	28,000	5,900	2,300	11,000
	5/10/90	15.94	58.57	0	8015/8020	69,000	24,000	4,800	2,000	11,000
	8/9/90	15.97	58.54	0	8015/8020	100,000	33,000	4,000	2,100	12,000
	11/13/90	16.70	57.81	0	8015/8020	110,000	33,000	4,300	2,900	13,000
	3/27/91	---	---	---	8015/8020	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	8015/8020	100,000	22,000	2,500	2,000	11,000
	8/21/91	16.31	58.20	0	8015/8020	80,000	28,000	2,800	2,400	12,000
	11/8/91	16.60	57.91	0	8015/8020	94,000	29,000	1,900	2,200	11,000
	2/13/92	15.93	58.58	0	8015/8020	280,000	34,000	2,500	4,600	23,000
	5/1/92	14.94	59.57	Sheen	8015/8020	29,000	1,700	300	1,100	4,300
74.52	11/18/92	16.71	57.81	0	8015/8020	26,000	11,000	170	870	950
	3/19/93	14.06	60.46	0	8015/8020	110,000	28,000	1,200	2,200	12,000
	6/10/93	14.88	59.64	0	8015/8020	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	8015/8020	980,000	21,000	30,000	9,100	71,000
	3/9/94	14.53	59.99	Sheen	8015/8020	110,000	23,000	920	1,300	7,800
	9/21/94 <sup>s</sup>	---	---	---	---	---	---	---	---	---
	12/20/94	14.65	59.86	0	8015/8020	70,000	25,000	710	920	5,300
	3/28/95	12.30	62.22	0	8015/8020	76,000	20,000	920	1,200	5,200
	6/22/95	14.22	60.30	0	8015/8020	89,000	21,000	3,800	1,500	6,800
	9/21/95	15.80	58.72	0	8015/8020	84,000	24,000	2,900	1,800	9,800
B-3	5/9/89	14.02	60.01	0	8015/8020	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	---	---	---	---	---	---
	4/5/91	13.30	60.82	<0.01	---	---	---	---	---	---
	6/19/91	15.16	58.96	0	8015/8020	260,000	20,000	9,000	2,200	16,000
	8/21/91	15.61	58.51	0	8015/8020	70,000	28,000	11,000	1,800	11,000
	11/8/91	15.77	58.35	0	8015/8020	150,000	29,000	9,700	2,200	13,000
	2/13/92	14.88	59.24	0	8015/8020	100,000	27,000	9,906	2,000	11,000
	5/1/92	14.20	59.93	0.01	---	---	---	---	---	---





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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)					X
						-----ppb----->					
B-3/74.13 (cont)	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	8015/8020	1,100,000	18,000	29,000	8,900	59,000	---
	3/9/94	13.53	60.60	0	8015/8020	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	---	---	---	---	---	---	---
B-4	5/9/89	14.93	61.50	0	8015/8020	3,600	840	34	120	200	---
	8/9/89	16.65	59.78	0	8015/8020	<500	4,200	130	370	260	---
76.43	11/9/89	---	---	---	8015/8020	5,000	4,200	83	400	250	---
	2/8/90	16.99	59.44	0	8015/8020	14,000	6,000	70	530	300	---
	5/10/90	16.05	60.38	0	8015/8020	12,000	5,400	130	460	320	---
	8/9/90	16.49	59.94	0	8015/8020	16,000	7,400	120	530	350	---
	11/13/90	16.64	59.79	0	8015/8020	21,000	7,000	100	550	320	---
	3/27/91	17.42	59.01	0	8015/8020	17,000	8,500	120	500	300	---
	4/5/91	14.66	61.77	0	8015/8020	14,000	7,700	75	610	210	---
	6/19/91	16.48	59.95	0	8015/8020	16,000	7,800	110	550	340	---
	8/21/91	17.00	59.43	0	8015/8020	18,000	11,000	110	450	340	---
	11/8/91	17.38	59.05	0	8015/8020	18,000	6,800	98	500	620	---
	2/13/92	16.42	60.01	0	8015/8020	15,000	9,100	86	570	350	---
	5/1/92	15.50	60.93	0	8015/8020	36,000	16,000	180	990	690	---
	3/19/93	14.11	62.32	0	8015/8020	26,000	15,000	150	900	790	---
	6/10/93	15.44	60.99	0	8015/8020	35,000	14,000	180	940	590	---
	9/8/93	16.65	59.78	0	8015/8020	34,000	15,000	170	1,100	870	---
	12/21/93	16.45	59.98	0	8015/8020	30,000	12,000	74	610	340	---
	3/9/94	14.88	61.55	0	8015/8020	37,000	15,000	140	1,000	580	---
	9/21/94	17.14	59.29	0	8015/8020	32,000	14,000	110	660	190	---
12/20/94	14.99	61.44	0	8015/8020	23,000	8,400	97	640	530	---	
3/28/95	11.33	65.10	0	8015/8020	27,000	9,900	120	880	540	---	
6/22/95	14.59	61.84	0	8015/8020	33,000	12,000	84	650	150	---	
9/21/95	16.19	60.24	0	8015/8020	20,000 <sup>6</sup>	12,000	72	540	68	---	



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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B T E X			
							-----ppb----->			
B-6 72.66	5/9/89	12.11	60.55	0	8015/8020	26,000	120	110	250	1,300
	8/9/89	14.72	57.94	0	8015/8020	19,000	470	150	440	1,400
	11/9/89	13.85	58.81	0	8015/8020	13,000	70	36	36	440
	2/8/90	7.73	64.93	0	8015/8020	2,900	16	5	10	58
	5/10/90	---	---	---	---	---	---	---	---	---
	8/9/90	14.51	58.15	0	8015/8020	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	8015/8020	210,000	13,000	19,000	2,000	20,000
	8/9/89	16.36	59.04	0	8015/8020	672,000	8,7000	17,000	2,700	30,000
	11/9/89	16.64	58.76	0	8015/8020	150,000	7,000	12,000	1,800	16,000
	2/8/90	15.69	59.71	0	8015/8020	41,000	2,500	6,900	1,100	11,000
	5/10/90	---	---	---	---	---	---	---	---	---
	8/9/90	16.31	59.09	0	8015/8020	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	8015/8020	280	2.7	2.4	3	12
	3/19/93	9.97	60.10	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	6/10/93	10.98	59.09	0	8015/8020	<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	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/9/94	10.67	59.40	0	8015/8020	<50	<0.5	0.7	<0.5	0.7
	9/21/94	12.29	57.78	0	8015/8020	<50	2.5	<0.5	1.0	<0.5
	12/20/94	15.53	54.54	0	8015/8020	<50	0.5	<0.5	<0.5	<0.5
	3/28/95	8.45	61.62	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/22/95	10.57	59.50	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/21/95	11.59	58.48	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
F 72.01	5/9/89	18.70	53.31	0	8015/8020	<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	8015/8020	<50	0.4	<0.3	0.3	<0.6
	5/10/90	18.98	53.03	0	---	---	---	---	---	---



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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)					X
						←-----ppb----->					
						B	T	E			
F	8/9/90	18.95	53.06	0	---	---	---	---	---	---	
(cont)	11/13/90	19.10	52.91	0	---	---	---	---	---	---	
	3/27/91	---	---	---	8015/8020	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	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	5/1/92	Dry	---	---	---	---	---	---	---	---	
71.72	11/18/92	14.85	56.87	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	3/19/93	14.25	57.47	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5	
	6/10/93	13.92	57.80	0	8015/8020	<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	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	3/9/94	12.99	58.73	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	9/21/94	16.30	55.42	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	12/20/94	12.57	59.15	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	3/28/95	8.95	62.77	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	6/22/95	13.77	57.95	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	9/21/95	13.45	58.27	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
EA-1	5/9/89	14.56	59.38	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5	
	8/9/89	16.09	57.85	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5	
73.94	11/9/89	15.84	58.10	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5	
	2/8/90	15.05	58.89	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	
	5/10/90	15.65	58.29	0	8015/8020	<50	1	0.3	<0.3	<0.6	
	8/9/90	15.67	58.27	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	
	11/13/90	16.32	57.62	0	8015/8020	<50	<0.4	<0.3	<0.3	<0.4	
	3/27/91	---	---	---	8015/8020	<50	0.7	0.5	<0.5	<0.5	
	4/5/91	14.03	59.91	0	---	---	---	---	---	---	
	6/19/91	15.56	58.38	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	8/21/91	15.99	57.95	0	8015/8020	<50	<0.4	<0.3	<0.3	<0.4	
	11/08/91	16.13	57.81	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	2/13/92	15.10	58.84	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	
	5/1/92	18.80	55.14	0	8015/8020	<50	2.7	<0.5	<0.5	<0.5	
71.85	11/18/92	15.97	55.88	0	8015/8020	<10	<0.3	<0.3	<0.3	<0.5	
	3/19/93	13.66	58.19	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5	
	6/10/93	14.71	57.14	0	8015/8020	<50	<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	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	



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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <-----ppb----->	B	T	E	X
EA-1 (cont)	3/9/94	14.38	57.47	0	8015/8020	<50	<0.5	1.0	<0.5	<0.5
	9/21/94	16.12	55.73	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	14.05	57.80	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/28/95	12.05	59.80	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/22/95	14.35	57.50	0	8015/8020	<50	2.0	<0.5	<0.5	<0.5
	9/21/95	15.36	56.49	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
EA-2  75.24	5/9/89	15.95	59.29	0	8015/8020	760	<0.5	<0.5	1.1	<0.5
	8/9/89	17.45	57.79	0	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	11/9/89	17.41	57.83	0	8015/8020	<500	<0.5	1	<0.5	<0.5
	2/8/90	16.57	58.67	0	8015/8020	190	<0.3	<0.3	<0.3	<0.6
	5/10/90	17.12	58.12	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6
	8/9/90	17.20	58.04	0	8015/8020	120	<0.3	<0.3	<0.3	<0.6
	11/13/90	17.88	57.36	0	8015/8020	160	<0.4	1	<0.3	<0.4
	3/27/91	---	---	---	8015/8020	110	<0.5	<0.5	<0.5	<0.5
	4/5/91	15.54	59.70	0	---	---	---	---	---	---
	6/19/91	17.07	58.17	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	8/21/91	17.46	57.78	0	8015/8020	70	0.8	1.4	<0.3	<0.4
	11/8/91	17.58	57.66	0	8015/8020	<50	<0.5	0.7	<0.5	<0.5
	2/13/92	16.69	58.55	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/1/92	16.16	59.08	0	8015/8020	340	<0.5	2.6	0.7	<0.5
76.24	11/18/92	17.61	58.63	0	8015/8020	450	<0.5	3.3	<0.5	0.8
	3/19/93	15.00	61.24	0	8015/8020	450	<0.5	2.3	0.6	<1.5
	6/10/93	16.08	60.16	0	8015/8020	250	<0.5	1.3	<0.5	<1.5
	9/8/93	17.07	59.17	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	12/21/93	16.60	59.64	0	8015/8020	170	<0.5	1.3	<0.5	<0.5
	3/9/94	15.83	60.41	0	8015/8020	200	1.8	1.4	<0.5	<0.5
	9/21/94	17.60	58.64	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	15.53	60.71	0	8015/8020	950	31	15	1.7	<0.5
	3/28/95	13.28	62.96	0	8015/8020	71	2.0	0.6	<0.5	<0.5
	6/22/95	15.62	60.62	0	8015/8020	300	<0.5	3.7	<0.5	0.6
	9/21/95	16.78	59.46	0	8015/8020	170	<0.5	<0.5	<0.5	<0.5
Trip Blank TBLB	5/9/89	---	---	---	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	8/9/89	---	---	---	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	11/9/89	---	---	---	8015/8020	<500	<0.5	<0.5	<0.5	<0.5
	2/8/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6
	5/10/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6



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

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	←-----ppb----->				
						TPPH(G)	B	T	E	X
TBLB	8/9/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6
(cont)	11/13/90	---	---	---	8015/8020	<50	<0.4	<0.3	<0.3	<0.4
	3/27/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/19/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	8/21/91	---	---	---	8015/8020	<50	<0.4	<0.3	<0.3	<0.4
	11/8/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	2/13/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	5/1/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	11/18/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/19/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	6/10/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	9/8/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	12/21/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/9/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/21/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/28/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/22/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/21/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5



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

EXPLANATION:

DTW = Depth to water  
TOC = Top of casing elevation  
GWE = Groundwater elevation  
msl = Mean sea level  
TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline  
B = Benzene  
T = Toluene  
E = Ethylbenzene  
X = Xylenes  
ppb = Parts per billion  
--- = Not analyzed/not applicable

ANALYTIC METHODS

8015 = EPA Method 8015/5030 for TPPH(G)  
8020 = EPA Method 8020 for BTEX

NOTES:

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

Analytic 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.



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
B-3	3/28/95	1.54	2.0
	6/22/95	1.23	0.5
	9/21/95	0.30	0.5

5127.pt



## STANDARD OPERATING PROCEDURE QUARTERLY 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 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 analytic 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, preservative (if any), and the sample collector's initials. The water samples are placed in cooler maintained at 4 C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivery 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 and decontamination water generated during sampling activities is taken to Chevron's Richmond Refinery for disposal.



WELL SAMPLING FIELD DATA SHEET

SAMPLER Guadalupe Sanchez / F Cline DATE 9-21-95  
 ADDRESS 3701 Broadway JOB # 5127-85  
 CITY Oakland SS# 9-1026

Well ID B-1 Well Condition OK

Well Location Description N. Entrance on McArthur Blvd

Well Diameter 4 in Hydrocarbon Thickness 0

Total Depth 32.89 ft

Depth to Liquid 13.65 ft

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

3 # of casing Volume 19.24 x 0.66 x (VF) 12.7 #Estimated 38.1 gal.

Purge Equipment Stack Pump Sampling Equipment Disposable Bailor

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

Starting Time 1150 Purging Flow Rate 2 gpm.

Sampling Time 1214

Time	pH	Conductivity	Temperature	Volume
<u>1157</u>	<u>6.8</u>	<u>740</u>	<u>70.0</u>	<u>14 gal</u>
<u>1204</u>	<u>6.7</u>	<u>750</u>	<u>69.6</u>	<u>28 gal</u>
<u>1209</u>	<u>6.7</u>	<u>760</u>	<u>69.7</u>	<u>38 gal</u>
<u>1214</u>	<u>6.7</u>	<u>760</u>	<u>69.7</u>	<u>39 gal</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>GTEL</u>	<u>Gas BTEX</u>

Comments \_\_\_\_\_

WELL SAMPLING FIELD DATA SHEET

SAMPLER Guadalupe Sanchez / F Cline DATE 9-21-95  
 ADDRESS 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID B-2 Well Condition OK

Well Location Description At corner of Broadway / MacArthur

Well Diameter 2 in Hydrocarbon Thickness skene

Total Depth 18.8 ft

Depth to Liquid 15.80 ft

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

3 # of casing Volume 3.00 x .17 x(VF) 0.5 #Estimated 1.5 gal.

Purge Equipment Barter Sampling Equipment Disposable Barter

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

Starting Time 1245 Purging Flow Rate \_\_\_\_\_ gpm.

Sampling Time 1250

Time	pH	Conductivity	Temperature	Volume
<u>1246</u>	<u>6.7</u>	<u>1310</u>	<u>69.1</u>	<u>0.5 gal</u>
<u>1248</u>	<u>6.6</u>	<u>1280</u>	<u>68.6</u>	<u>1.0</u>
<u>1250</u>	<u>6.6</u>	<u>1270</u>	<u>68.5</u>	<u>1.5 ↓</u>

Weather Conditions sunny

Water Color: gray Odor: strong

Sediment Description water

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>B-2</u>	<u>3X40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gas DTEX</u>

Comments \_\_\_\_\_

**WELL SAMPLING FIELD DATA SHEET**

SAMPLER Guadalupe Sanchez / F Cline DATE 9-21-95  
 ADDRESS 3701 Broadway JOB # 5127-85  
 CITY Oakland SS# 9-1026

Well ID B-4 Well Condition OK  
 Well Location Description West Entrance on Broadway ~ 6' from sidewalk

Well Diameter 2 in Hydrocarbon Thickness 0  
 Total Depth 19.27 ft  
 Depth to Liquid 16.19 ft  
 # of casing Volume 3.08 x .17 x(VF) 0.5 #Estimated 1.5 gal. purge Volume

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

Purge Equipment Bailer Sampling Equipment Disposable Bailer  
 Did well dewater no If yes, Time \_\_\_\_\_ Volume \_\_\_\_\_

Starting Time 1225 Purging Flow Rate \_\_\_\_\_ gpm.  
 Sampling Time 1232

Time	pH	Conductivity	Temperature	Volume
<u>1226</u>	<u>6.6</u>	<u>1830</u>	<u>68.1</u>	<u>0.5 gal</u>
<u>1228</u>	<u>6.6</u>	<u>1840</u>	<u>67.0</u>	<u>1.0 gal</u>
<u>1232</u>	<u>6.5</u>	<u>1850</u>	<u>67.1</u>	<u>1.5 gal</u>

Weather Conditions Sunny  
 Water Color: clear Odor: stranj  
 Sediment Description none

**LABORATORY INFORMATION**

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>B-4</u>	<u>3x40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gas RTEX</u>

Comments \_\_\_\_\_

WELL SAMPLING FIELD DATA SHEET

SAMPLER Guadalupe Sanchez / F Cline DATE 9-21-95  
 ADDRESS 3701 Broadway JOB # 5127-85  
 CITY Oakland SS# 9-1026

Well ID B Well Condition OK  
 Well Location Description \_\_\_\_\_

Well Diameter 2" in Hydrocarbon Thickness 0

Total Depth 33.0 ft  
 Depth to Liquid 11.59 ft

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

3 # of casing Volume 21.41 x 0.17 x(VF) 3.6 #Estimated 10.9 gal.  
 Purge Volume \_\_\_\_\_

Purge Equipment Suction Sampling Equipment Disposable Bailer  
 Did well dewater NO If yes, Time \_\_\_\_\_ Volume \_\_\_\_\_

Starting Time 11:15 Purging Flow Rate 2.0 gpm.  
 Sampling Time 11:24

Time	pH	Conductivity	Temperature	Volume
<u>11:17</u>	<u>7.00</u>	<u>788</u>	<u>20.1</u>	<u>4</u>
<u>11:19</u>	<u>6.88</u>	<u>789</u>	<u>19.8</u>	<u>8</u>
<u>11:21</u>	<u>6.79</u>	<u>790</u>	<u>19.9</u>	<u>12</u>
<u>11:24</u>	<u>6.80</u>	<u>789</u>	<u>20.1</u>	<u>13</u>

Weather Conditions Partly Cloudy  
 Water Color: Clear Odor: None  
 Sediment Description None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>B</u>	<u>3X40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gas DTEX</u>

Comments \_\_\_\_\_

11:33  
 11:35 7.10 2.0 510  
 11:37

WELL SAMPLING FIELD DATA SHEET

SAMPLER Guadalupe Sanchez / F Cline DATE 9-21-95  
 ADDRESS 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID F Well Condition Okay

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

Well Diameter 24 in Hydrocarbon Thickness 0

Total Depth 211 ft

Depth to Liquid 1345 ft

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

3 # of casing Volume 7.65 x 0.17 x (VF) 1.3 #Estimated 3.9 gal. purge Volume

Purge Equipment Suction Sampling Equipment Disposable Bailer

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

Starting Time 10:58 Purging Flow Rate 0.05 gpm.

Sampling Time 11:07

Time	pH	Conductivity	Temperature	Volume
<u>11:00</u>	<u>6.83</u>	<u>826</u>	<u>22-3</u>	<u>1.3</u>
<u>11:02</u>	<u>6.69</u>	<u>820</u>	<u>21.9</u>	<u>2.6</u>
<u>11:04</u>	<u>6.64</u>	<u>824</u>	<u>21.0</u>	<u>3.9</u>
<u>11:07</u>	<u>6.66</u>	<u>826</u>	<u>21.2</u>	<u>9.2</u>

Weather Conditions Partly cloudy Warm

Water Color: clear Odor: None

Sediment Description None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>F</u>	<u>3X40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gas BTEX</u>

Comments \_\_\_\_\_

WELL SAMPLING FIELD DATA SHEET

SAMPLER Guadalupe Sanchez / F Cline DATE 9-21-95  
 ADDRESS 3701 Broadway JOB # 5127.85  
 CITY Oakland SS# 9-1026

Well ID BA-1 Well Condition okay

Well Location Description 4"

Well Diameter \_\_\_\_\_ in Hydrocarbon Thickness e

Total Depth 27.34 ft

Depth to Liquid 15.36 ft

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

3 # of casing Volume 11.98 x 0.66 x(VF) 7.9 #Estimated 23.7 gal.

Purge Equipment Suction Sampling Equipment Disposable Bailor

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

Starting Time 10:47 Purging Flow Rate 4 gpm.

Sampling Time 10:57

Time	pH	Conductivity	Temperature	Volume
<u>10:49</u>	<u>6.68</u>	<u>806</u>	<u>20.7</u>	<u>8</u>
<u>10:51</u>	<u>6.60</u>	<u>798</u>	<u>20.6</u>	<u>16</u>
<u>10:53</u>	<u>6.58</u>	<u>793</u>	<u>20.7</u>	<u>24</u>
<u>10:57</u>	<u>6.60</u>	<u>795</u>	<u>20.6</u>	<u>25</u>

Weather Conditions Cloudy Warm  
 Water Color: clear Odor: None  
 Sediment Description None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>BA-1</u>	<u>3X40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gas BTX</u>

Comments \_\_\_\_\_

WELL SAMPLING FIELD DATA SHEET

SAMPLER Guadalupe Sanchez / F Cline DATE 9-21-95  
 ADDRESS 3701 Broadway JOB # 5127-85  
 CITY Oakland SS# 9-1026

Well ID B11-2 Well Condition Okay  
 Well Location Description \_\_\_\_\_

Well Diameter 4" in Hydrocarbon Thickness 0

Total Depth 29.8 ft

Depth to Liquid 16.78 ft

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

3 # of casing Volume 13.02 x Oil x (VF) 8.6 #Estimated 26. gal.  
 Purge Volume

Purge Equipment Suction Sampling Equipment Disposable Bailer

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

Starting Time 11:33 Purging Flow Rate 4.5 gpm.

Sampling Time 11:43

Time	pH	Conductivity	Temperature	Volume
<u>11:35</u>	<u>7.10</u>	<u>510</u>	<u>21.0</u>	<u>9</u>
<u>11:37</u>	<u>7.17</u>	<u>511</u>	<u>21.0</u>	<u>18</u>
<u>11:39</u>	<u>7.20</u>	<u>512</u>	<u>20.8</u>	<u>27</u>
<u>11:43</u>	<u>7.19</u>	<u>510</u>	<u>20.8</u>	<u>28</u>

Weather Conditions Partly cloudy

Water Color: Clear Odor: None

Sediment Description None

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
<u>B11-2</u>	<u>3x40ml</u>	<u>Y</u>	<u>HCL</u>	<u>GTEL</u>	<u>Gas PTEX</u>

Comments \_\_\_\_\_

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

Chevron Facility Number 7-1026  
Facility Address 3701 Broadway Oakland  
Consultant Project Number 572783  
Consultant Name Gettler-Ryan  
Address 6747 Sierra Ct, Ste J, Dublin 94568  
Project Contact (Name) Argy Levton  
(Phone) 510 551-7555 (Fax Number) 551-7888

Chevron Contact (Name) Mark Miller  
(Phone) (510)  
Laboratory Name GTEL  
Laboratory Release Number 3970530  
Samples Collected by (Name) Guadalupe Saucher  
Collection Date 9-21-95  
Signature Guadalupe Saucher

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Leak (Yes or No)	Analytes To Be Performed										Remarks
								STX + TPH-GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Greases (8020)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)			
TB-LB	01	2	W	G		HCL	Y											Analyze in order
EA-1	02	3			1057													
F	03				1107													
E	04				1124													
EA-2	05				1143 <del>1237</del>													
B-1	06				1214													
B-4	07				1232													
B-2	08				1250													

DO NOT BILL  
TB-LB ANALYSIS

CS090254

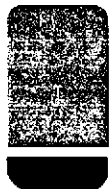
Relinquished By (Signature) <u>Guadalupe Saucher</u>	Organization <u>GIR</u>	Date/Time <u>9-21-95</u>	Received By (Signature) <u>D. Harding</u>	Organization <u>GIR</u>	Date/Time <u>9/22 9:50 a.m.</u>
Relinquished By (Signature) <u>D. Harding</u>	Organization <u>G-R</u>	Date/Time <u>9/22 11:30</u>	Received By (Signature) <u>Joe Weber</u>	Organization <u>GTEL</u>	Date/Time <u>9/22/95 4:30</u>
Relinquished By (Signature) <u>Joe Weber</u>	Organization <u>GTEL</u>	Date/Time <u>9/22/95 1:10</u>	Received For Laboratory By (Signature)		Date/Time

Turn Around Time (Circle Choice)

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

COC-3-DWG/03 B1/HCT





# GTEL

ENVIRONMENTAL  
LABORATORIES, INC.

**Northwest Region**

4080-C Pike Lane  
Concord, CA 94520  
(510) 685-7852  
(800) 544-3422 from inside California  
(800) 423-7143 from outside California  
(510) 825-0720 (FAX)

October 6, 1995

Argy Leyton  
Gettler-Ryan, Inc.  
6747 Sierra Ct.  
Suite J  
Dublin, CA 94568

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RE: GTEL Client ID: GTR01CHV08  
Login Number: C5090254  
Project ID (number): 5127.85  
Project ID (name): Chevron/#9-1026/3701 Broadway, Oakland, CA

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Dear Argy Leyton:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 09/22/95.

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.

GTEL is certified by the Department of Health Service under Certification Number E1075.

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.

Chip Poalinelli  
Laboratory Director

**ANALYTICAL RESULTS**  
Volatile Organics

GTEL Client ID: GTR01CHV08  
 Login Number: C5090254  
 Project ID (number): 5127.85  
 Project ID (name): Chevron/#9-1026/3701 Broadway, Oakland, CA

Method: EPA8020/15  
 Matrix: Aqueous

GTEL Sample Number	C5090254-01	C5090254-02	C5090254-03	C5090254-04
Client ID	TB-LB	EA-1	F	E
Date Sampled	09/21/95	09/21/95	09/21/95	09/21/95
Date Analyzed	10/02/95	10/02/95	10/02/95	10/02/95
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting		Concentration:			
	Limit	Units				
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
TPH as GAS	50	ug/L	< 50	< 50	< 50	< 50
BFB (Surrogate)	--	%	113.	115.	114.	115.

Notes:

**Dilution Factor:**

Dilution factor indicates the adjustments made for sample dilution.

**EPA8020/15:**

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

**ANALYTICAL RESULTS**  
Volatile Organics

GTEL Client ID: GTR01CHV08  
 Login Number: C5090254  
 Project ID (number): 5127.85  
 Project ID (name): Chevron/#9-1026/3701 Broadway, Oakland, CA

Method: EPA8020/15  
 Matrix: Aqueous

GTEL Sample Number	C5090254-05	C5090254-06	C5090254-07	C5090254-08
Client ID	EA-2	B-1	B-4	B-2
Date Sampled	09/21/95	09/21/95	09/21/95	09/21/95
Date Analyzed	10/02/95	10/02/95	10/03/95	10/05/95
Dilution Factor	1.00	1.00	50.0	100.

Analyte	Reporting		Concentration:			
	Limit	Units				
Benzene	0.5	ug/L	< 0.5	19.	12000	24000
Toluene	0.5	ug/L	< 0.5	1.0	72.	2900
Ethylbenzene	0.5	ug/L	< 0.5	1.2	540	1800
Xylenes (total)	0.5	ug/L	< 0.5	6.1	68.	9800
TPH as GAS	50	ug/L	170	140	20000	84000
BFB (Surrogate)	--	%	111.	115.	116.	84.1

Notes:

**Dilution Factor:**

Dilution factor indicates the adjustments made for sample dilution.

**EPA8020/15:**

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

**C5090254-07:**

Data obtained from multiple dilutions. Dilution factor noted represents the dilution used for majority of results.

GTEL Client ID: GTR01CHV08  
Login Number: C5090254  
Project ID (number): 5127.85  
Project ID (name): Chevron/#9-1026/3701 Broadway, Oakland, CA

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA8020/15  
Matrix: Aqueous

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT	BFB
Method: EPA8020/15	Acceptability Limits:		45-125%	45-125%
--	09025401	TB-LB	120.	113.
--	09025402	EA-1	121.	115.
--	09025403	F	120.	114.
--	09025404	E	121.	115.
--	09025405	EA-2	120.	111.
--	09025406	B-1	119.	115.
--	09025407	B-4	122.	116.
--	09025408	B-2	94.0	84.1
Q100295-1	BW0100295	Method Blank Water	135.*	124.
Q100295-3	MS09021113	Matrix Spike	127.*	140.*
Q100295-4	MD09021113	Matrix Spike Dupli	122.	135.*

Notes:

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

GTEL Client ID: GTR01CHV08                      QUALITY CONTROL RESULTS  
Login Number: C5090254  
Project ID (number): 5127.85  
Project ID (name): Chevron/#9-1026/3701 Broadway, Oakland, CA

Volatile Organics  
Method: EPA8020/15  
Matrix: Aqueous

Method Blank Results

QC Batch No: Q100295-1  
Date Analyzed: 02-OCT-95

Analyte	Method: EPA8020/15	Concentration: ug/L
Benzene	< 0.300	
Toluene	< 0.300	
Ethylbenzene	< 0.300	
Xylenes (Total)	< 0.500	
TPH as Gasoline	< 50.0	

Notes:

GTEL Client ID: GTR01CHV08  
 Login Number: C5090254  
 Project ID (number): 5127.85  
 Project ID (name): Chevron/#9-1026/3701 Broadway, Oakland, CA

QUALITY CONTROL RESULTS

Volatile Organics  
 Method: EPA8020/15  
 Matrix: Aqueous

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) Results

GTEL Sample ID: C5090211-13		MS ID: MS09021113		MSD ID: MD09021113						
Analysis Date: 30-SEP-95		03-OCT-95		03-OCT-95						
Units: ug/L	Sample	Spikes Added		MS	MS	MSD	MSD	Acceptability Limits		
Analyte	Conc.	MS	MSD	Conc.	% Rec.	Conc.	% Rec.	RPD	RPD	% Rec.
Benzene	< 0.5 (0.000)	20.0	20.0	25.7	129.	24.0	120.	7.2	34	57.3-138
Toluene	< 0.5 (0.000)	20.0	20.0	23.9	120.	24.3	122.	1.7	31	63-134
Ethylbenzene	< 0.5 (0.000)	20.0	20.0	24.2	121.	24.7	124.	2.4	38	59.3-137
Xylenes (Total)	< 0.5 (0.000)	60.0	60.0	73.0	122.	73.1	122.	0.0	31	59.3-144

Notes:

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

GTEL Client ID: GTR01CHV08  
Login Number: C5090254  
Project ID (number): 5127.85  
Project ID (name): Chevron/#9-1026/3701 Broadway, Oakland, CA

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA8020/15  
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, OG, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	--	--	--
Surrogate Recovery	*	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments: