Chevron U.S.A. Products Company
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Operations

March 2, 1993

Mr. Scott Seery
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Service Station No. 9-8139
16304 Foothill Rd., San Leandro, California

Dear Mr. Seery :

Enclosed is the quarterly monitoring and sampling report dated February 26, 1993 from Sierra Environmental Services.

During this sampling period, dissolved hydrocarbon were detected in the monitoring wells and had the following concentrations : ND<50 to 32000 ppb total purgeable petroleum hydrocarbon as gasoline, ND<0.5 to 5900 ppb benzene, ND<0.5 to 2900 ppb toluene, ND<0.5 to 1300 ppb ethylbenzene, and ND<0.5 to 5000 ppb xylenes. Depth to water during the sampling event was from 9.26 to 17.07 feet.

Geraghty & Miller, Inc. at the request of Chevron U.S.A. Products Company conducted an evaluation on the treatment system located at the above referenced site. Geraghty & Miller made several recommendations which will be implemented. These recommendations are expected to be completed in mid to late February. The recommendations being implemented will improve the system's performance.

If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/MacFile 9-8139R6

Enclosure

cc: Mr. Lester Feldman, RWQCB-S.F.Bay Region
2101 Webster Str., Suite 500, Oakland, CA 94612

Mr. Steve Willer, Chevron U.S.A. Products Co.

MAR 1 '93 J.M.M.

SIERRA
Environmental Services

February 26, 1993

Mr. Ken Kan
Chevron USA
P.O. Box 5004
San Ramon, CA 94583

Re: Chevron Service Station #9-8139
16304 Foothill Boulevard
San Leandro, California
SES Project #1-289-04

Dear Mr. Kan:

This report presents the results of the quarterly water sampling at Chevron Service Station #9-8139, located at 16304 Foothill Boulevard in San Leandro, California (Figure 1, Appendix A). Nine wells, MW-1 through MW-3 and MW-6 through MW-11 were sampled (Figure 2, Appendix A).

On January 29, 1993, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not present in any of the site wells. Water level data are shown in Table 1 (Appendix B) and a ground water elevation contour map is included as Figure 2 (Appendix A).

The ground water samples were collected on January 29, 1993 in accordance with SES Standard Operating Procedure - Ground Water Sampling (Appendix C). All analyses were performed by GTEL of Concord, California. Analytic results for ground water are presented in Table 2 (Appendix B). The chain of custody document and laboratory analytic reports are included in Appendix D. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Chevron. Please call if you have any questions.

Sincerely,
Sierra Environmental Services

Carol Eaton for
Argy Mena
Staff Geologist

REGISTERED PROFESSIONAL ENGINEER
CHRIS J. BRAMER
C 048846
Exp 5/96
CIVIL
STATE OF CALIFORNIA

Chris J. Bramer
Professional Engineer #C48846

AM/CJB/bjc
28904QM.FE3

Appendices
A - Figures
B - Tables
C - SES Standard Operating Procedure
D - Chain of Custody Document and Laboratory Analytic Reports

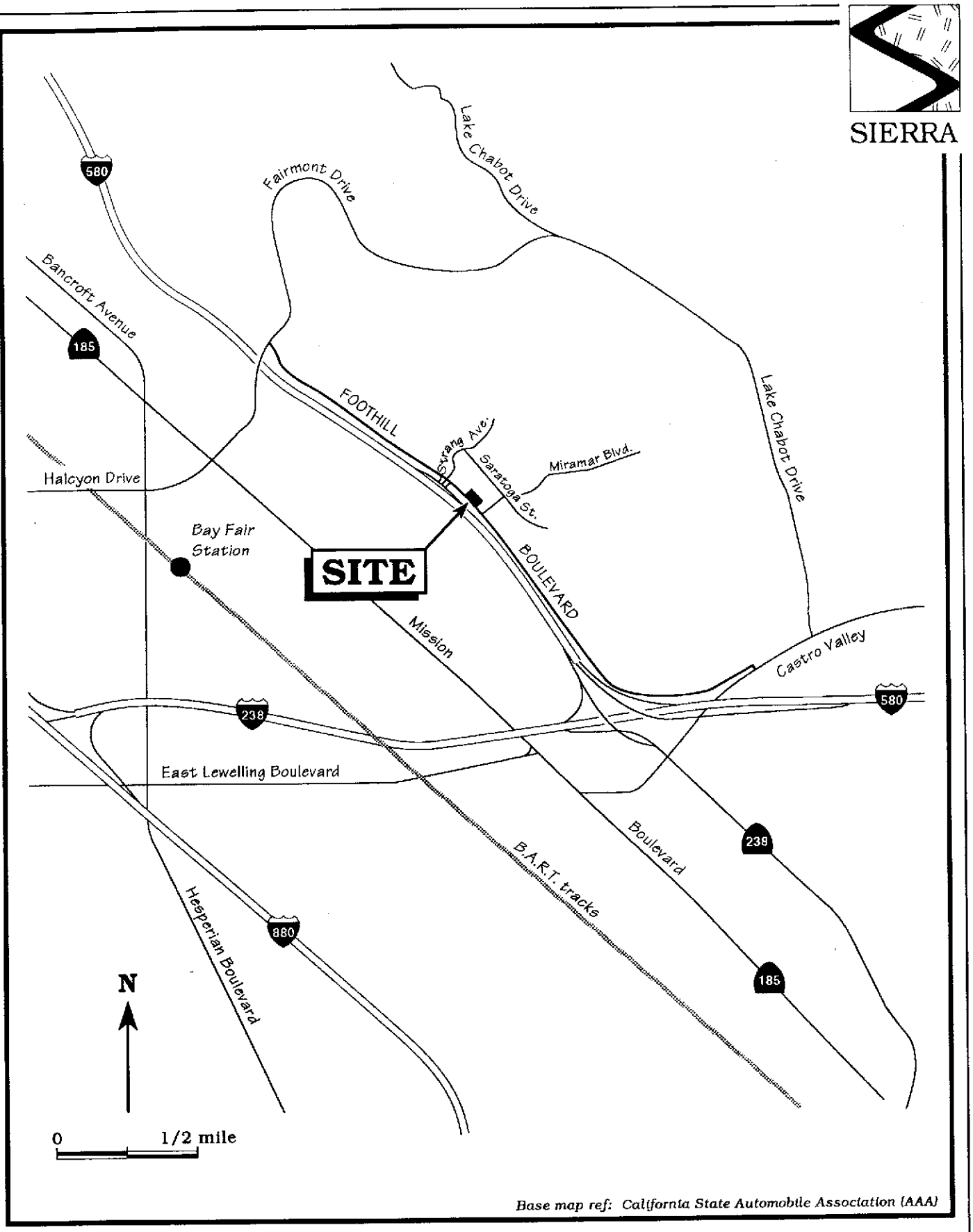

Figure 1. Site Location Map – Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California

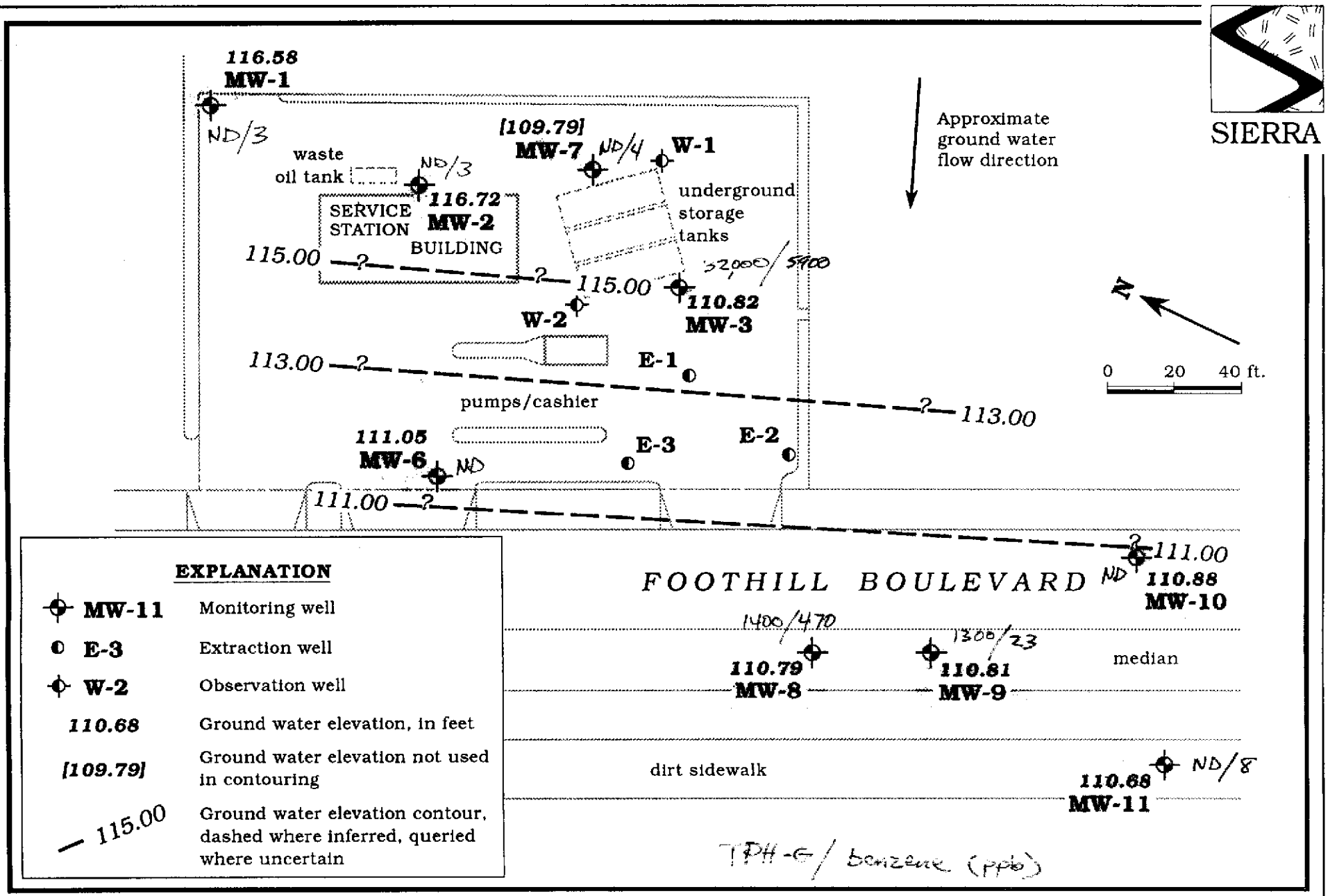

Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map – January 29, 1993 – Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California

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Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------*feet below grade*---------->		
MW-1	3/23/90	12.92	127.09	114.17	0	25 - 30	22 - 30	20.5 - 22
	9/6/90	14.68		112.41	0			
	9/25/90	15.01		112.08	0			
	11/29/90	14.82		112.27	0			
	2/20/91	14.29		112.80	0			
	4/19/91	12.16		114.93	0			
	5/22/91	13.69		113.40	0			
	8/22/91	15.38		111.71	0			
	11/13/91	15.80		111.29	0			
	1/30/92	14.71		112.38	0			
	4/23/92	12.22		114.87	0			
	7/27/92	14.30		112.79	0			
	10/26/92	15.90		111.19	0			
	1/29/93	**10.51**		**116.58**	**0**			
MW-2	3/23/90	12.40	125.98	113.58	0	25 - 30	23 - 31.5	21.5 - 23
	9/6/90	14.85		111.13	0			
	9/25/90	14.80		111.18	0			
	11/29/90	14.40		111.58	0			
	2/20/91	14.09		111.89	0			
	4/19/91	12.62		113.36	0			
	5/22/91	12.98		113.00	0			
	8/22/91	14.93		111.05	0			
	11/13/91	15.42		110.56	0			
	1/30/92	14.70		111.28	0			
	4/23/92	13.83		112.15	0			
	7/27/92	15.30		110.68	0			
	10/26/92	15.62		110.36	0			
	10/21/93	**9.26**		**116.72**	**0**			

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Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------feet below grade---------->		
MW-3	3/23/90	17.50	127.84	110.34	0	15.5 - 25.5	12.5 - 25.5	10.5 - 12.5
	9/6/90	18.72	126.77	108.05	0			
	9/25/90	18.40		108.37	0			
	11/29/90	18.97		107.80	0			
	2/20/91	19.20		107.57	0			
	4/19/91	17.81		108.96	0			
	5/22/91	17.88		108.89	0			
	8/1/91	19.23		107.54	0			
	8/22/91	20.17		106.60	0			
	11/13/91	19.95		106.82	0			
	1/30/92	19.14		107.63	0			
	4/23/92	17.75		109.02	0			
	7/27/92	19.00		107.77	0			
	10/26/92	19.62		107.15	0			
	1/29/93	**15.95**		**110.82**	**0**			
MW-4	3/23/90	16.02	125.22	109.20	0	14 - 22	11 - 23	10 - 11
	9/6/90	17.35		107.87	0			
	9/25/90	17.48		107.74	0			
	11/29/90	17.61		107.61	0			
	2/20/91	17.81		107.41	0			
	4/19/91	15.80		109.42	0			
	5/22/91[2]	16.68		108.54	0			
MW-5	3/23/90	16.89	125.85	108.96	0	14.5 - 24	13 - 25.5	11 - 13
	9/7/90	18.46		107.42[1]	0.04			
	9/25/90	19.30		107.58[1]	1.3			
	11/29/90	18.87		107.54[1]	0.71			
	2/20/91	18.91		107.31[1]	0.47			
	4/19/91	16.99		109.24[1]	0.48			
	5/22/91[2]	17.69		108.42[1]	0.33			

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Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------feet below grade---------->		
MW-6	3/23/90	18.51	124.18	105.67	0	24.5 - 29.5	23 - 34	21 - 23
	9/7/90	16.18		108.00	0			
	9/25/90	16.42		107.76	0			
	11/29/90	16.11		108.07	0			
	2/20/91	16.09		108.09	0			
	4/19/91	15.15		109.03	0			
	5/22/91	15.41		108.77	0			
	8/23/91	17.80		106.38	0			
	11/14/91	16.52		107.66	0			
	1/30/92	16.48		107.70	0			
	4/23/92	16.20		107.98	0			
	7/27/92	16.52		107.66	0			
	10/26/92	17.12		107.06	0			
	1/29/93	**13.13**		**111.05**	**0**			
MW-7	3/23/90	21.40	126.86	105.46	0	21.5 - 27	20.5 - 26.5	18.5 - 20.5
	9/7/90	18.38		108.48	0			
	9/25/90	19.25		107.61	0			
	11/29/90	18.55		108.31	0			
	2/20/91	18.55		108.31	0			
	4/19/91	17.33		109.53	0			
	5/22/91	17.42		109.44	0			
	8/22/91	19.05		107.81	0			
	11/13/91	21.84		105.02	0			
	1/30/92	22.42		104.44	0			
	4/23/92	22.04		104.82	0			
	7/27/92	22.24		104.62	0			
	10/26/92	22.11		104.75	0			
	1/29/93	**17.07**		**109.79**	**0**			

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Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------*feet below grade*---------->		
MW-8	9/7/90	16.07	123.61	107.54	0	22 - 30.5	20.5 - 31.5	17.5 - 20.5
	9/25/90	16.20		107.41	0			
	11/29/90	16.30		107.31	0			
	2/20/91	16.32		107.29	0			
	4/19/91	14.71		108.90	0			
	5/22/91	15.42		108.19	0			
	8/22/91	17.15		106.46	0			
	11/14/91	16.99		106.62	0			
	1/30/92	16.30		107.31	0			
	4/23/92	15.05		108.56	0			
	7/27/92	16.08		107.53	0			
	10/26/92	16.72		106.89	0			
	1/29/93	**12.82**		**110.79**	**0**			
MW-9	8/22/91	17.60	124.20	106.60	0	17 - 27	15 - 27	13 - 15
	11/14/91	17.48		106.72	0			
	1/30/92	16.71		107.49	0			
	4/23/92	15.23		108.97	0			
	7/27/92	16.72		107.48	0			
	10/26/92	17.22		106.98	0			
	1/29/93	**13.39**		**110.81**	**0**			
MW-10	7/27/92	17.52	125.03	107.51	0	14.5 - 30	12 - 30	9 - 12
	10/27/92	18.06		106.97	0			
	1/29/93	**14.15**		**110.88**	**0**			
MW-11	7/27/92	15.38	122.92	107.54	0	14.5 - 30	11 - 30	8 - 11
	10/26/92	15.97		106.95	0			
	1/29/93	**12.24**		**110.68**	**0**			

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Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------*feet below grade*---------->		
EW-1	8/1/91	17.54	124.95	107.41	0	18 - 26.5	17 - 27	15 - 17
EW-2	8/1/91	18.07	125.79	107.72	0	12.5 - 22.5	11.5 - 28	10.5 - 11.5
EW-3	8/1/91	17.49	125.22	107.73	0	12.5 - 22.5	10.5 - 28	10.5 - 11.5

EXPLANATION:

DTW = Depth to water
TOC = Top of casing elevation
GWE = Ground water elevation
msl = Measurements referenced relative to mean sea level
--- = Not applicable/Not measured

NOTES:

All top of casing elevations compiled from Quarterly Ground Water Monitoring Report prepared for Chevron by Burlington Environmental Inc., December 3, 1992.

Well construction details were compiled from Burlington Environmental, Inc. boring logs dated November 1989, December 1989, May 1990, August 1990, June 1991 and April 1992.

* Product thickness was measured on and after January 29, 1993 with an MMC flexi-dip interface probe.

[1] Ground water elevation level corrected for the presence of free-phase hydrocarbons using assumed density of 0.79. Compiled from the Quarterly Ground Water Monitoring Report prepared for Chevron by Burlington Environmental Inc., December 3, 1992.

[2] Monitoring well was converted to a ground water extraction well on June 10, 1991.

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Table 2. Analytic Results for Ground Water - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	EDB
				<----------ppb---------->					
MW-1	12/5/89	UNK	8015/8020/413/504[1,2]	<500	<0.5	<0.5	<0.5	<0.5	<0.5
	5/24/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	9/6/90	SAL	8015/8020/504	<50	<0.5	0.8	<0.5	0.5	<0.5
	11/29/90	SAL	8015/8020	<50	0.7	0.9	<0.5	1	---
	2/20/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/13/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/31/92	SPA	8015/8020	<50	0.5	<0.5	<0.5	0.5	---
	4/23/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/26/92	SPA	8015/8020	<50	0.6	<0.5	<0.5	<0.5	---
	1/29/93	**GTEL**	**8015/8020**	**<50**	**3**	**3**	**0.7**	**3**	**---**
MW-2	12/5/89	UNK	8015/8020/413/504[1,2]	<500	<0.5	<0.5	<0.5	0.9	<0.5
	5/24/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	9/6/90	SAL	8015/8020/504	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	11/29/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/13/91	SAL	8015/8020	58	<0.5	0.5	0.7	2.3	---
	1/31/92	SPA	8015/8020	<50	<0.5.	<0.5	<0.5	<0.5	---
	4/23/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	1.1	---
	10/26/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/93	**GTEL**	**8015/8020**	**<50**	**3**	**8**	**1**	**5**	**---**
MW-3	12/5/89	UNK	8015/8020/504	24,000	2,400	1,800	360	2,600	<0.5
(d)	12/5/89	UNK	8015/8020/413/504[2]	24,000	2,500	1,900	390	2,600	<0.5
	5/24/90	SAL	8015/8020	9,000	2,600	1,700	250	1,500	---
(d)	5/24/90	SAL	8015/8020	10,000	2,600	1,800	260	1,600	---
	9/6/90	SAL	8015/8020/504	3,500	900	550	110	460	<0.5

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Table 2. Analytic Results for Ground Water - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	EDB
				<--------		*ppb*			-------->
MW-3	11/29/90	SAL	8015/8020	9,200	1,100	1,100	210	1,100	---
(cont)	2/20/91	SAL	8015/8020	8,800	960	780	200	920	---
	5/22/91	SAL	8015/8020	28,000	5,800	1,200	460	2,300	--
	8/22/91	SAL	8015/8020	21,000	3,100	2,000	480	2,000	---
(d)	8/22/91	SAL	8015/8020	19,000	2,700	1,800	420	1,700	---
	11/13/91	SAL	8015/8020	18,000	2,400	1,200	450	2,200	---
	1/31/92	SPA	8015/8020	18,000	3,800	920	700	2,600	---
	4/23/92	SPA	8015/8020	46,000	5,000	1,900	1,000	3,500	---
	7/27/92	SPA	8015/8020	26,000	4,900	1,100	1,200	3,600	---
	10/26/92	SPA	8015/8020	6,600	1,100	41	220	570	---
	1/29/93	**GTEL**	**8015/8020**	**32,000**	**5,900**	**2,900**	**1,300**	**5,000**	---
MW-4**	12/5/89	UNK	8015/8020/504	19,000	390	1,300	460	1,800	<0.5
	5/24/90	SAL	8015/8020	4,500	210	440	140	480	---
	9/6/90	SAL	8015/8020/504	6,000	680	520	170	580	<0.5
	11/29/90	SAL	8015/8020	15,000	800	1,000	430	1,700	---
	2/20/91	SAL	8015/8020	15,000	640	390	420	1,600	---
(d)	2/20/91	SAL	8015/8020	15,000	680	410	430	1,600	---
	5/22/91	SAL	8015/8020	9,800	580	140	310	740	---
(d)	5/22/91	SAL	8015/8020	7,200	520	130	270	670	---
MW-5**	5/25/90	SAL	8015/8020/504	28,000	920	1,100	460	1,300	2.1
	9/7/90	SAL	8015/8020	---	---	---	---	---	---
	11/29/90	SAL	8015/8020	---	---	---	---	---	---
	2/20/91	SAL	8015/8020	---	---	---	---	---	---
	5/22/91	SAL	8015/8020	---	---	---	---	---	---
MW-6	5/25/90	SAL	8015/8020/504	<50	<2	<3	<3	<3	<0.02
	9/7/90	SAL	8015/8020/504	<50	<2	<3	<3	<3	<0.05
	11/29/90	SAL	8015/8020/504	<50	<0.5	<0.5	<0.5	<0.5	<0.05

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Table 2. Analytic Results for Ground Water - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	EDB
				<--------		*ppb*			-------->
MW-6	2/20/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
(cont)	5/22/91	SAL	8015/8020	<50	0.5	0.7	<0.5	1.1	---
	8/23/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/14/91	SAL	8015/8020/504	<50	<0.5	<0.5	<0.5	<0.5	<0.02
	11/14/91	SAL	8015/8020/504	<50	<0.5	0.6	<0.5	1.1	<0.05
	1/31/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
(d)	1/31/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/23/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
(d)	4/23/92	SPA	8015/8020	---	---	---	---	---	---
	7/27/92	SPA	8015/8020	<50	1.2	0.6	<0.5	1.9	---
	10/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/93	**GTEL**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	---
MW-7	5/25/90	SAL	8015/8020/504	<50	<2	<3	<3	<3	<0.02
	9/27/90	SAL	8015/8020/504	<50	<2	<3	<3	<3	<0.05
(d)	9/27/90	SAL	8015/8020/504	<50	<2	<3	<3	<3	<0.05
	11/29/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/13/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/31/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/23/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/26/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/93	**GTEL**	**8015/8020**	**<50**	**4**	**13**	**2**	**8**	---
MW-8	9/7/90	SAL	8015/8020/504	<50	<0.5	<0.5	<0.5	<0.5	<0.05
	11/29/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---

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Table 2. Analytic Results for Ground Water - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	EDB
				<----------ppb---------->					
MW-8 (d) (cont)	11/29/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/22/91	SAL	8015/8020	<50	0.6	<0.5	<0.5	1	---
	8/23/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/14/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/30/92	SPA	8015/8020	<50	1	0.7	<0.5	1.1	---
	4/24/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/93	**GTEL**	**8015/8020**	**1,400**	**470**	**470**	**37**	**160**	**---**
MW-9	8/22/91	SAL	8015/8020/504	9,600	46	170	98	1,200	<0.05
	11/14/91	SAL	8015/8020/504	11,000	130	58	86	1,500	<0.05
	1/30/92	SPA	8015/8020	11,000	210	29	110	1,900	---
	4/24/92	SPA	8015/8020	17,000	180	25	100	1,900	---
	7/27/92	SPA	8015/8020	2,800	59	1.6	18	280	---
	10/27/92	SPA	8015/8020	3,200	38	<0.5	19	200	---
	1/29/93	**GTEL**	**8015/8020**	**1,300**	**23**	**6**	**8**	**100**	**---**
MW-10	7/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/93	**GTEL**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**0.7**	**---**
MW-11	7/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/27/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/93	**GTEL**	**8015/8020**	**<50**	**8**	**16**	**2**	**10**	**---**
EW-1**	5/25/90	SAL	8015/8020/504	3,900	260	430	64	340	0.03

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Table 2. Analytic Results for Ground Water - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	EDB
				<----------		*ppb*			---------->
Rinseate	12/5/89	UNK	8015/8020/413/504[2]	<500	<0.5	<0.5	<0.5	<0.5	<0.05
	5/24/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	9/7/90	SAL	8015/8020/504	<50	<0.5	<0.5	<0.5	<0.5	<0.05
	2/20/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/13/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/30/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/23/92	SPA	8015/8020	---	---	---	---	---	---
Trip Blank	2/20/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/22/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/13/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/30/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/23/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/27/92	SPA	8015/8020	<0.5	<0.5	<0.5	<0.5	<0.5	---
	10/26/92	SPA	8015/8020	<0.5	<0.5	<0.5	<0.5	<0.5	---
TB-LB	**1/29/93**	**GTEL**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
Bailer Blank	**1/29/93**	**GTEL**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	---

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Table 2. Analytic Results for Ground Water - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California (continued)

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
TPH(D) = Total Petroleum Hydrocarbons as Diesel
O&G = Oil and Grease
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
EDB = Ethylene Dibromide
ppb = Parts per billion
--- = Not analyzed/Not applicable
(d) = Duplicate sample

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)
8015 = Modified EPA Method 8015 for TPH(D)
8020 = EPA Method 8020 for BTEX
413 = Method 413 for O&G
504 = EPA Method 504 for EDB

ANALYTIC LABORATORY:

UNK = Unknown
SAL = Superior Analytic Precision, Inc. of San Francisco and Martinez, California
SPA = Superior Precision Analytical, Inc. of San Francisco and Martinez, California
GTEL = GTEL Environmental Laboratories, Inc. of Concord, California

NOTES:

Analytic data prior to January 15, 1993 compiled from Quarterly Ground Water Monitoring Report prepared for Chevron by Burlington Environmental Inc., December 3, 1992.

1 TPH(D) analyzed during this event. Not detected at detection limits of 1,000 ppb.
2 O&G analyzed during this event. Not detected at detection limit of 5,000 ppb.

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Table 3. Analytic Results for Ground Water - Metals - Chevron Service Station #9-8139, 16304 Foothill Boulevard, San Leandro, California

Sample ID	Date Sampled	Analytic Lab	Analytic Method	Cadmium	Chromium	Lead	Zinc
				<----------ppb---------->			
MW-1	12/5/89	UNK	7130/7190/7420/7950	20	<100	<500	20
MW-2	12/5/89	UNK	7130/7190/7420/7950	<10	<100	<500	10
MW-3	12/5/89	UNK	7130/7190/7420/7950	---	---	---	---
(d)	12/5/89	UNK	7130/7190/7420/7950	<10	<100	<500	40
Rinseate	12/5/89	UNK	7130/7190/7420/7950	<10	<100	<500	<10

EXPLANATION:

ppb = Parts per billion
(d) = Duplicate sample

ANALYTIC LAB:

UNK = Unknown

ANALYTICAL METHODS:

7130 = EPA Method 7130 for Cadmium
7190 = EPA Method 7190 for Chromium
7420 = EPA Method 7420 for Lead
7950 = EPA Method 7950 for Zinc

NOTES:

Analytic data prior to January 1993 compiled from Quarterly Ground Water Monitoring Report prepared for Chevron by Burlington Environmental Inc., December 3, 1992.

28904T.GWM

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APPENDIX C
SIERRA ENVIRONMENTAL SERVICES
STANDARD OPERATING PROCEDURE

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SES STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of four well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed ±0.5°F, 0.1 or 5%, respectively).

The purge water is taken to Chevron's Richmond Refinery for disposal.

Ground water samples are collected from the wells with steam-cleaned Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C with blue ice or ice) for transport under chain of custody to the laboratory.

The chain of custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank and bailer blank accompanies each sampling set, or 5% trip blanks and 5% bailer blanks are included for sets of greater than 20 samples. The bailer blank is prepared by pouring previously boiled water into a steam-cleaned Teflon bailer prior to sampling a well. The trip and bailer blanks are analyzed for some or all of the same compounds as the ground water samples.

SIERRA

APPENDIX D
CHAIN OF CUSTODY DOCUMENT AND
LABORATORY ANALYTIC REPORTS

copy of Lab Report and COC to Chevron Contact: ☐ Yes ☒ No

Chain-of-Custody-Recor

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

Chevron Facility Number 9-8139
Facility Address 16304 FOOTHILL BLVD, SAN LEANDRO
Consultant Project Number 1-289-04
Consultant Name SIERRA ENVIRONMENTAL SERVICES
Address P.O. BOX 2546, MARTINEZ 94553
Project Contact (Name) ARGY MENA
(Phone) 370.1280 (Fax Number) 370.7959

Chevron Contact (Name) KEN KAN
(Phone) 842-8752
Laboratory Name GTEL
Laboratory Release Number 8617900
Samples Collected by (Name) Carol Eaton
Collection Date 1/29/93
Signature Carol Eaton

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)	BTEX + TPH GAS (8020 + 8015)	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
TBLB	01	3	W	G	10:40	HCl	Y	✓												Analyze in order shown
BB	02	↓	↓	↓	10:50	↓	↓	✓												↓
MW-10	03				11:35			✓												
MW-11	04				10:55			✓												
MW-8	05				10:50			✓												
MW-6	06				11:10			✓												
MW-7	07				12:00			✓												
MW-2	08				12:10			✓												
MW-1	09				12:30			✓												
MW-3	10				11:50			✓												
MW-9	11				11:00			✓												
METHOD BLANK																				

NOTE: Do NOT BILL TB-LB SAMPLES
Temp. 7.9
pres. HCl
Seals intact

C301643

T-BOX

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Carol Eaton	SES	1/29/93			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Recieved For Laboratory By (Signature)		Date/Time
			Jamie Dao	1/29/93	2:50

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted (circled)
9 DAY 1/29/93

COC-3.DWG/03 01/M0H

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)

Client Number: SEV01CHV08
Project ID: Chevron, San Leandro
Work Order Number: C3-01-643
Total Number of Pages: 5

February 13, 1993

Argy Mena
Sierra Environmental
P.O. Box 2546
Martinez, CA 94553

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 01/29/93.

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 California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

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

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen
Laboratory Director

Client Number: SEV01CHV08
Project ID: Chevron, San Leandro
Work Order Number: C3-01-643

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		01	02	03	04
Client Identification		TB-LB	BB	MW-10	MW-11
Date Sampled		01/29/93	01/29/93	01/29/93	01/29/93
Date Analyzed		02/09/93	02/09/93	02/10/93	02/09/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	<0.5	8
Toluene	0.5	<0.5	<0.5	<0.5	16
Ethylbenzene	0.5	<0.5	<0.5	<0.5	2
Xylene, total	0.5	<0.5	<0.5	0.7	10
BTEX, total	--	--	--	0.7	36
TPH as Gasoline	50	<50	<50	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		77.3	101	84.2	102

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 1 (Continued)

ANALYTICAL RESULTS

Aromatic Volatile Organics and
Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		05*	06	07	08
Client Identification		MW-8	MW-6	MW-7	MW-2
Date Sampled		01/29/93	01/29/93	01/29/93	01/29/93
Date Analyzed		02/09/93	02/09/93	02/08/93	02/08/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	470	<0.5	4	3
Toluene	0.5	470	<0.5	13	8
Ethylbenzene	0.5	37	<0.5	2	1
Xylene, total	0.5	160	<0.5	8	5
BTEX, total	--	1100	--	27	17
TPH as Gasoline	50	1400	<50	<50	<50
Detection Limit Multiplier		5	1	1	1
BFB surrogate, % recovery		87.1	94.9	101	102

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.
* Sample dilution due to high concentration of target compounds.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: SEV01CHV08
Project ID: Chevron, San Leandro
Work Order Number: C3-01-643

Table 1 (Continued)

ANALYTICAL RESULTS

Aromatic Volatile Organics and
Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		09	10*	11	12
Client Identification		MW-1	MW-3	MW-9	METHOD BLANK
Date Sampled		01/29/93	01/29/93	01/29/93	--
Date Analyzed		02/08/93	02/08/93	02/08/93	02/08/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	3	5900	23	<0.5
Toluene	0.5	3	2900	6	<0.5
Ethylbenzene	0.5	0.7	1300	8	<0.5
Xylene, total	0.5	3	5000	100	<0.5
BTEX, total	--	10	15000	140	--
TPH as Gasoline	50	<50	32000	1300	<50
Detection Limit Multiplier		1	5	1	1
BFB surrogate, % recovery		103	105	98	94.8

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.
* Sample dilution due to high concentration of target compounds.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: SEV01CHV08
Project ID: Chevron, San Leandro
Work Order Number: C3-01-643

QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
Modified EPA 8020:							
Benzene	C301643-07	20.0	ug/L	107	108	0.9	55 - 129
Toluene	C301643-07	20.0	ug/L	104	105	0.9	72 - 149
Ethylbenzene	C301643-07	20.0	ug/L	100	101	1.0	75 - 138
Xylene, total	C301643-07	60.0	ug/L	100	101	1.0	74 - 147

GTEL ENVIRONMENTAL LABORATORIES, INC.