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**Chevron**

**Chevron U.S.A. Products Company**

2410 Camino Ramon  
San Ramon, CA 94583  
P.O. Box 5004  
San Ramon, CA 94583-0804

**Marketing Department**

Phone 510 842 9500

January 11, 1994

Ms. Eva Chu  
Alameda County Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

Re: Chevron Station # 9-5542, 7007 San Ramon Valley Blvd., Dublin, CA  
Attached groundwater monitoring report (Sierra, 10/29/93)

Dear Ms. Chu:

Please find attached a report dated, October 29, 1993, which was prepared by Chevron's consultant, Sierra Environmental Services (Sierra), to describe groundwater monitoring performed at the subject site on September 23, 1993.

The measured direction of groundwater flow was toward the east. The measured levels of dissolved hydrocarbons were consistent with those detected during previous site monitoring events.

Chevron is currently evaluating other remediation options for the subject site. In the meantime, plans to conduct a soil vapor extraction pilot test have been postponed indefinitely. Once a remediation option has been selected, a work plan proposing this option will be submitted to your agency for review. It is anticipated that a ~~work plan will be submitted before March 1, 1994.~~

If you have any questions or comments, I can be reached at (510) 842-8695.

Sincerely,

Brett L. Hunter  
Environmental Engineer  
Site Assessment and Remediation

1/25/94: Why not do SVE pilot test? What other plans Chevron is considering?

Attachment

cc: Richard Hiatt, San Francisco Bay RWQCB, Oakland, CA  
Mary Diamond, See's Candy, 3423 S. La Cienega Blvd., Los Angeles, CA 90016-4401  
See's Real Estate, 210 El Camino Real, S. San Francisco, CA 94080 (w/o attachment)

10/27/93



NOV 12 '93 J.M.M.

October 29, 1993

Brett Hunter  
Chevron USA Products Company  
P.O. Box 5004  
San Ramon, CA 94583

Re: Chevron Service Station #9-5542  
7007 San Ramon Road  
Dublin, California  
SES Project #1-214-04

Dear Mr. Hunter:

This report presents the results of the quarterly ground water sampling at Chevron Service Station #9-5542, located at 7007 San Ramon Road in Dublin, California. Six wells, MW-2 through MW-6 and MW-8, were sampled (Figure 1).


On September 23, 1993, SES personnel visited the site. Water level measurements were collected from six wells and all 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 and ground water elevation contours are included on Figure 1.

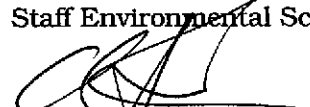
The ground water samples were collected on September 23, 1993 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). All analyses were performed by GTEL of Concord, California. Analytic results for ground water are presented in Table 2. The chain of custody document and laboratory analytic reports are attached. 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.



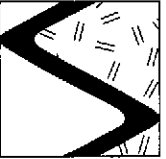
Sincerely,  
Sierra Environmental Services

  
Richard E. Hilton  
Staff Environmental Scientist

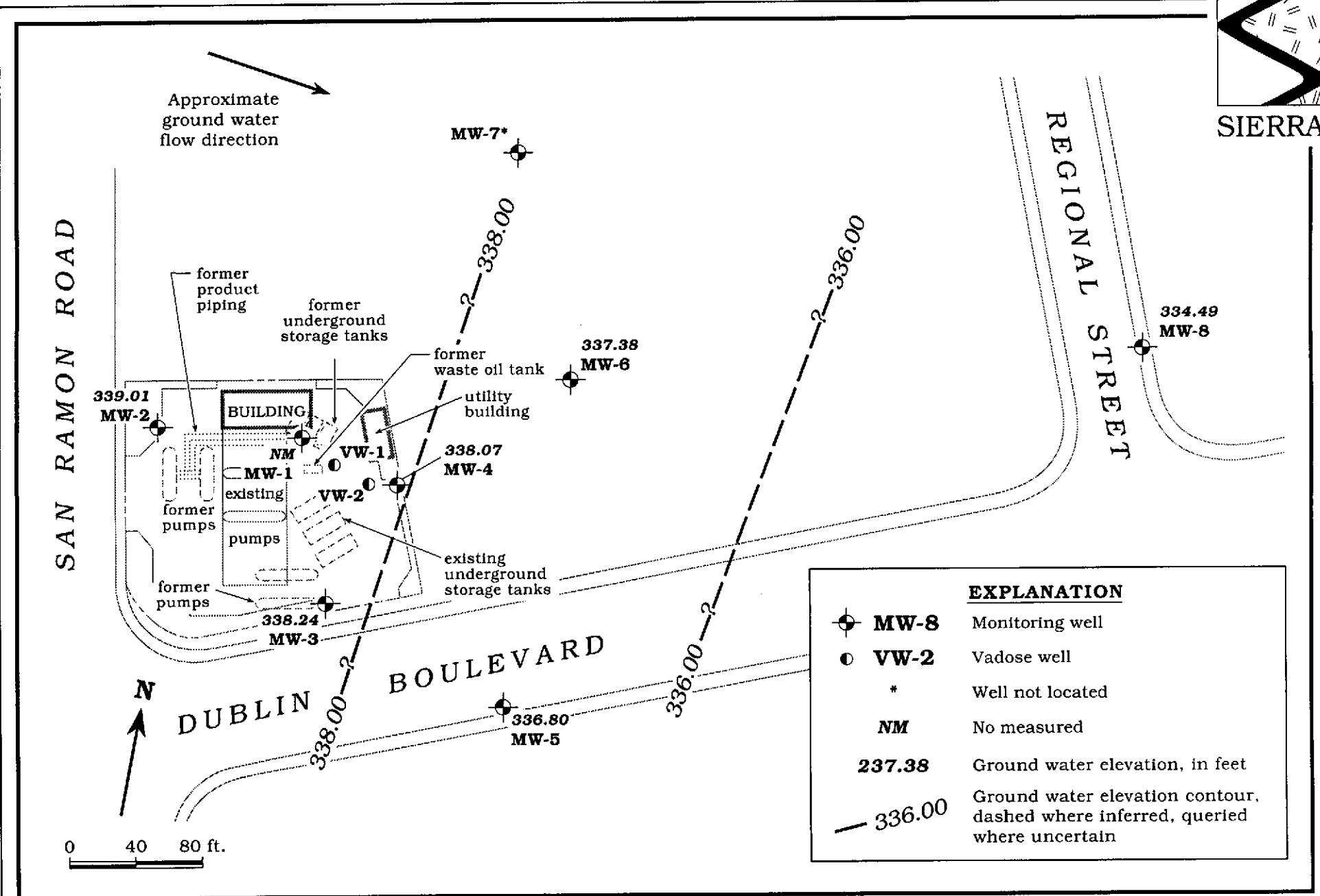
  
Chris J. Bramer  
Professional Engineer #C48846

REH/CJB/cb  
21404QM.OC3

Attachments: Figure  
Tables  
SES Standard Operating Procedure  
Chain of Custody Document and Laboratory Analytic Reports



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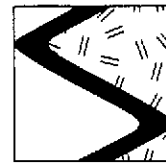
EXPLANATION	
	<b>MW-8</b> Monitoring well
	<b>VW-2</b> Vadose well
*	Well not located
<b>NM</b>	No measured
<b>237.38</b>	Ground water elevation, in feet
	Ground water elevation contour, dashed where inferred, queried where uncertain

Figure 1. Monitoring Well Location and Ground Water Elevation Contour Map - September 23, 1993 - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California



Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California

Well ID	Date Measured	DTW (ft)	TOC (msl)	GWE (msl)	Product Thickness* (ft)	Screen Interval -----feet below grade----->	Sand Pack Interval	Bentonite/Grout Interval
MW-1	5/31/91	25.67	363.98 <sup>1</sup>	338.31	0	20.0 - 35.0	19.5 - 35.5	0 - 19.5
	6/21/91	26.23		337.75	0			
	7/17/91	26.53		337.45	0			
	10/4/91	27.90		336.08	0			
	12/19/91	28.12		335.86	0			
	3/19/92	24.63		339.35	0			
	6/19/92	26.23	364.32 <sup>2</sup>	338.09	0			
	9/22/92	27.73		336.59	0			
	12/18/92	26.76		337.56	0			
	3/22/93 <sup>4</sup>	---		---	---			
	6/14/93 <sup>4</sup>	---		---	---			
	7/25/93 <sup>4</sup>	---		---	---			
	9/23/93 <sup>4</sup>	---		---	---			
	MW-2	5/31/91	25.51	364.19 <sup>1</sup>	338.68	0	22.0 - 37.0	20.0 - 37.0
6/21/91		26.13		338.06	0			
7/17/91		26.46		337.73	0			
10/4/91		27.79		336.40	0			
12/19/91		28.06		336.13	0			
3/19/92		24.46		339.73	0			
6/19/92		26.10	364.64 <sup>2</sup>	338.54	0			
9/22/92		27.60		337.04	0			
12/18/92		26.32		338.32	0			
3/22/93		21.39		343.29	0			
6/14/93		25.15		339.49	0			
7/25/93		24.52		340.12	0			
9/23/93		25.63		339.01	0			
MW-3		5/31/91	23.20	361.92 <sup>1</sup>	338.72	0	20.0 - 35.0	19.0 - 35.0
	6/21/91	24.13		337.79	0			
	7/17/91	24.59		337.73	0			
	9/20/91	25.98		335.94	0			
	12/19/91	26.24		335.68	0			
	3/19/92	22.46		339.46	0			
	6/19/92	24.32	362.26 <sup>2</sup>	337.94	0			
	9/22/92	25.84		336.42	0			
	12/18/92	24.40		337.86	0			
	3/22/93	19.72		342.54	0			
	6/14/93	23.52		338.74	0			
	7/25/93	23.21		339.05	0			
	9/23/93	24.02		338.24	0			



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Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (msl)	GWE (msl)	Product Thickness* (ft)	Screen Interval -----feet below grade-----	Sand Pack Interval	Bentonite/Grout Interval				
MW-4	5/31/91	24.67	362.70 <sup>1</sup>	338.03	0	20.0 - 35.0	19.0 - 35.0	0 - 19.0				
	6/21/91	25.31		337.39	0							
	7/17/91	25.73		336.97	0							
	10/4/91	27.08		335.62	0							
	12/19/91	27.24		335.46	0							
	3/19/92	23.66		339.04	0							
	6/19/92	25.33	363.07 <sup>2</sup>	337.74	0							
	9/22/92	26.90		336.17	0							
	12/18/92	25.62		337.45	0							
	3/22/93	20.80		342.27	0							
	6/14/93	25.73		337.34	0							
	7/25/93	24.02		339.05	0							
	9/23/93	25.00		338.07	0							
	MW-5	6/21/91	23.17	359.95 <sup>1</sup>	336.78				0	21.0 - 36.0	19.5 - 36.0	0 - 19.5
7/17/91		23.68		336.27	0							
10/4/91		25.20		334.75	0							
12/19/91		25.20		334.75	0							
3/19/92		21.21		338.74	0							
6/19/92		23.42	360.28 <sup>2</sup>	336.86	0							
9/22/92		24.97		335.31	0							
12/18/92		23.52		336.76	0							
3/22/93		19.10		341.18	0							
6/14/93		22.71		337.57	0							
7/25/93		21.99		338.29	0							
9/23/93		23.48		336.80	0							
MW-6		6/21/91	23.55	360.22 <sup>1</sup>	336.67	0	20.0 - 35.0	18.5 - 35.0	0 - 18.5			
		7/17/91	24.00		336.22	0						
	10/4/91	25.29		334.93	0							
	12/19/91	25.34		334.88	0							
	3/19/92	22.05		338.17	0							
	6/19/92	23.52	360.58 <sup>2</sup>	337.06	0							
	9/22/92	25.60		334.98	0							
	12/18/92	24.18		336.40	0							
	3/22/93	19.36		341.22	0							
	6/14/93	23.48		337.10	0							
	7/25/93	22.30		338.28	0							
	9/23/93	23.20		337.38	0							



Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (msl)	GWE (msl)	Product Thickness* (ft)	Screen Interval			
						Sand Pack Interval			
						Bentonite/Grout Interval			
						-----feet below grade-----			
MW-7	6/21/91	23.45	360.63 <sup>1</sup>	337.18	0	20.0 - 35.0	18.5 - 35.0	0 - 18.5	
	7/17/91	23.90		336.73	0				
	10/4/91	25.03		335.60	0				
	12/19/91	25.10		335.53	0				
	3/19/92	22.74		337.89	0				
	6/19/92 <sup>3</sup>	---	360.99 <sup>2</sup>	---	---				
	9/22/92 <sup>3</sup>	---		---	---				
	12/18/92 <sup>3</sup>	---		---	---				
	3/22/93 <sup>5</sup>	---		---	---				
	6/14/93 <sup>5</sup>	---		---	---				
	7/25/93 <sup>5</sup>	---		---	---				
	MW-8	12/12/91	22.54	---	---	0	---	---	---
		6/19/92	20.47	354.89 <sup>2</sup>	334.42	0			
9/22/92		29.80		325.09	0				
12/18/92		21.18		333.71	0				
3/22/93		16.91		337.98	0				
6/14/93		24.30		330.59	0				
7/25/93		23.77		331.12	0				
<b>9/23/93</b>		<b>20.40</b>		<b>334.49</b>	<b>0</b>				

EXPLANATION:

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

NOTES:

Well construction details for MW-1 through MW-4 were compiled from a draft report prepared by Chempro, undated.  
 \* Product thickness was measured with an MMC flexi-dip interface probe.  
<sup>1</sup> Top of casing elevations for monitoring wells MW-1 through MW-7 were surveyed by Ron Miller, Professional Engineer #15816 on June 26, 1991.  
<sup>2</sup> Top of casing elevations for monitoring wells MW-1 through MW-8 were surveyed by Kier & Wright of Pleasanton, California on December 12, 1991. Survey data received by SES on April 30, 1992.  
<sup>3</sup> Well could not be located on this date due to surface conditions from recent discing.  
<sup>4</sup> Monitoring well inaccessible due to downhole equipment, therefore no water level measurement was collected.  
<sup>5</sup> Monitoring well not located since March 1992 sampling event.



Table 2. Analytic Results for Ground Water - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California

Sample ID	Date	Analytic Method	Analytic Lab	TPPH(G)	O&G	B	T	E	X	Other HVOCs	1,2-DCA	EDB	OL
				←-----ppb-----→									
MW-1 (D)	4/3-4/90	8015/602/504	*	46,000	---	8,400	7,400	860	5,600	---	---	1.04	---
	4/3-4/90	8015/602/504	*	43,000	---	8,400	7,200	840	5,200	---	---	1.1	---
	5/31/91	8015/8020/8010	SAL	31,000	---	7,400	2,500	630	2,100	ND <sup>1</sup>	2	---	---
	5/31/91	503E	SAL	---	<5,000	---	---	---	---	---	---	---	---
	9/20/91	8015/8020/8010	SAL	31,000	---	3,000	2,800	610	3,100	ND <sup>1</sup>	0.6	---	---
	12/19/91	8015/8020/8010	SPA	20,000	---	5,200	1,700	560	2,000	ND <sup>1</sup>	3.3	---	---
	3/19/92	8015/8020/8010	SPA	30,000	---	8,500	3,600	590	2,400	ND <sup>1</sup>	2.7	---	---
	6/19/92	8015/8020	SPA	25,000	---	1,100	2,000	520	1,800	---	---	---	---
	9/22/92	8015/8020	SPA	21,000	---	8,000	3,500	670	2,900	---	---	---	---
	12/18/92	8015/8020	SPA	79,000	---	12,000	12,000	1,600	8,500	---	---	---	---
3/10/93 <sup>6</sup>	---	---	---	---	---	---	---	---	---	---	---	---	
MW-2	4/3-4/90	8015/602/504	*	<50	---	<0.3	<0.3	<0.3	<0.6	---	---	<0.02	---
	5/31/91	8015/8020/8010	SAL	100	---	3.1	4.2	0.7	2.0	ND <sup>1</sup>	<0.5	---	---
	5/31/91	503E	SAL	---	<5,000	---	---	---	---	---	---	---	---
	9/20/91	8015/8020	SAL	68	---	1.3	1.6	0.8	3.0	---	---	---	---
	12/19/91	8015/8020	SPA	<50	---	0.6	1.2	0.8	2.5	---	---	---	---
	3/19/92	8015/8020	SPA	<50	---	2.5	2.0	1.1	2.4	---	---	---	---
	6/19/92	8015/8020	SPA	<50	---	<0.5	0.6	0.7	1.2	---	---	---	---
	9/22/92	8015/8020	SPA	200	---	16	42	6.1	32	---	---	---	---
	12/18/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/22/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	7/25/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
9/23/93	8015/8020	GTEL	72	---	12	4	6	8	---	---	---	---	
MW-3	4/3-4/90	8015/602/504	*	2,200	---	36	5	6	17	---	---	<0.02	---
	5/31/91	8015/8020/8010	SAL	2,200	---	130	11	31	78	ND <sup>1</sup>	19	---	---
	5/31/91	503E	SAL	---	<5,000	---	---	---	---	---	---	---	---
	9/20/91	8015/8020	SAL	2,200	---	190	6.0	24	32	---	---	---	---
	12/19/91	8015/8020	SPA	640	---	73	27	17	56	---	---	---	---
	3/19/92	8015/8020	SPA	4,500	---	1,000	15	91	240	---	---	---	---
	6/19/92	8015/8020	SPA	1,100	---	89	3.3	9.1	13	---	---	---	---
	9/22/92	8015/8020	SPA	1,400	---	81	51	15	49	---	---	---	---
	12/18/92	8015/8020	SPA	1,100	---	2.0	1.1	53	38	---	---	---	---
	3/22/93	8015/8020	GTEL	1,600	---	96	9	14	91	---	---	---	---
	7/25/93	8015/8020	GTEL	1,200	---	19	6	2	5	---	---	---	---
9/23/93	8015/8020	GTEL	1,500	---	5	<0.5	5	13	---	---	---	---	



Table 2. Analytic Results for Ground Water - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California (continued)

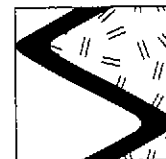
Sample ID	Date	Analytic Method	Analytic Lab	TPPH(G)	O&G	B	T	E	X	Other HVOCs	1,2-DCA	EDB	OL
MW-4	4/3-4/90	8015/413.1/602/504	*	43,000	18,000	4,000	5,000	790	5,500	---	---	<0.02	---
	4/3-4/90	624**	*	---	---	6,000	8,200	1,500	---	---	---	---	---
	5/31/91	8015/8020/8010	SAL	34,000	---	2,900	2,900	680	3,300	ND <sup>1</sup>	<0.5	---	---
	5/31/91	503E	SAL	---	<5,000	---	---	---	---	---	---	---	---
	9/20/91	8015/8020/8010	SAL	37,000	---	4,000	3,200	580	3,000	ND <sup>1</sup>	9.2	---	---
	12/19/91	8015/8020/8010	SPA	41,000	---	5,500	4,900	1,000	4,400	ND <sup>1</sup>	17	---	---
	3/19/92	8015/8020/8010	SPA	21,000	---	3,800	2,900	500	3,200	ND <sup>2</sup>	15	---	---
	6/19/92	8015/5520/8020	SPA	27,000	<5,000	1,800	1,600	570	1,900	---	---	---	---
	9/22/92	8015/5520/8020	SPA	20,000	<5,000	4,100	2,700	670	3,200	---	---	---	---
	12/18/92	8015/5520/8020	SPA	15,000	<5,000	2,200	2,000	370	1,600	---	---	---	---
	3/22/93	8015/5520/8020	GTEL	41,000	5,000	3,900	5,100	840	4,500	---	---	---	---
	7/25/93	8015/5520/8020	GTEL	94,000	<5,000	18,000	30,000	2,400	14,000	---	---	---	---
	9/23/93	8015/5520/8020	GTEL	23,000	<5,000	4,700	2,000	900	4,600	---	---	---	---
MW-5	6/21/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	6/21/91	8010/LUFT	SAL	---	---	---	---	---	---	ND <sup>1</sup>	<0.5	---	<4,000
	9/20/91	8015/8020	SAL	170 <sup>3</sup>	---	0.8	0.9	<0.5	1.5	---	---	---	---
	12/19/91	8015/8020	SPA	<50	---	0.7	0.7	<0.5	1.4	---	---	---	---
	3/19/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	6/19/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/22/92	8015/8020	SPA	150	---	13	34	5.0	26	---	---	---	---
	12/18/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/10/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	7/25/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/23/93	8015/8020	GTEL	<50	---	3	1	1	2	---	---	---	---
MW-6	6/21/91	8015/8020	SAL	3,700	---	50	2.6	150	340	---	---	---	---
	6/21/91	8010/LUFT	SAL	---	---	---	---	---	---	ND <sup>1</sup>	<0.5	---	<4,000
	9/20/91	8015/8020	SAL	3,200	---	28	<0.5	140	100	---	---	---	---
	12/19/91	8015/8020	SPA	380	---	2.7	4.0	15	10	---	---	---	---
	3/19/92	8015/8020	SPA	3,400	---	57	4.5	330	360	---	---	---	---
	6/19/92	8015/8020	SPA	980	---	11	4.2	57	38	---	---	---	---
	9/22/92	8015/8020	SPA	1,100	---	22	41	77	58	---	---	---	---
	12/18/92	8015/8020	SPA	1,900	---	3.2	1.3	58	47	---	---	---	---
	3/10/93	8015/8020	GTEL	1,400	---	30	9	8	22	---	---	---	---
	7/25/93	8015/8020	GTEL	83 <sup>8</sup>	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/23/93	8015/8020	GTEL	800	---	6	2	3	3	---	---	---	---





Table 2. Analytic Results for Ground Water - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California (continued)

Sample ID	Date	Analytic Method	Analytic Lab	TPPH(G)	O&G	B	T	E	X	Other HVOCs	1,2-DCA	EDB	OL
MW-7	6/21/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	6/21/91	8010/LUFT	SAL	---	---	---	---	---	---	ND <sup>1</sup>	<0.5	---	<4,000
	9/20/91	8015/8020	SAL	69	---	4.4	3.3	1.2	3.9	---	---	---	---
	12/19/91	8015/8020	SPA	<50	---	0.9	2.8	1.7	5.9	---	---	---	---
	3/19/92	8015/8020	SPA	<50	---	1.1	0.6	0.9	2.5	---	---	---	---
	6/19/92 <sup>4</sup>	---	---	---	---	---	---	---	---	---	---	---	---
	9/22/92 <sup>4</sup>	---	---	---	---	---	---	---	---	---	---	---	---
	12/18/92 <sup>4</sup>	---	---	---	---	---	---	---	---	---	---	---	---
	3/22/93 <sup>7</sup>	---	---	---	---	---	---	---	---	---	---	---	---
	7/25/93 <sup>7</sup>	---	---	---	---	---	---	---	---	---	---	---	---
MW-8	12/12/91	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	6/19/92	8015/8020	SPA	<50	---	1.2	1.4	0.5	2.9	---	---	---	---
	9/22/92	8015/8020	SPA	180	---	17	42	6.0	31	---	---	---	---
	12/18/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/10/93	8015/8020	GTEL	<50	---	0.8	2	<0.5	2	---	---	---	---
	7/25/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/23/93	8015/8020	GTEL	<50	---	1	0.9	0.7	1	---	---	---	---
	Trip Blank (MW-AA)	5/31/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---
(TB-LB)	6/21/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/20/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	12/19/91	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/19/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	6/19/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/22/92	8015/8020	SPA	92 <sup>5</sup>	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	12/18/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/10/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/22/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	7/25/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
9/23/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	
Bailer Blank (MW-BB)	5/31/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	6/21/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/20/91	8015/8020	SAL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---



SIERRA

Table 2. Analytic Results for Ground Water - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California (continued)

Sample ID	Date	Analytic Method	Analytic Lab	TPPH(G)	O&G	B	T	E	X	Other HVOCs	1,2-DCA	EDB	OL
				←-----ppb-----→									
Bailer Blank (MW-BB)	12/19/91	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
(cont)	3/19/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	6/19/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	9/22/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	0.8	---	---	---	---
	12/21/92	8015/8020	SPA	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/10/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	3/22/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	0.6	---	---	---	---
	7/25/93	8015/8020	GTEL	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	<b>9/23/93</b>	<b>8015/8020</b>	<b>GTEL</b>	<b>&lt;50</b>	---	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	---	---	---	---



Table 2. Analytic Results for Ground Water - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California (continued)

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline  
O&G = Oil and Grease  
B = Benzene  
T = Toluene  
E = Ethylbenzene  
X = Xylenes  
HVOCs = Halogenated Volatile Organic Compounds  
1,2-DCA = 1,2-Dichloroethane  
EDB = Ethylene dibromide  
OL = Organic lead  
ppb = Parts per billion  
D = Duplicate sample  
--- = Not analyzed/not applicable  
ND = Not detected (see notes)

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)  
602 = EPA Method 602 for BTEX  
504 = EPA Method 504 for EDB  
8020 = EPA Method 8020 for BTEX  
8010 = EPA Method 8010 for HVOCs  
503E = Standards Methods Method 503E for O&G

ANALYTIC METHODS: (continued)

413.1 = EPA Method 413.1 for total O&G  
624 = EPA Method 624 for BTEX and VOCs  
5520 = Standard Methods Method 5520 for O&G  
LUFT = DHS LUFT Manual Method for OL

ANALYTIC LABORATORIES:

SAL = Superior Analytic Laboratory, Inc. of San Francisco and Martinez, California  
SPA = Superior Precision Analytical, Inc. of San Francisco and Martinez, California  
GTEL = Groundwater Technology Environmental Laboratory, Inc., of Concord, California

NOTES:

- Analytic data was compiled from a draft report prepared by Chempro, undated.
- \* Analytic laboratory was not shown.
  - \*\* 624 compounds other than BTE were not reported
  - <sup>1</sup> Other HVOCs were not detected at detection limits ranging from 0.5 to 1 ppb.
  - <sup>2</sup> Chloroform and bromodichloromethane were detected at 1.3 and 0.9 ppb, respectively. Other HVOCs were not detected at detection limits ranging from 0.5 to 1 ppb.
  - <sup>3</sup> A non-standard gasoline pattern was observed in the chromatogram.
  - <sup>4</sup> This well could not be located; therefore it was not sampled.
  - <sup>5</sup> Gasoline range concentration reported. The chromatogram shows only a single peak in the gasoline range.
  - <sup>6</sup> Monitoring well deleted from sampling program per Chevron Project Engineer.
  - <sup>7</sup> Monitoring well not located since March 1992 sampling event.
  - <sup>8</sup> Uncategorized compound not included in gasoline total.



## **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 three 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  $\pm 0.5^{\circ}\text{F}$ , 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  $4^{\circ}\text{C}$ ) 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.



**Northwest Region**

4080 Pike Lane  
Suite C  
Concord, CA 94520  
(510) 685-7852  
(800) 544-3422 Inside CA  
FAX (510) 825-0720

Client Number: SIE01CHV08  
Consultant Project Number: 1-214-04  
Facility Number: 9-5542  
Project ID: 7007 San Ramon Rd.  
Dublin  
Work Order Number: C3-09-0528

October 14, 1993

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

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 09/24/93.

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, Laboratory certification number E1075, 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.

A handwritten signature in cursive script that reads 'Eileen F. Bullen'.

Eileen F. Bullen  
Laboratory Director

Client Number: SIE01CHV08  
 Consultant Project Number: 1-214-04  
 Facility Number: 9-5542  
 Project ID: 7007 San Ramon Rd.  
 Dublin  
 Work Order Number: C3-09-0528

**Table 1**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water**

**EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>**

GTEL Sample Number		01	02	03	04
Client Identification		TB-LB	BB	MW-8	MW-5
Date Sampled		09/23/93	09/23/93	09/23/93	09/23/93
Date Analyzed		10/06/93	10/06/93	10/06/93	10/06/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	1	3
Toluene	0.5	<0.5	<0.5	0.9	1
Ethylbenzene	0.5	<0.5	<0.5	0.7	1
Xylene, total	0.5	<0.5	<0.5	1	2
BTEX, total	--	--	--	4	7
TPH as Gasoline	50	<50	<50	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		90.7	90.7	89.7	89.5

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1996. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.

Client Number: SIE01CHV08  
 Consultant Project Number: 1-214-04  
 Facility Number: 9-5542  
 Project ID: 7007 San Ramon Rd.  
 Dublin  
 Work Order Number: C3-09-0528

**Table 1 (Continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water**

**EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>**

GTEL Sample Number		05	06	07	08
Client Identification		MW-2	MW-6	MW-3	MW-4
Date Sampled		09/23/93	09/23/93	09/23/93	09/23/93
Date Analyzed		10/06/93	10/06/93	10/06/93	10/07/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	12	6	35	4700
Toluene	0.5	4	2	<0.5	2000
Ethylbenzene	0.5	6	3	5	900
Xylene, total	0.5	8	3	13	4600
BTEX, total	—	36	14	53	12000
TPH as Gasoline	50	72	200	1500	23000
Detection Limit Multiplier		1	1	1	100
BFB surrogate, % recovery		87.7	89.5	116	86.9

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. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.

Client Number: SIE01CHV08  
 Consultant Project Number: 1-214-04  
 Facility Number: 9-5542  
 Project ID: 7007 San Ramon Rd.  
 Dublin  
 Work Order Number: C3-09-0528

**Table 1 (Continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water**

**EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>**

GTEL Sample Number		M00693			
Client Identification		METHOD BLANK			
Date Sampled		--			
Date Analyzed		10/06/93			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5			
Toluene	0.5	<0.5			
Ethylbenzene	0.5	<0.5			
Xylene, total	0.5	<0.5			
BTEX, total	--	--			
TPH as Gasoline	50	<50			
Detection Limit Multiplier		1			
BFB surrogate, % recovery		90.4			

- 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. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.



Client Number: SIE01CHV08  
 Consultant Project Number: 1-214-04  
 Facility Number: 9-5542  
 Project ID: 7007 San Ramon Rd.  
 Dublin  
 Work Order Number: C3-09-0528

**Table 1**

**ANALYTICAL RESULTS**

**Total Oil and Grease in Water  
 by Infrared Spectrometry**

**EPA Method 413.2<sup>1</sup>(SM 5520 C<sup>2</sup>)**

1. Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-202, Revised March 1983, U.S. Environmental Protection Agency.
2. Standard Methods for the Examination of Water and Wastewater, 17th ed., 1989, American Public Health Association.

GTEL Sample Number		08	100793TPH		
Client Identification		MW-4	METHOD BLANK		
Date Sampled		09/23/93	--		
Date Prepared		10/05/93	10/05/93		
Date Analyzed		10/06/93	10/06/93		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Total Oil and Grease	5000	<5000	<5000		
Detection Limit Multiplier		1	1		

Client Number: SIE01CHV08  
 Consultant Project Number: 1-214-04  
 Facility Number: 9-5542  
 Project ID: 7007 San Ramon Rd.  
 Dublin  
 Work Order Number: C3-09-0528

### QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, % <sup>a</sup>	RPD, % <sup>a</sup>	Control Limits
<b>Modified EPA 8020:</b>							
Benzene	C3090565-03	20.0	ug/L	86.0	--	--	55 - 129
Toluene	C3090565-03	20.0	ug/L	92.5	--	--	72 - 149
Ethylbenzene	C3090565-03	20.0	ug/L	89.5	--	--	75 - 138
Xylene, total	C3090565-03	60.0	ug/L	95.7	--	--	74 - 147
<b>TOG/IR:</b>	Blank Spike	50.9	mg/L	90.6	94.1	3.8	70 - 130

a. MSD lost due to power failure other. All other QC in control.

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

Chain-of-Custody-Record

Chevron Facility Number 1-5542  
 Facility Address 7007 San Ramon Rd., Dublin  
 Consultant Project Number 1-214-04  
 Consultant Name Sierra Environmental Services  
 Address P.O. Box 2546, Martinez, CA 94553  
 Project Contact (Name) Argy Mena  
 (Phone) 370-1280 (Fax Number) 370-7959

Chevron Contact (Name) Brett Hunter  
 (Phone) 842-8695  
 Laboratory Name GTEL  
 Laboratory Release Number 3236620  
 Samples Collected by (Name) Carol Eaton  
 Collection Date 11/03/93  
 Signature Carol Eaton

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

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed														
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)							
BLB	01	3	W	G	12:00	HCl	Y	✓														
2B	02				13:53			✓														
MW-8	03				13:05			✓														
MW-5	04				13:30			✓														
MW-2	05				14:22			✓														
MW-6	06				13:55			✓														
MW-3	07				14:45			✓														
MW-4	08	↓			15:15			✓														
MW-4	08	2	↓	↓	15:15	None	↓				✓											

Note:  
 Do Not Bill  
 TB-LB Sample  
 Seal intact  
 5°C  
 Remarks  
 Analyze in  
 order shown

C3090528

Relinquished By (Signature) <u>Carol Eaton</u>	Organization <u>SEI</u>	Date/Time <u>9/24/93</u> 12:30	Received By (Signature) <u>John Weber</u>	Organization <u>GTEL</u>	Date/Time <u>12:30</u> 9-24-93
Relinquished By (Signature) <u>John Weber</u>	Organization <u>GTEL</u>	Date/Time <u>13:00</u> 9-24-93	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>Gwinne Belobey</u>	Date/Time <u>9/24/93 13:00</u>	

Turn Around Time (Circle Choice)  
 24 Hrs.  
 48 Hrs.  
 5 Days  
 10 Days  
 As Contracted  
9/23/93