



Chevron

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HAYWARD FIRE DEPARTMENT

May 9, 1995

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

Site Assessment & Remediation Group
Phone (510) 842-9500

Mr. Sumadhu Arigala
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Re: **Chevron Service Station #9-0260**
21995 Foothill Boulevard, Hayward, CA

Dear Mr. Arigala:

Enclosed is the quarterly Ground Water Sampling report dated March 10, 1995, prepared by our consultant Sierra Environmental Services for the above referenced site. Currently, monitor wells MW-6, MW-9, MW-11, and MW-13 are sampled during the 1st and 3rd quarters and monitor wells MW-4, MW-5, MW-7, MW-8, and MW-12 are sampled during the 2nd and 4th quarters. Monitor well MW-10 is sampled during the first quarter only. Monitor wells MW-14, MW-15, MW-16, and MW-17 are sampled during all four quarters. Depth to water measurements are taken from all wells on a quarterly basis to maintain knowledge of ground water flow direction and gradient.

As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. The levels of dissolved hydrocarbon constituents in the ground water samples analyzed were consistent with previous observations at the site with the exception of MW-17. Concentrations detected in this well during the past quarter are decreasing towards historical levels which were below method detection limits. We will closely monitor the concentrations in this well during successive sampling events to determine possible trends.

Depth to ground water was measured at approximately 8.5 to 21.9 feet below grade and the direction of flow is to the southwest.

The ground water extraction system at this site has treated approximately 280,000 gallons of hydrocarbon impacted ground water to date. We are currently evaluating additional remediation options at this site. Chevron will continue to monitor and sample all wells at this site in accordance with the schedule outlined above.

If you have any questions or comments, please feel free to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

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May 9, 1995
Chevron SS#9-0260

Enclosure

cc: Mr. Rafat Shahid, Alameda County Health Care Services
✓ Mr. Hugh Murphy, City of Hayward Fire Department
Mr. Kent O'Brien, Geraghty & Miller - Richmond
Mr. S.A. Willer

File: 90260Q8

March 10, 1995

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

Re: Chevron Service Station #9-0260
21995 Foothill Boulevard
Hayward, California
SES Project #1-388-04

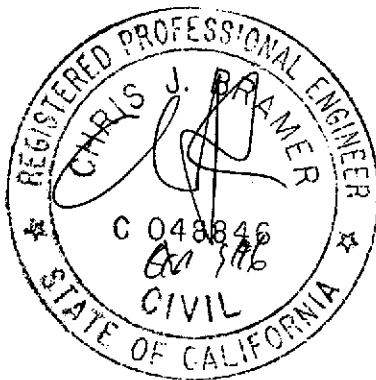
Dear Mr. Miller:

This report presents the results of the quarterly ground water sampling for the first quarter of 1995 at Chevron Service Station #9-0260, located at 21995 Foothill Boulevard in Hayward, California. Eight wells, MW-6, MW-9 through MW-11 and MW-14 through MW-17 were sampled (Figure 1).

On February 14, 1995, 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 present in one site well, MW-7. 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 February 14, 1995 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field water sampling forms for this event are included. All analyses were performed by Superior Precision Analytical Laboratories of Martinez, California. Analytic results for ground water are presented in Table 1. 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. (Rick) Hilton
Staff Environmental Scientist

Chris J. Bramer
Professional Engineer #C48846

REH/CJB/lmo
38804QM.MA5

Attachments:

Figure
Tables
SES Standard Operating Procedure
Field Water Sampling Forms
Chain of Custody Document and Laboratory Analytic Reports



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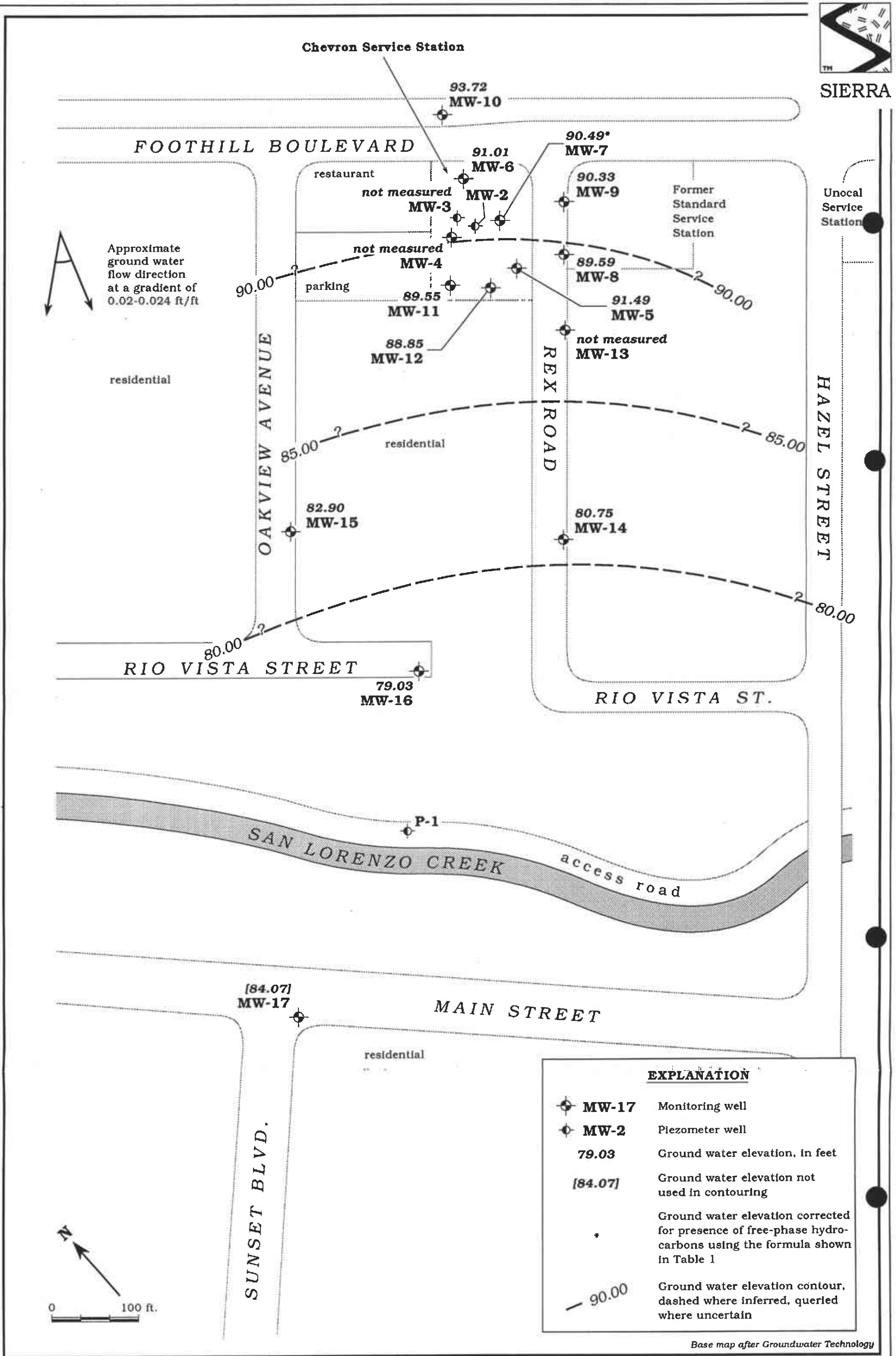
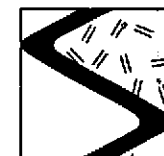


Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - February 14, 1995 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California



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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <-----ppb----->	B	T	E	X
MW-4	2/5/88	---	---	0	8240	88,000	24,000	19,000	1,700	10,000
	6/15/88	12.92	87.83	0	8240	95,000	45,000	30,000	2,100	17,000
100.75	9/27/88 ^{1,2}	14.22	86.53	0	8240	500,000	41,000	27,000	<5,000	16,000
	9/27/88 ^{1,3,4}	---	---	0	8240	88,000	1,200	4,100	1,600	12,000
	1/5/89	13.20	87.55	0	8240	64,000	41,000	29,000	2,700	14,000
	4/6/89	12.32	88.43	---	---	---	---	---	---	---
	6/28/89	14.25	86.50	0	8240	110,000	34,000	24,000	2,400	13,000
	10/3/89	14.75	86.00	0	8240	240,000	36,000	31,000	3,200	19,000
	1/4/90	14.75	86.00	0	8240	130,000	33,000	28,000	2,400	14,000
	4/3/90	13.81	86.94	0	8240	110,000	41,000	32,000	2,900	17,000
	7/3/90	14.06	86.69	0	8240	180,000	32,000	30,000	2,600	15,000
	11/6/90	15.66	85.09	0	8240	170,000	31,000	30,000	2,700	17,000
	1/4/91	15.18	85.87	---	---	---	---	---	---	---
	4/3/91	11.00	89.75	0	8240	130,000	21,000	24,000	2,300	14,000
	7/2/91	14.25	86.50	---	---	---	---	---	---	---
	10/2/91	16.16	84.59	0	8240	240,000	27,000	33,000	2,600	16,000
	1/2/92	15.26	85.49	---	---	---	---	---	---	---
	4/7/92	12.38	88.37	---	---	---	---	---	---	---
	8/13/92	16.68	84.05	---	---	---	---	---	---	---
100.73	12/3/92	16.17	84.58	---	8240	1,300,000	17,000	41,000	12,000	90,000
	3/25/93	10.50	90.23	---	---	---	---	---	---	---
	10/4/94	12.84	87.89	0	---	---	---	---	---	---
	11/14/94 ¹⁰	---	---	---	---	---	---	---	---	---
	2/14/95 ¹³	---	---	---	---	---	---	---	---	---
MW-5	2/5/88	---	---	0	8240	80,000	16,000	15,000	2,600	17,000
	6/15/88	12.30	87.67	0	8240	77,000	42,000	38,000	2,500	16,000
99.97	9/27/88 ^{1,2}	13.25	86.72	0	8240	470,000	39,000	32,000	<5,000	16,000
	9/27/88 ^{3,5}	---	---	---	8240	48,000	1,800	3,500	1,600	10,000
	1/5/89	12.70	87.27	0	8240	82,000	44,000	37,000	2,400	14,000
	4/6/89	12.22	87.75	---	---	---	---	---	---	---
	6/28/89	13.81	86.16	0	8240	80,000	36,000	24,000	2,400	13,000
	10/3/89	14.27	85.70	0	8240	240,000	40,000	35,000	2,600	15,000
	1/4/90	14.31	85.66	0	8240	130,000	37,000	31,000	2,400	13,000
	4/3/90	13.50	86.47	0	8240	120,000	41,000	33,000	2,500	14,000
	7/3/90	13.64	86.33	0	8240	200,000	28,000	25,000	1,800	10,000
	11/6/90	15.14	84.83	0	8240	370,000	38,000	36,000	4,700	31,000



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) ←-----ppb-----→	B	T	E	X
MW-5 (cont)	1/4/91	14.90	85.08	0.01	---	---	---	---	---	---
	4/3/91	11.56	88.41	0	8240	140,000	36,000	32,000	2,700	17,000
	7/2/91	13.89	86.08	0	---	---	---	---	---	---
	10/2/91	15.26	84.71	0	8240	230,000	34,000	31,000	2,700	16,000
	1/2/92	14.97	85.00	0	---	---	---	---	---	---
	4/7/92	13.44	86.53	0	8240	220,000	35,000	30,000	2,500	14,000
	8/13/92	15.61	84.36	0	---	---	---	---	---	---
	12/3/92	16.29	83.68	<0.02 ⁶	---	---	---	---	---	---
	3/25/93	10.97	89.00	0	---	---	---	---	---	---
	6/23/93	12.60	87.40	0.04	---	---	---	---	---	---
	9/21/93	14.00	85.99	0.03	---	---	---	---	---	---
	12/2/93	14.27	85.73	0.04	---	---	---	---	---	---
	3/8/94	12.16	87.81	0	---	---	---	---	---	---
	6/13/94	13.01	87.22	0.32	---	---	---	---	---	---
	10/4/94	15.56	84.41	0	---	---	---	---	---	---
	11/14/94	13.35	86.62	0	8015/8020	1,100,000	64,000	69,000	9,200	61,000
	2/14/95	8.48	91.49	0	--- ¹¹	---	---	---	---	---
MW-6	2/5/88	---	---	0	8240	53,000	5,100	4,400	2,100	14,000
	6/15/88	13.51	87.92	0	8240	33,000	9,200	5,500	520	20,000
101.43	9/27/88 ¹	14.56	86.87	0	8240	17,000	2,200	2,800	1,700	5,100
	1/5/89	13.48	87.95	0	8240	37,000	5,000	3,400	2,200	10,000
	4/6/89	12.60	88.83	0	---	---	---	---	---	---
	6/28/89	14.58	86.85	0	8240	80,000	7,000	4,100	2,000	9,700
	10/3/89	13.03	88.40	0	8240	110,000	8,500	5,100	2,600	14,000
	1/4/90	15.08	86.35	0	8240	59,000	5,200	2,600	2,000	11,000
	4/3/90	14.06	87.37	0	8240	31,000	6,600	2,600	2,200	12,000
	7/3/90	14.28	87.15	0	8240	66,000	5,800	2,900	2,000	9,800
	11/6/90	16.10	85.33	0	---	---	---	---	---	---
	1/4/91	15.52	85.91	---	8240	50,000	5,600	2,200	1,800	9,400
	4/3/91	11.03	90.40	0	---	---	---	---	---	---
	7/2/91	14.44	86.99	0	8240	81,000	11,000	2,700	2,100	13,000
	10/2/91	16.22	85.21	0	---	---	---	---	---	---
	1/2/92	15.71	85.72	0	8240	67,000	7,500	1,900	1,800	9,500
	4/7/92	13.47	87.96	0	---	---	---	---	---	---
	8/13/92	15.97	85.46	0	---	---	---	---	---	---

Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

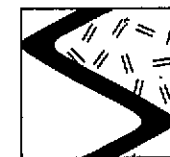
Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
-----ppb----->										
MW-6 (cont)	12/3/92	16.62	<84.81	---	---	---	---	---	---	---
	3/25/93	10.58	90.85	0	8240	110,000	12,000	2,900	4,200	14,000
	6/23/93	13.01	88.42	0	---	---	---	---	---	---
	9/21/93	14.74	86.69	0	8240	62,000	12,000	1,400	2,100	12,000
	12/2/93	14.87	86.56	0	---	---	---	---	---	---
	3/8/94	12.04	89.39	0	8240	61,000	7,000	1,500	1,500	7,400
	6/13/94	13.37	88.06	0	---	---	---	---	---	---
	10/4/94	15.56	85.87	0	8015/8020	78,000	13,000	940	1,900	10,000
	11/14/94	13.53	87.90	0	--- ¹¹	---	---	---	---	---
	2/14/95	10.42	91.01	0	8015/8020	50,000	9,100	1,700	1,700	8,600
MW-7	2/5/88	---	---	---	8240	81,000	34,000	36,000	2,400	16,000
	6/15/88	12.57	88.34	---	8240	77,000	40,000	41,000	1,400	24,000
100.91	9/27/88 ^{1,7}	13.60	87.31	---	8240	30,000	9,700	8,900	400	4,100
	1/5/89	12.98	87.93	---	8240	96,000	36,000	38,000	2,800	16,000
	4/6/89	12.34	88.57	---	---	---	---	---	---	---
	6/28/89	14.08	86.83	---	8240	110,000	31,000	30,000	2,600	16,000
	10/3/89	14.53	86.38	---	8240	230,000	34,000	34,000	2,400	15,000
	1/4/90	14.49	86.42	---	8240	150,000	41,000	40,000	2,400	15,000
	4/3/90	13.66	87.25	---	8240	100,000	31,000	28,000	2,100	16,000
	7/3/90	13.86	87.05	---	8240	190,000	30,000	27,000	1,800	13,000
	11/6/90	15.58	85.33	---	8240	160,000	27,000	25,000	1,900	15,000
	1/4/91	15.25	85.66	---	---	---	---	---	---	---
	4/3/91	11.41	89.50	---	8240	240,000	40,000	36,000	2,400	18,000
	7/2/91	14.18	86.73	---	---	---	---	---	---	---
	10/2/91	15.78	85.13	---	8240	220,000	26,000	27,000	2,500	18,000
	1/2/92	15.45	85.46	---	---	---	---	---	---	---
	4/7/92	13.48	87.43	---	8240	260,000	27,000	26,000	2,400	15,000
	8/13/92	15.89	85.02	---	---	---	---	---	---	---
	12/3/92	16.43	84.48	---	8240	330,000	29,000	31,000	3,300	18,000
	3/25/93	11.10	89.81	---	---	---	---	---	---	---
	6/23/93	13.63	88.13	1.06	---	---	---	---	---	---
	9/21/93	14.88	86.57	0.67	---	---	---	---	---	---
	12/2/93	14.74	86.32	0.19	---	---	---	---	---	---
	3/8/94	12.37	88.54	0	---	---	---	---	---	---
	6/13/94	13.12	88.03	0.30	---	---	---	---	---	---



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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <-----ppb----->	B	T	E	X
MW-7 (cont)	10/4/94 ¹⁰ 11/14/94 2/14/95	--- 13.83 10.95	--- 87.22 ¹² 90.49 ¹²	--- 0.18 0.68	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---
MW-8 99.67	10/27/88 1/5/89 4/6/89 6/28/89 10/3/89 1/4/90 4/3/90 7/3/90 11/6/90 1/4/91 4/3/91 7/2/91 10/2/91 1/2/92 4/7/92 8/13/92 12/3/92 3/25/93 6/23/93 9/21/93 12/2/93 3/8/94 6/13/94 10/4/94 11/14/94 2/14/95	--- 12.02 11.78 13.40 13.84 13.99 13.07 13.11 14.77 14.59 11.53 13.71 14.84 15.05 12.17 14.96 15.85 10.78 12.27 13.68 14.00 11.84 12.11 14.20 14.06 10.08	--- 87.65 87.89 86.27 85.92 85.76 86.84 86.59 85.02 85.22 88.18 86.34 85.05 84.86 87.73 84.96 84.44 88.89 87.60 86.25 85.86 87.83 87.58 85.47 85.61 89.59	--- --- --- --- 0.11 0.10 0.30 0.04 0.15 0.18 0.05 0.48 0.27 0.30 0.29 0.31 0.78 --- 0.25 0.32 0.24 0 0.03 0 0 0	--- 8240 --- 8240 --- 8015/8020 --- ¹¹ ---	190,000 87,000 --- 120,000 --- 140,000 ---	27,000 24,000 --- 22,000 --- 12,000 ---	43,000 39,000 --- 35,000 --- 36,000 ---	2,200 3,000 --- 2,900 --- 2,400 ---	15,000 15,000 --- 16,000 --- 17,000 ---
MW-9 101.15	10/27/88 1/5/89 4/6/89 6/28/89 10/3/89	--- 12.63 12.46 14.04 14.61	--- 88.52 88.69 87.11 86.54	--- 0 0 0 0	8240 8240 --- 8240 8240	50,000 55,000 --- 100,000 130,000	2,000 670 --- 510 540	9,900 8,900 --- 4,500 8,000	2,000 3,400 --- 2,600 3,200	14,000 16,000 --- 13,000 17,000



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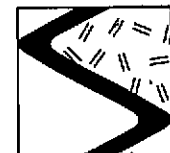
Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) ←-----ppb-----→	B	T	E	X
MW-9 (cont)	1/4/90	14.59	86.56	0	8240	83,000	600	4,600	2,600	14,000
	4/3/90	13.75	87.40	0	8240	52,000	1,600	5,400	3,100	16,000
	7/3/90	13.84	87.31	0	8240	100,000	520	5,400	3,200	16,000
	11/6/90	15.42	85.73	0	---	---	---	---	---	---
	1/4/91	15.37	85.78	0	8240	59,000	1,100	5,600	2,500	13,000
	4/3/91	12.27	88.88	0	---	---	---	---	---	---
	7/2/91	14.17	86.98	0	8240	130,000	1,900	7,600	3,600	20,000
	10/2/91	15.68	85.47	0	---	---	---	---	---	---
	1/2/92	15.65	85.50	0	8240	100,000	3,300	8,200	2,800	14,000
	4/7/92	13.84	87.31	0	---	---	---	---	---	---
	8/13/92	15.50	85.65	0	8240	45,000	1,300	3,000	1,500	7,100
	12/3/92	16.66	84.49	0	---	---	---	---	---	---
	3/25/93	11.48	89.67	0	8240	220,000	540	3,200	2,100	18,000
	6/23/93	12.83	88.32	0	---	---	---	---	---	---
	9/21/93	14.31	86.84	0	8240	54,000	1,900	3,400	1,700	9,100
	12/2/93	14.70	86.46	0.01	8240	---	---	---	---	---
	3/8/94	12.63	88.52	0	8240	49,000	800	780	390	3,600
	6/13/94	13.65	87.50	0	---	---	---	---	---	---
	10/4/94	15.20	85.95	0	8015/8020	180,000	2,600	5,400	1,700	11,000
	11/14/94	14.25	86.90	0	---	---	---	---	---	---
	2/14/95	10.82	90.33	0	8015/8020	170,000	3,300	5,400	4,500	23,000
MW-10	10/27/88 ¹	---	---	---	8240	<500	26	13	<5	<5
	1/5/89	12.64	89.72	0	8240	<1,000	<0.3	<0.3	<0.3	<0.3
102.36	4/6/89	11.38	90.98	---	---	---	---	---	---	---
	6/28/89	13.64	88.72	0	8240	<500	<0.5	<0.5	<0.5	<0.5
	10/3/89	13.85	88.51	0	8240	<500	<0.5	<0.5	<0.5	<0.5
	1/4/90	13.75	88.61	0	8240	<50	0.5	1.1	<0.5	1.7
	4/3/90	12.86	89.50	0	8240	<50	<0.5	<0.5	<0.5	<0.5
	7/3/90	13.43	88.93	---	---	---	---	---	---	---
	11/6/90	14.82	87.54	---	---	---	---	---	---	---
	1/4/91	13.98	88.38	0	8240	<50	<0.5	<0.5	<0.5	<0.5
	4/3/91	9.79	92.57	---	---	---	---	---	---	---
	7/2/91	12.28	90.08	---	---	---	---	---	---	---
	10/2/91	14.53	87.83	---	---	---	---	---	---	---
	1/2/92	13.60	88.76	0	8240	<50	<0.5	<0.5	<0.5	<0.5



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) ----->	B	T ppb	E	X
MW-10 (cont)	4/7/92	11.83	90.53	---	---	---	---	---	---	---
	8/13/92	13.95	88.41	---	---	---	---	---	---	---
	12/3/92	13.96	88.40	---	---	---	---	---	---	---
	3/25/93	8.45	93.91	0	8240	<50	<0.5	<0.5	<0.5	<1.5
	6/23/93	11.60	91.03	0	---	---	---	---	---	---
	9/21/93	13.32	89.31	0	---	---	---	---	---	---
	12/2/93	13.27	89.36	0	---	---	---	---	---	---
	3/8/94	10.85	91.51	0	8240	<50	<0.5	<0.5	<0.5	<0.5
	6/13/94	---	---	---	---	---	---	---	---	---
	10/4/94	13.90	88.46	0	---	---	---	---	---	---
	11/14/94	11.80	90.56	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	2/14/95	8.64	93.72	0	---	---	---	---	---	---
MW-11	6/28/89	14.33	85.64	0	8240	60,000	36,000	13,000	2,500	12,000
	10/3/89	14.61	85.36	0	8240	14,000	4,200	1,400	240	1,300
99.97	1/4/90	14.55	85.42	0	8240	82,000	33,000	11,000	2,000	10,000
	4/3/90	13.82	86.15	0	8240	78,000	35,000	12,000	2,300	12,000
	7/3/90	14.00	85.97	0	8240	140,000	32,000	12,000	2,100	10,000
	11/6/90	15.56	84.41	0	---	---	---	---	---	---
	1/4/91	14.88	---	0.30	---	---	---	---	---	---
	4/3/91	10.75	---	0.21	8240	340,000	29,000	14,000	3,700	24,000
	7/2/91	13.97	---	0.02	8240	130,000	27,000	14,000	2,200	12,000
	10/2/91	15.60	---	---	---	---	---	---	---	---
	1/2/92	14.51	85.46	0	8240	77,000	18,000	14,000	1,900	10,000
	4/7/92	13.13	86.84	0	---	---	---	---	---	---
	8/13/92	17.04	82.53	---	---	---	---	---	---	---
99.57	12/3/92	15.59	83.98	---	---	---	---	---	---	---
	3/25/93	10.06	89.51	---	8240	110,000	13,000	2,100	5,900	9,800
	3/8/94	11.70	87.87	0	---	---	---	---	---	---
	6/13/94	12.16	87.41	0	---	---	---	---	---	---
	10/4/94 ¹⁰	---	---	---	---	---	---	---	---	---
	11/14/94 ¹⁰	---	---	---	---	---	---	---	---	---
	2/14/95	10.02	89.55	0	8015/8020	37,000	8,300	2,900	1,100	5,000
MW-12	6/28/89	14.10	85.54	0	8240	55,000	30,000	21,000	2,900	19,000
	10/3/89	14.30	85.34	0	8240	170,000	30,000	23,000	2,700	15,000



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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <-----ppb----->	B	T	E	X
MW-12 (cont)										
99.64	1/4/90	14.35	85.29	0	8240	110,000	24,000	19,000	2,300	12,000
	4/3/90	13.59	86.05	0	8240	89,000	41,000	28,000	3,300	17,000
	7/3/90	13.77	85.87	0	8240	170,000	27,000	20,000	2,200	12,000
	11/6/90	15.19	84.45	0.06	8240	110,000	28,000	21,000	2,400	14,000
	1/4/91	14.52	---	---	---	---	---	---	---	---
	4/3/91	10.91	---	---	---	---	---	---	---	---
	4/9/91	---	---	0	8240	170,000	39,000	17,000	2,400	14,000
	7/2/91	13.51	---	0	---	---	---	---	---	---
	10/2/91	14.93	---	---	8240	170,000	27,000	15,000	2,600	17,000
	1/2/92	14.45	85.19	0	---	---	---	---	---	---
	4/7/92	13.05	86.59	0	---	---	---	---	---	---
99.22	8/13/92	17.39	81.83	0	---	---	---	---	---	---
	12/3/92	15.34	83.88	0	8240	2,400,000	19,000	21,000	14,000	110,000
	3/25/93	10.37	88.85	0	---	---	---	---	---	---
	6/23/93	12.21	87.01	0	8240	110,000	30,000	19,000	2,000	12,000
	3/8/94	11.95	87.27	0	---	---	---	---	---	---
	6/13/94	12.35	86.87	0	8240	62,000	6,600	6,900	2,400	9,900
	10/4/94 ¹⁰	---	---	---	---	---	---	---	---	---
	11/14/94 ¹⁰	---	---	---	---	---	---	---	---	---
	2/14/95	10.37	88.85	0	---	---	---	---	---	---
MW-13	6/28/89	13.22	85.25	0	8240	54,000	12,000	10,000	1,900	15,000
	10/3/89	13.54	84.93	0	8240	120,000	10,000	10,000	2,300	15,000
98.47	1/4/90	13.64	84.83	0	8240	87,000	6,800	10,000	2,000	12,000
	4/3/90	12.95	85.52	0	8240	53,000	12,000	14,000	2,900	17,000
	7/3/90	13.05	85.42	0	8240	90,000	8,400	11,000	2,000	11,000
	11/6/90	14.12	84.35	---	---	---	---	---	---	---
	1/4/91	14.05	84.42	0	8240	72,000	5,500	12,000	2,300	12,000
	4/3/91	11.41	87.06	---	---	---	---	---	---	---
	7/2/91	13.17	85.30	0	8240	120,000	12,000	13,000	2,500	14,000
	10/2/91	14.24	84.23	---	---	---	---	---	---	---
	1/2/92	14.13	84.34	0.03	---	---	---	---	---	---
	4/7/92	13.06	85.41	---	---	---	---	---	---	---
	8/13/92	14.26	84.21	0	8240	84,000	7,400	11,000	2,600	13,000

Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <-----ppb----->	B	T	E	X
MW-13 (cont)	12/3/92	14.82	83.65	---	---	---	---	---	---	---
	3/25/93	10.73	87.74	0	8240	97,000	5,200	2,500	7,200	12,000
	6/23/93	11.97	86.50	0	---	---	---	---	---	---
	9/21/93	13.08	85.39	0	8240	80,000	7,600	9,000	2,900	14,000
	12/2/93	13.45	85.02	0	---	---	---	---	---	---
	3/8/94	11.75	86.72	0	8240	78,000	5,300	7,600	2,600	10,000
	6/13/94	12.30	86.17	0	---	---	---	---	---	---
	10/4/94	14.18	84.29	0	8015/8020	39,000	2,300	2,700	850	4,600
	11/14/94	12.62	85.85	0	---	---	---	---	---	---
	2/14/95 ¹⁵	---	---	---	---	---	---	---	---	---
MW-14	8/29/90	21.39	78.29	0	8240 ⁸	970	4	2	0.7	2
	11/6/90	21.62	78.06	0	8240	920	10	10	4	9
99.68	1/4/91	21.69	77.99	0	8240	1,000	<0.5	4.0	2.6	4.2
	4/3/91	19.53	80.15	0	8240	1,200	380	6	7	18
	7/2/91	20.93	78.75	0	8240	460	27	1.0	1.2	1.0
	10/2/91	21.52	78.16	0	8240	480	6.7	0.8	1.4	1.8
	1/2/92	21.43	78.25	0	8240	1,100	2.4	1.5	6.2	18
	4/7/92	21.36	78.32	0	8240	290	<0.5	1.4	<0.5	1.2
	8/13/92	21.07	78.61	0	8240	370	10	1.2	<0.5	0.9
	12/3/92	21.67	78.01	0	8240	230	1.3	<0.5	<0.5	<0.5
	3/25/93	19.03	80.65	0	8240	390	57	2.1	1.3	1.7
	6/23/93	19.94	79.74	0	8240	4,400	460	220	16	62
	9/21/93	20.65	79.03	0	8240	680	8.7	1.7	3.2	12
	12/2/93	21.05	78.63	0	8240	900	0.8	7	3	7
	3/8/94	20.05	79.63	0	8240	1,700	2.4	7.7	5.6	14
	6/13/94	20.21	79.47	0	8240	750	0.8	8.0	3.2	5.7
	10/4/94	20.70	78.98	0	8015/8020	130	3.4	5.4	<0.5	2.0
	11/14/94	20.00	79.68	0	8015/8020	9,900	620	1,600	120	920
	2/14/95	18.93	80.75	0	8015/8020	230	35	2.4	2.2	8.0
MW-15	8/29/90	16.58	79.48	0	8240 ⁹	2,000	26	2	72	110
	11/6/90	17.43	78.63	0	8240	1,300	40	5	45	63
96.06	1/4/91	16.37	79.69	0	8240	1,700	46	2.8	58	86
	4/3/91	12.46	83.60	0	8240	2,100	74	0.8	44	85
	7/2/91	16.53	79.53	0	8240	1,700	39	<0.5	35	46



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) <-----ppb----->	B	T	E	X
MW-15 (cont)	10/2/91	17.33	78.73	0	8240	1,100	50	<0.5	40	33
	1/2/92	16.46	79.60	0	8240	1,300	51	<0.5	30	30
	4/7/92	14.70	81.36	0	8240	2,600	98	<5	64	36
	8/13/92	16.72	79.34	0	8240	510	55	<0.5	35	2.8
	12/3/92	17.43	78.63	0	8240	1,000	64	0.9	22	4.4
	3/25/93	13.33	82.73	0	8240	1,300	86	52	0.7	7.7
	6/23/93	15.23	80.83	0	8240	7,300	34	<0.5	85	160
	9/21/93	16.32	79.74	0	8240	1,500	39	<0.5	32	33
	12/2/93	16.57	79.49	0	8240	990	28	4	8	10
	3/8/94	14.61	81.45	0	8240	3,400	44	4.0	28	53
	10/4/94	16.48	79.58	0	8015/8020	310	11	10	2.2	12
	11/14/94	14.20	81.86	0	8015/8020	450	27	2.4	2.2	4.2
	2/14/95	13.16	82.90	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
MW-16	8/29/90	20.89	77.26	0	8240 ⁹	11,000	6,000	51	1,100	20
	11/6/90	21.27	76.88	0	8240	15,000	6,300	340	1,300	540
98.15	1/4/91	21.63	76.52	0	8240	16,000	6,800	820	1,300	1,500
	4/3/91	19.32	78.83	0	8240	45,000	7,300	2,200	1,800	4,900
	7/2/91	20.68	77.47	0	8240	30,000	6,400	530	1,500	1,800
	10/2/91	21.18	76.97	0	8240	24,000	4,600	450	1,400	1,600
	1/2/92	21.30	76.85	0	8240	20,000	4,700	240	1,200	1,100
	4/7/92	20.19	77.96	0	8240	40,000	5,000	980	1,100	2,100
	8/13/92	20.77	77.38	0	8240	17,000	4,500	240	860	530
	12/3/92	21.44	76.71	0	8240	39,000	4,600	410	1,100	2,200
	3/25/93	18.83	79.32	0	8240	39,000	5,500	1,400	690	2,000
	6/23/93	19.72	78.43	0	8240	29,000	6,600	1,200	1,400	3,700
	9/21/93	20.38	77.77	0	8240	36,000	6,300	340	1,200	1,800
	12/2/93	20.84	77.31	0	8240	28,000	5,600	230	900	820
	3/8/94	20.27	77.88	0	8240	35,000	6,500	760	1,000	1,300
	10/4/94	20.58	77.57	0	8015/8020	39,000	9,700	680	1,300	3,300
	11/14/94	20.12	78.03	0	8015/8020	26,000	5,500	640	690	1,800
	2/14/95	19.12	79.03	0	8015/8020	37,000	4,600	1,300	1,200	4,500
MW-17	8/13/92	23.30	82.70	0	8240	<50	<0.5	<0.5	<0.5	<0.5
	12/3/92	24.74	81.26	0	8240	<50	<0.5	<0.5	<0.5	<0.5
106.00	3/25/93	22.14	83.86	0	8240	<50	<0.5	<0.5	<0.5	<1.5



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) ←-----ppb-----→	B	T	E	X
MW-17 (cont)	6/23/93	23.02	82.98	0	8240	<50	<0.5	<0.5	<0.5	1
	9/21/93	23.09	82.91	0	8240	<50	<0.5	<0.5	<0.5	<0.8
	12/2/93	23.37	82.63	0	---	---	---	---	---	---
	3/8/94	22.83	83.17	0	8240	<50	<0.5	<0.5	<0.5	<0.5
	6/13/94	22.62	83.38	0	8240	<50	1.2	1.1	<0.5	0.9
	10/4/94	23.00	83.00	0	8015/8020	62	8.0	2.9	0.7	3.1
	11/14/94	23.03	82.97	0	8015/8020	550	22	120	8.9	84
	2/14/95	21.93	84.07	0	8015/8020	50	<0.5	1.4	<0.5	<0.5
P-1	8/13/92	10.02	76.41	0	---	---	---	---	---	---
	12/3/92	10.80	75.63	0	---	---	---	---	---	---
86.43	3/25/93	8.95	77.48	0	---	---	---	---	---	---
Rinseate	1/5/89	---	---	---	8240	<1,000	<0.3	<0.3	<0.3	<0.3
	3/8/94	---	---	---	8240	<50	1	1.4	<0.5	1.5
TBLB	1/5/89	---	---	---	8240	<1,000	<0.3	<0.3	<0.3	<0.3
	10/3/89	---	---	---	8240	<500	<0.5	<0.5	<0.5	<0.5
	1/4/90	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	4/3/90	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	7/3/90	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	11/6/90	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	1/4/91	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	4/3/91	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	7/2/91	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	10/2/91	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	1/2/92	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	4/7/92	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	8/13/92	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	12/3/92	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	3/25/93	---	---	---	8240	<50	<0.5	<0.5	<0.5	<1.5
	6/23/93	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	9/21/93	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.8
	12/2/93	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5
	3/8/94	---	---	---	8240	<50	0.6	0.8	<0.5	0.6
	6/13/94	---	---	---	8240	<50	<0.5	<0.5	<0.5	<0.5



Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) ←-----ppb-----→	B	T	E	X
TBLB	10/4/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
(cont)	11/14/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	2/14/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5

EXPLANATION:

TOC =
 DTW = Depth to water
 GWE = Ground water elevation in feet above mean sea level
 TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes
 DCE = 1,2 - Dichloroethane
 EDB = Ethylene dibromide
 VOCs = Volatile organic compounds
 ppb = Parts per billion
 --- = Not analyzed/Not applicable

ANALYTIC METHODS:

8240 = EPA Method 524.2/8240 for total fuel and aromatic volatile hydrocarbons.
 8015 = EPA Method 8015/5030 for TPPH(G).
 8020 = EPA Method 8020 for BTEX.

NOTES:

Analytic results and ground water elevation data prior to September 30, 1994, compiled from the Quarterly Ground Water Monitoring Report prepared for Chevron by Ground Water Technology Inc., July 1994.

- ¹ Samples analyzed by Fuel Fingerprint Analysis.
- ² EDB not detected at detection limits of 5,000 ppb.
- ³ Sample was analyzed a second time after the holding time expired to confirm the high TPH-G concentration reported in the original analysis.
- ⁴ DCE and EDB detected at 270 and 230 ppb, respectively.
- ⁵ DCE and EDB detected at 410 and 420 ppb, respectively.
- ⁶ Estimated thickness.
- ⁷ DCE detected at 2,600 ppb. EDB not detected at detection limits of 10 ppb.
- ⁸ DCE was detected at 1 ppb. Other VOCs not detected at detection limits of 0.5 to 4.0 pb.
- ⁹ Chloroform detected, concentration not stated. Other VOCs not detected at detection limits of 25 to 500 ppb.
- ¹⁰ Well not accessible due to down hole equipment.
- ¹¹ Well sampled semi-annually.
- ¹² GWE corrected for the presence of free-phase hydrocarbons using the formula $GWE = [(TOC - DTW) + (0.8)(Product\ Thickness)]$. 0.8 is the assumed specific gravity of free-phase hydrocarbons.
- ¹³ Well not located.
- ¹⁴ Well Sampled annually.
- ¹⁵ Well inaccessible due to inoperative automobile parked over well.



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Table 2. Product Thickness and Product Bailed - Chevron Service Station #9-0260, 21995
Foothill Boulevard, Hayward, California

Well ID	Date	Initial	Gallons Bailed (product + water)
		Product Thickness (ft)	
MW-7	11/14/94	0.18	0.5
	2/14/95	0.68	1.0



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 Chevron designated disposable 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) 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 accompanies each sampling set, or 5% trip blanks are included for sets of greater than 20 samples. The trip blank is analyzed for some or all of the same compounds as the ground water samples.



WATER SAMPLING DATA

Job Name 21995 Foothill Blvd.

Job Number 1-388-04

Sampler DB

Well Number ~~111~~ TB

Date 2-14-95

Well Diameter

Sample Point Location/Description

Well Depth (spec.)

Depth to Water (static) Well Depth (sounded)

Initial height of water in casing Volume gallons

Volume to be purged gallons

Purged With ~~Pumped~~ Sampled With ~~Disp. Batted~~

Pumped or Bailed Dry? Yes No Time After gallons

Water level at sampling Percent Recovery

Formulas/Conversions

r = well radius in ft

h = ht of water col. in ft

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft³

V_2 casing = 0.163 gal/ft

V_3 casing = 0.367 gal/ft

V_4 casing = 0.653 gal/ft

$V_{4.5}$ casing = 0.826 gal/ft

V_6 casing = 1.47 gal/ft

V_8 casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm

SAMPLES COLLECTED Time Total volume purged (gal.)

Water color Odor

Description of sediments or material in sample:

Additional Comments: TRIP BLANK

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
111 TB	21	1	-	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other ; 6 = Other



WATER SAMPLING DATA

Job Name 21995 Foothill Bw. Job Number 1-388-04
Well Number MW-60 Date 2-14-95
Sample Point Location/Description Crest of Pump Island
Depth to Water (static) 10.42 Well Depth (sounded) 17.0
Initial height of water in casing 6.56 Volume 4.29 gallons
Volume to be purged 12.59 gallons
Purged With PUMP Sampled With DISP. BAILER
Pumped or Bailed Dry? Yes ☒ No Time After gallons
Water level at sampling Percent Recovery

Sampler DB
Well Diameter 4"
Well Depth (spec.)

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
 $V_{2"} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{2.5"} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{3"} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{3.5"} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{4"} \text{ casing} = 1.47 \text{ gal/ft}$
 $V_{4.5"} \text{ casing} = 2.61 \text{ gal/ft}$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
13:00							
	13:04	4	4	6.75	59	1400	
	13:08	5	9	6.72	59	1440	
	13:13	4	13	6.70	59	1420	

SAMPLES COLLECTED Time 13:20 Total volume purged (gal.) 13
Water color CLEAR Odor Hydrocarbon
Description of sediments or material in sample:
Additional Comments:

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-60	2	1	—	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other ; 6 = Other



WATER SAMPLING DATA

Job Name 21995 FORTHILL BLV. Job Number 1-388-04
Well Number MW-9 Date 2-14-95
Sample Point Location/Description TEX STREET
Depth to Water (static) 10.82 Well Depth (sounded) 19.0
Initial height of water in casing 8.18 Volume 5.34 gallons
Volume to be purged 16 gallons
Purged With PUMP Sampled With DISP. BAILER
Pumped or Bailed Dry? Yes ☒ No Time After gallons
Water level at sampling Percent Recovery

Sampler DMB
Well Diameter 4"
Well Depth (spec.)

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
 V_2 casing = 0.163 gal/ft
 V_3 casing = 0.367 gal/ft
 V_4 casing = 0.653 gal/ft
 $V_{4.5}$ casing = 0.826 gal/ft
 V_6 casing = 1.47 gal/ft
 V_8 casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
12:00							
	12:03	5	5	6.62	59	0490	
	12:06	5	10	6.55	59	0660	
	12:10	6	16	6.49	59	0710	

SAMPLES COLLECTED Time 12:15 Total volume purged (gal.) 16
Water color CLEAR Odor Hydrocarbon Other
Description of sediments or material in sample:
Additional Comments:

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-9	2	1	—	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other ; 6 = Other



WATER SAMPLING DATA

Job Name 21995 Foothill B.V.

Job Number 1-388-04

Sampler DB

Well Number MW-10

Date 2-14-95

Well Diameter 4"

Sample Point Location/Description MADISON Foothill B.V.

Well Depth (spec.) _____

Depth to Water (static) 8.64

Well Depth (sounded) 28.0

Initial height of water in casing 19.36

Volume 12.64 gallons

Volume to be purged _____

37.9 gallons

Purged With PUMP

Sampled With DISP. BAILER

Pumped or Bailed Dry? Yes ☒ No

Time _____ After _____ gallons

Water level at sampling _____

Percent Recovery _____

Formulas/Conversions

r = well radius in ft

h = ht of water col. in ft

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft³

V_2 casing = 0.163 gal/ft

V_3 casing = 0.367 gal/ft

V_4 casing = 0.653 gal/ft

$V_{4.5}$ casing = 0.826 gal/ft

V_6 casing = 1.47 gal/ft

V_8 casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp ^F (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
9:24							
	9:38	13	13	7.56	62°	1240	
	9:41	13	26	7.55		1250	
	9:48	12	38	7.53		1260	

SAMPLES COLLECTED Time 9:55

Total volume purged (gal.) 38

Water color CLEAR

Odor NO

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (init)	Analysis Requested
MW-10	2	1	—	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____



WATER SAMPLING DATA

Job Name 21995 FOOTHILL BLV.

Job Number 1-388-04

Sampler DMB

Well Number MW-11

Date 2-14-95

Well Diameter 4"

Sample Point Location/Description BEHIND SS BLD.

Well Depth (spec.) _____

Depth to Water (static) 10.07

Well Depth (sounded) 18-0

Initial height of water in casing 7.98

Volume 5.81 gallons

Volume to be purged _____

15.6 gallons

Purged With PUMP

Sampled With DISP. BAILER

Pumped or Bailed Dry? Yes ☒ No

Time _____ After _____ gallons

Water level at sampling _____

Percent Recovery _____

Formulas/Conversions

r = well radius in ft

h = ht of water col. in ft

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft³

$V_{2"}$ casing = 0.163 gal/ft

$V_{2.5"}$ casing = 0.367 gal/ft

$V_{3"}$ casing = 0.653 gal/ft

$V_{3.5"}$ casing = 0.826 gal/ft

$V_{4"}$ casing = 1.47 gal/ft

$V_{4.5"}$ casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
14:03							
	14:06	5	5	6.80	62	1230	
	14:09	5	10	6.85	62	1240	
	14:12	5	15	6.78	62	1220	

SAMPLES COLLECTED Time 14:20

Total volume purged (gal.) 15

Water color CLEAR

Odor HYDROCARBON

Description of sediments or material in sample: _____

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-11	2	1	—	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____



WATER SAMPLING DATA

Job Name 21995 FOOTHILL BLV.

Job Number 1-388-04

Sampler DMS

Well Number MW-14

Date 2-14-95

Well Diameter 7"

Sample Point Location/Description Rex Rd.

Well Depth (spec.) _____

Depth to Water (static) 18.93

Well Depth (sounded) 41

Initial height of water in casing 22.07

Volume 3.59 gallons

Volume to be purged _____

10.79 gallons

Purged With PUMP

Sampled With DISP. BAILER

Pumped or Bailed Dry? Yes ☒ No

Time _____ After _____ gallons

Water level at sampling _____

Percent Recovery _____

Formulas/Conversions

r = well radius in ft

h = ht of water col. in ft

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft³

V_2 casing = 0.163 gal/ft

V_3 casing = 0.357 gal/ft

V_4 casing = 0.653 gal/ft

$V_{4.5}$ casing = 0.826 gal/ft

V_6 casing = 1.47 gal/ft

V_8 casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp ^F °C	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
11:27							
	11:30	4	4	7.04	62	0690	
	11:33	4	8	6.99	60	0690	
	11:36	3	11	6.81	60	0690	

SAMPLES COLLECTED Time 11:45

Total volume purged (gal.) 11

Water color CLEAR

Odor HYDROCARBON

Description of sediments or material in sample:

Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-14	2	1	—	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____



WATER SAMPLING DATA

Job Name 21995 Foothill Blvd. Job Number 1-388-04
Well Number MW-15 Date 2-14-95
Sample Point Location/Description Oakview Ave
Depth to Water (static) 13.16 Well Depth (sounded) 22.0
Initial height of water in casing 8.84 Volume 1.4 gallons
Volume to be purged 4 gallons
Purged With PUMP Sampled With DISP. BAILER
Pumped or Bailed Dry? ☒ Yes ☐ No Time After 3 gallons
Water level at sampling Percent Recovery

Sampler DB
Well Diameter 2"
Well Depth (spec.)

Formulas/Conversions

r = well radius in ft

h = ht of water col. in ft

vol. in cyl. = $\pi r^2 h$

7.48 gal/ft³

$V_{1"} \text{ casing} = 0.163 \text{ gal/ft}$

$V_{1.5"} \text{ casing} = 0.367 \text{ gal/ft}$

$V_{2"} \text{ casing} = 0.653 \text{ gal/ft}$

$V_{2.5"} \text{ casing} = 0.826 \text{ gal/ft}$

$V_{3"} \text{ casing} = 1.47 \text{ gal/ft}$

$V_{4"} \text{ casing} = 2.61 \text{ gal/ft}$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:07							
		1	1	6.95	62°	1250	
		1	2	6.96	1	1270	
	10:10	2	4	6.96	7	1300	

SAMPLES COLLECTED Time 10:15 Total volume purged (gal.) 3
Water color CLEAR Odor
Description of sediments or material in sample:
Additional Comments:

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-15	2	1	—	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other ; 6 = Other



WATER SAMPLING DATA

Job Name 21995 FORMULA B.W. Job Number 1-388-04
Well Number MW-16 Date 2-14-95
Sample Point Location/Description Rio Vista St.
Depth to Water (static) 19.12 Well Depth (sounded) 38
Initial height of water in casing 18.79 Volume 3 gallons
Volume to be purged RMP 9 gallons
Purged With PUMP HAND Sampled With DISP. BAILER
Pumped or Bailed Dry? Yes ☒ No Time After gallons
Water level at sampling Percent Recovery

Sampler DB
Well Diameter 2"
Well Depth (spec.)

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft^3
 $V_{2"} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{2.5"} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{3"} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{3.5"} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{4"} \text{ casing} = 1.47 \text{ gal/ft}$
 $V_{4.5"} \text{ casing} = 2.61 \text{ gal/ft}$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:21							
	10:26	3	3	6.70	62	0170	
	10:31	3	6	6.65	62	0150	
	10:35	3	9	6.61	62	0130	

SAMPLES COLLECTED Time 10:40 Total volume purged (gal.) 9
Water color CLEAR Odor HYDROCARBON
Description of sediments or material in sample:
Additional Comments:

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-16	2	1	—	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other ; 6 = Other



WATER SAMPLING DATA

Job Name 21995 FOOTHILL BLVD. Job Number 1-388-04
Well Number MW-17 Date 2-14-95
Sample Point Location/Description MAIN ST.
Depth to Water (static) 21.93 Well Depth (sounded) 34.
Initial height of water in casing 12.67 Volume 1.96 gallons
Volume to be purged 5.9 gallons
Purged With PUMP Sampled With DISP. BAILER
Pumped or Bailed Dry? Yes ☒ No Time 5 After 5 gallons
Water level at sampling Percent Recovery

Sampler DB.
Well Diameter 2"
Well Depth (spec.) 34

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
 $V_{2"}$ casing = 0.163 gal/ft
 $V_{3"}$ casing = 0.367 gal/ft
 $V_{4"}$ casing = 0.653 gal/ft
 $V_{4.5"}$ casing = 0.826 gal/ft
 $V_{6"}$ casing = 1.47 gal/ft
 $V_{8"}$ casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
10:53							
	1055	2	2	7.20	62	6700	
	1057	2	4	7.19	62	6890	
	1059	2	6	7.16	62	6960	

SAMPLES COLLECTED Time 11:07 Total volume purged (gal.) 6
Water color CLEAR Odor
Description of sediments or material in sample:
Additional Comments:

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-17	2	1	-	HCl	Y	SEQ	G/RTX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other ; 6 = Other

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

Chevron Facility Number 9-0260
Facility Address 21995 FOOTHILL BLVD. HAYWARD
Consultant Project Number 1-388-C4
Consultant Name SIERRA ENVIRONMENTAL SERVICES
Address PO BOX 2546 MARTINEZ, CA. 94553
Project Contact (Name) ED MORALAS
(Phone) 370-1280 (Fax Number) 370-7959

Chevron Contact (Name) MARK MILLER
(Phone) 842-8134
Laboratory Name SPA
Laboratory Release Number 2719150
Samples Collected by (Name) DAVID BEARDSLEY
Collection Date 2-14-95
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Media 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												Remarks
								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)					
TB		1	W	G	-	HCL	Y	✓												ANALYTICAL IN ORDER
MW-10		2			9:55			✓												
MW-15		2			10:15			✓												
MW-16		2			10:40			✓												
MW-17		2			11:07			✓												
MW-14		2			11:45			✓												
MW-9		2			12:15			✓												
MW-6		2			13:20			✓												
MW-11		2	✓	✓	14:24	✓	✓	✓												
Please Initial: <u>FI</u>																				
Samples stored in ice <u>hand delivered tank</u>																				
Appropriately <u>✓</u>																				
Samples are <u>✓</u>																				
VOA's will be <u>✓</u>																				
Comments: <u>✓</u>																				

Note:
Do Not Bill
TB-LB Sample

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>SES</u>	Date/Time <u>2/14/95 13:10</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>[Signature]</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>[Signature]</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>[Signature]</u>	
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>[Signature]</u>	Received For Laboratory By (Signature) <u>Flanquely</u>	Organization <u>[Signature]</u>	Date/Time <u>2/14/95</u>	



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

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

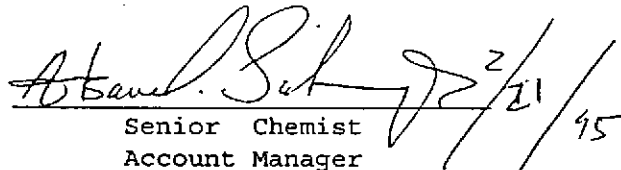
Date: February 20, 1995

Attn: ED MORALES

Laboratory Number : 80617

Project Number/Name : 1-388-04

This report has been reviewed and
approved for release.


Senior Chemist
Account Manager

Certified Laboratories

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Superior Precision Analytical, Inc.

Sierra Environmental
Attn: ED MORALES

A member of ESSCON Environmental Support Service Consortium

Project 1-388-04
Reported on February 20, 1995

TOTAL PETROLEUM HYDROCARBONS

LAB #	Sample ID	Sampled	Analyzed	Matrix
80617-01	TB	02/14/95	02/17/95	Water
80617-02	MW-10	02/14/95	02/17/95	Water
80617-03	MW-15	02/14/95	02/17/95	Water
80617-04	MW-16	02/14/95	02/17/95	Water
80617-05	MW-17	02/14/95	02/17/95	Water
80617-06	MW-14	02/14/95	02/17/95	Water
80617-07	MW-9	02/14/95	02/17/95	Water
80617-08	MW-6	02/14/95	02/17/95	Water
80617-09	MW-11	02/14/95	02/17/95	Water

RESULTS OF ANALYSIS

Laboratory Number:	80617-01	80617-02	80617-03	80617-04	80617-05
Gasoline_Range	ND<50	ND<50	ND<50	37000	50
Benzene	ND<0.5	ND<0.5	ND<0.5	4600	ND<0.5
Toluene	ND<0.5	ND<0.5	ND<0.5	1300	1.4
Ethyl Benzene	ND<0.5	ND<0.5	ND<0.5	1200	ND<0.5
Total Xylenes	ND<0.5	ND<0.5	ND<0.5	4500	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
Laboratory Number:	80617-06	80617-07	80617-08	80617-09	
Gasoline_Range	230	170000	50000	37000	
Benzene	35	3300	9100	8300	
Toluene	3.4	5400	1700	2900	
Ethyl Benzene	2.2	4500	1700	1100	
Total Xylenes	8.0	23000	8600	5000	
Concentration:	ug/L	ug/L	ug/L	ug/L	



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBONS

QA/QC Information

Laboratory Number: 80617

NA - Analysis NOT required

ND - Not Detected above quantitation limit

Matrix: Water

Analyte	Spike Recovery	RPD	Control Limits
Gasoline_Range	80/85	6	65-135
Benzene	105/110	5	65-135
Toluene	105/110	5	65-135
Ethyl Benzene	105/110	5	65-135
Total Xylenes	107/108	1	65-135
Gasoline_Range	85/83	2	65-135
Benzene	120/115	4	65-135
Toluene	110/110	0	65-135
Ethyl Benzene	110/100	10	65-135
Total Xylenes	108/107	1	65-135

i - The surrogate recovery was high due to the presence of interfering compounds in the sample.

Senior Chemist
Account Manager