

RECEIVED BY  
HAZARDOUS MATERIALS OFFICE

JUN 02 1993



**Chevron**

**HAYWARD FIRE DEPARTMENT**

May 28, 1993

Chevron U.S.A. Products Company  
2410 Camino Ramon  
San Ramon, CA 94583

Marketing Department  
Phone 510 842 9500

Site Assessment & Remediation

SCVWD Coordinator  
Regional Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street, Suite #500  
Oakland, California 94612

Re: Chevron Service Station #9-0260  
**21995 Foothill Boulevard**  
Hayward, California 94541

Dear Coordinator,

Please find attached the most recent quarterly ground water monitoring report for the above referenced site. Chevron has a total of thirteen ground water monitoring wells here with six wells on-site and seven off-site. Nine of the wells were sampled this event. The depth-to-water on-site ranged from 10.06 to 11.10 feet-below-grade and off-site from 8.45 to 22.14 feet-below-grade. Ground water was flowing south to southwestward with a gradient of 0.015 ft/ft to 0.026 ft/ft. The levels of dissolved hydrocarbons in the ground water samples were consistent with previous observations at this site.

Chevron plans to perform a vacuum-enhanced aquifer pumping test in June. This test will enable us to evaluate the effectiveness of the existing ground water extraction system and the potential pumping rate of the system wells. We will notify the RWQCB of our findings.

I declare under penalty of perjury that the information contained in the attached report is true and correct, and that any recommended actions are appropriate under the current circumstances, to the best of my knowledge.

If you have any questions, please call me at (510) 842-8896.

Truly yours,

A handwritten signature in cursive script, appearing to read "Jeff Zindel".

Jeff Zindel  
Environmental Engineer

Attachments

cc: Mr. Rafat Shahid, Alameda County  
Mr. Hugh Murphy, Hayward Fire Dept.  
Mr. Kent O'Brien, Geraghty & Miller, 1050 Marina Way South, Richmond, Ca. 94804  
File(MAC 9-0260R14)

**Weiss Associates***Environmental and Geologic Services*

5500 Shellmound Street, Emeryville, CA 94608-2411

Fax: 510-547-5043 Phone: 510-547-5420

May 3, 1993

Jeff Zindel  
Chevron U.S.A. Products Company  
P.O. Box 5004  
San Ramon, CA 94583-0804

Re: First Quarter 1993  
Ground Water Monitoring Report  
Chevron Service Station #9-0260  
21995 Foothill Boulevard  
Hayward, California  
WA Job #4-310-91

Dear Mr. Zindel:

As you requested, Weiss Associates (WA) is providing this Ground Water Monitoring Report for the site referenced above (Figure 1). WA sampled the ground water monitoring wells (Figure 2) on March 25, 1993, in accordance with the requirements and procedures of the California Regional Water Quality Control Board - San Francisco Bay Region and local regulatory agencies.

#### SAMPLING PROCEDURES

Prior to purging and sampling the wells, WA measured the depth to ground water in each well to the nearest 0.01 ft using an electronic sounder (Table 1). We also checked the wells for floating hydrocarbons. No floating hydrocarbons were measured in any well.

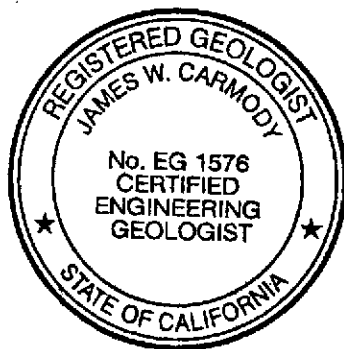
WA collected ground water samples for analysis after purging at least 3 well-casing volumes of ground water from each well, purging the well dry and allowing it to recover to 80% of its static water level or purging the well dry and allowing it to recover for at least two hours. Each sample was decanted from a dedicated or disposable bailer into appropriate clean sample containers and delivered to a California-certified laboratory following proper sample preservation and chain-of-custody procedures. Purged ground water was transported to the Chevron terminal in Richmond, California for recycling.

## MONITORING AND ANALYTIC RESULTS

The top-of-casing elevation, depth to ground water and the ground water elevation for each well are presented in Table 1. Ground water elevation contours and the ground water flow direction are shown on Figure 2. The ground water elevation contours indicate that ground water flows south to southwestward with a gradient of about 0.015 to 0.026 ft/ft.

Current and historical ground water analytic results are tabulated in Table 2. Total petroleum hydrocarbons as gasoline (TPH-G) and benzene isoconcentration contour maps are included as Figures 3 and 4, respectively. The water sample collection records, and analytic report and chain-of-custody forms are included as Attachments A and B, respectively.

We appreciate this opportunity to provide hydrogeologic consulting services to Chevron and trust that this submittal meets your needs. Please call if you have any questions regarding this report.



Sincerely,  
Weiss Associates

*Mariette Shin*  
Mariette Shin  
Staff Geologist

*James W. Carmody*  
James W. Carmody, C.E.G.  
Senior Hydrogeologist

MMS/JWC:fc

J:\CHEV\300\QMRPTS\310QMAP3.WP

Attachments    A    -    Water Sample Collection Records  
                     B    -    Analytic Report and Chain-of-Custody Forms

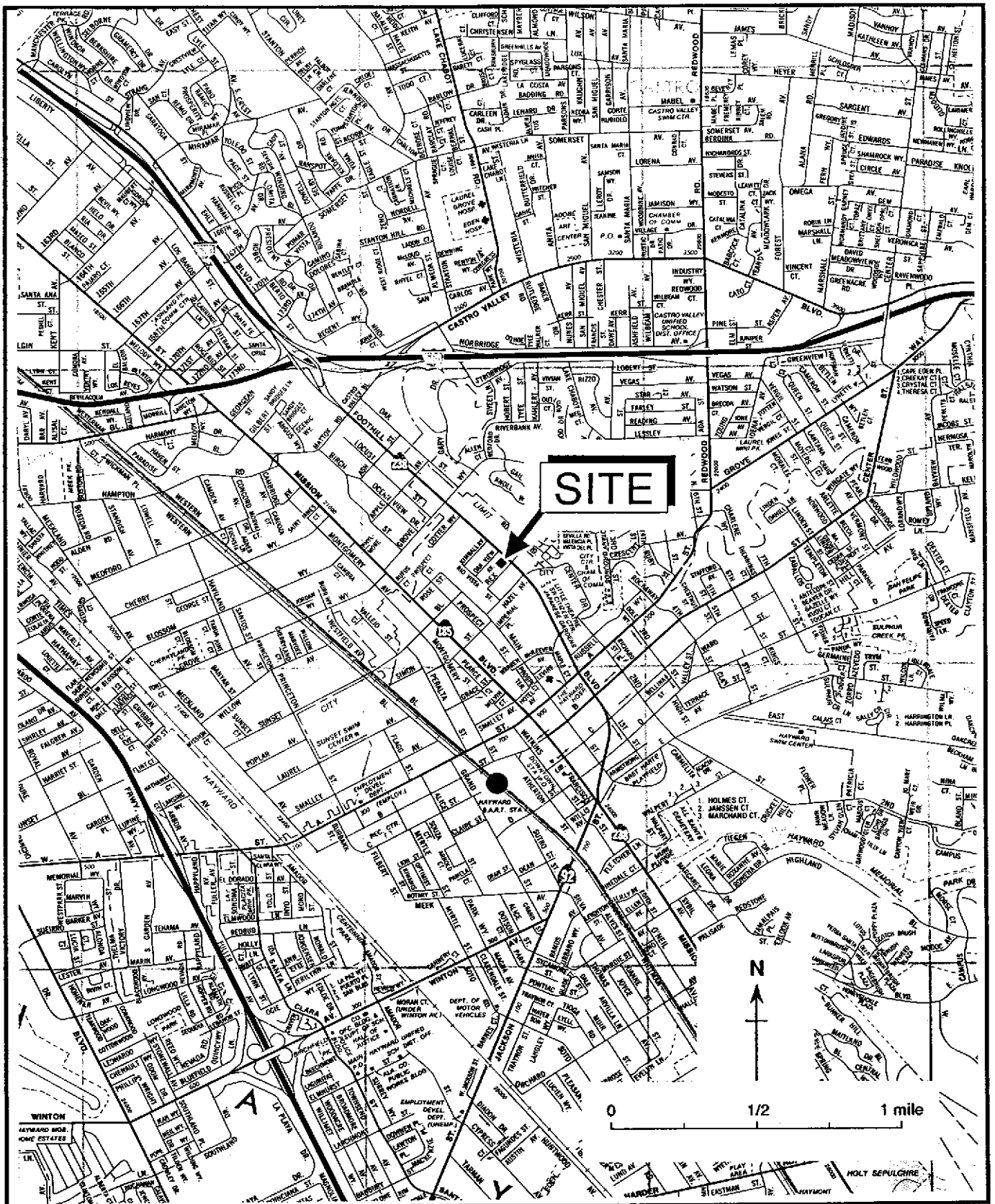


Figure 1. Site Location Map - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

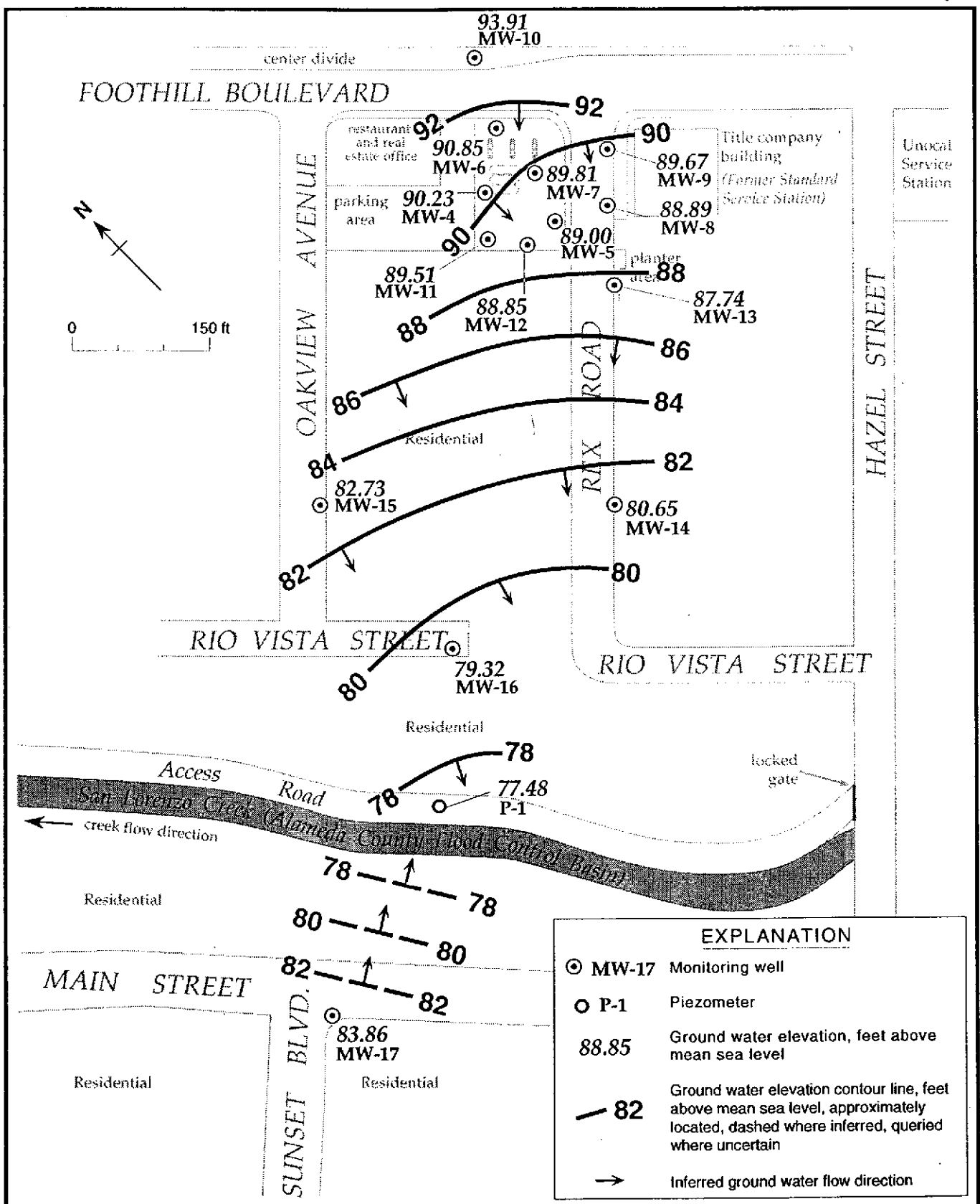


Figure 2. Monitoring Well and Piezometer Locations and Ground Water Elevation Contours - March 25, 1993 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

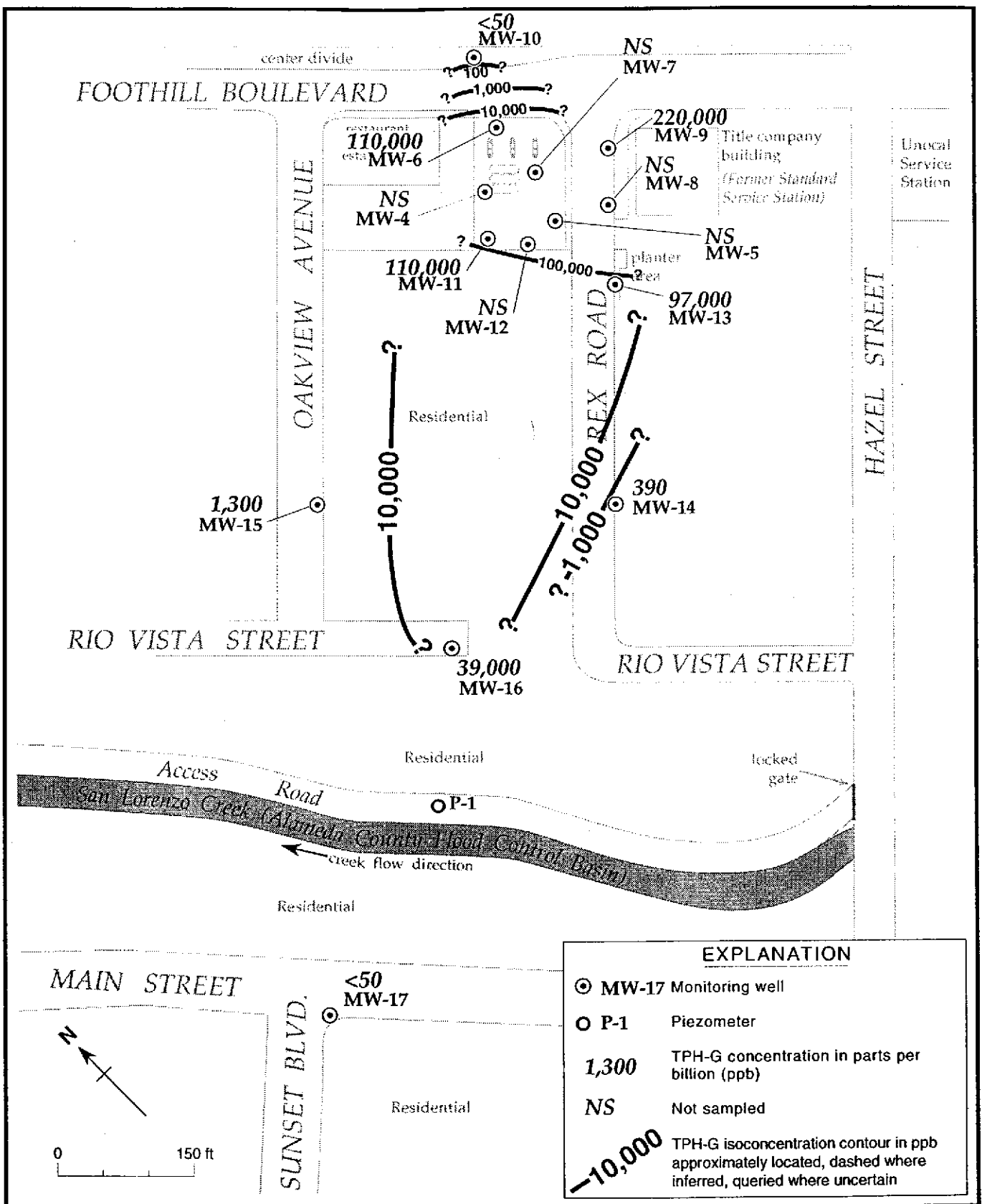


Figure 3. TPH-G Concentrations in Ground Water - March 25, 1993 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

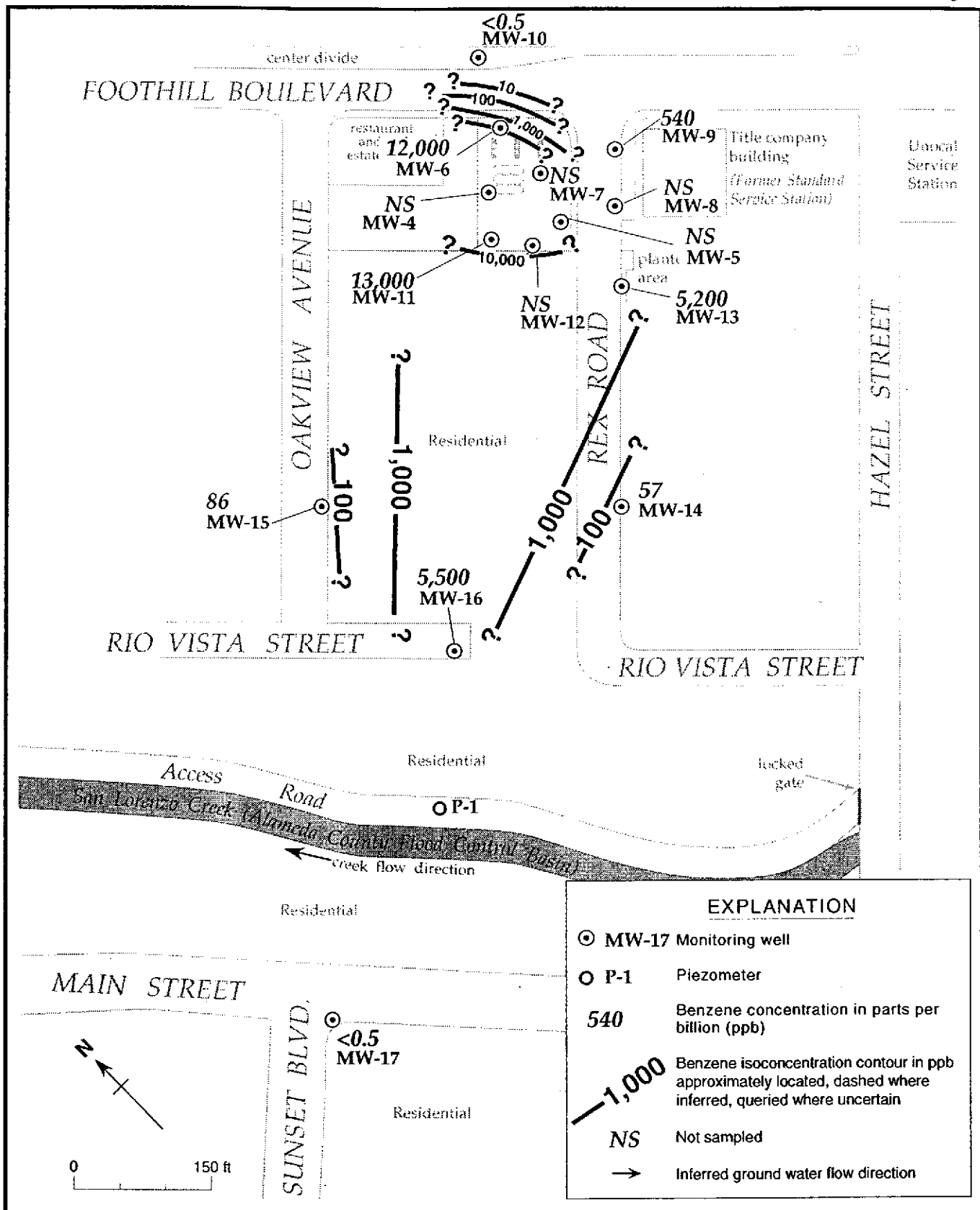


Figure 4. Benzene Concentrations in Ground Water - March 25, 1993 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

**TABLE 1. Ground Water Elevation Data, Chevron Service Station #9-0260, 21995  
Foothill Boulevard, Hayward, California**

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) <sup>a</sup>	Ground Water Elevation (ft above msl)
MW-4	06/15/88	100.75	12.92	---	87.83
	09/27/88		14.22	---	86.53
	01/05/89		13.20	---	87.55
	04/06/89		12.32	---	88.43
	06/28/89		14.25	---	86.50
	10/03/89		14.75	---	86.00
	01/04/90		14.75	---	86.00
	04/03/90		13.81	---	86.94
	07/03/90		14.06	---	86.69
	11/06/90		15.66	---	85.09
	01/04/91		15.18	---	85.57
	04/03/91		11.00	---	89.75
	07/02/91		14.25	---	86.50
	10/02/91		16.16	---	84.59
	01/02/92		15.26	---	85.49
	04/07/92		12.38	---	88.37
	08/13/92	100.73 <sup>b</sup>	16.68	---	84.05
	12/03/92		16.17	---	84.58
	03/25/93		10.50	---	90.23
MW-5	06/15/88	99.97	12.30	---	87.67
	09/27/88		13.25	---	86.72
	01/05/89		12.70	---	87.27
	04/06/89		12.22	---	87.75
	06/28/89		13.81	---	86.16
	10/03/89		14.27	---	85.70
	01/04/90		14.31	---	85.66
	04/03/90		13.50	---	86.47
	07/03/90		13.64	---	86.33
	11/06/90		15.14	---	84.83
	01/04/91		14.90	0.01	85.08
	04/03/91		11.56	---	88.41
	07/02/91		13.89	---	86.08
	10/02/91		15.26	---	84.71
	01/02/92		14.97	---	85.00
	04/07/92		13.44	---	86.53
	08/13/92		15.61	---	84.36
	12/03/92		16.29	<0.02 <sup>c</sup>	83.68
	03/25/93		10.97	---	89.00
MW-6	06/15/88	101.43	13.51	---	87.92
	09/27/88		14.56	---	86.87
	01/05/89		13.48	---	87.95
	04/06/89		12.60	---	88.83
	06/28/89		14.58	---	86.85

-- Table 1 continues on next page --



TABLE 1. Ground Water Elevation Data, Chevron Service Station #9-0260, 21995  
Foothill Boulevard, Hayward, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) <sup>a</sup>	Ground Water Elevation (ft above msl)
	10/03/89		13.03	---	88.40
	01/04/90		15.08	---	86.35
	04/03/90		14.06	---	87.37
	07/03/90		14.28	---	87.15
	11/06/90		16.10	---	85.33
	01/04/91		15.52	---	85.91
	04/03/91		11.03	---	90.40
	07/02/91		14.44	---	86.99
	10/02/91		16.22	---	85.21
	01/02/92		15.71	---	85.72
	04/07/92		13.47	---	87.96
	08/13/92		15.97	---	85.46
	12/03/02		>16.62	---	<84.81
	03/25/93		10.58	---	90.85
MW-7	06/15/88	100.91	12.57	---	88.34
	09/27/88		13.60	---	87.31
	01/05/89		12.98	---	87.93
	04/06/89		12.34	---	88.57
	06/28/89		14.08	---	86.83
	10/03/89		14.53	---	86.38
	01/04/90		14.49	---	86.42
	04/03/90		13.66	---	87.25
	07/03/90		13.86	---	87.05
	11/06/90		15.58	---	85.33
	01/04/91		15.25	---	85.66
	04/03/91		11.41	---	89.50
	07/02/91		14.18	---	86.73
	10/02/91		15.78	---	85.13
	01/02/92		15.45	---	85.46
	04/07/92		13.48	---	87.43
	08/13/92		15.89	---	85.02
	12/03/92		16.43	---	84.48
	03/25/93		11.10	---	89.81
MW-8	01/05/89	99.67	12.02	---	87.65
	04/06/89		11.78	---	87.89
	06/28/89		13.40	---	86.27
	10/03/89		13.84	0.11	85.92
	01/04/90		13.99	0.10	85.76
	04/03/90		13.07	0.30	86.84
	07/03/90		13.11	0.04	86.59
	11/06/90		14.77	0.15	85.02
	01/04/91		14.59	0.18	85.22
	04/03/91		11.53	0.05	88.18

-- Table 1 continues on next page --

**TABLE 1. Ground Water Elevation Data, Chevron Service Station #9-0260, 21995  
Foothill Boulevard, Hayward, California (continued)**

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) <sup>a</sup>	Ground Water Elevation (ft above msl)
MW-9	07/02/91	101.15	13.71	0.48	86.34
	10/02/91		14.84	0.27	85.05
	01/02/92		15.05	0.30	84.86
	04/07/92		12.17	0.29	87.73
	08/13/92		14.96	0.31	84.96
	12/03/92		15.85	0.78	84.44
	03/25/93		10.78	---	88.89
	01/05/89		12.63	---	88.52
	04/06/89		12.46	---	88.69
	06/28/89		14.04	---	87.11
	10/03/89		14.61	---	86.54
	01/04/90		14.59	---	86.56
	04/03/90		13.75	---	87.40
	07/03/90		13.84	---	87.31
	11/06/90		15.42	---	85.73
	01/04/91		15.37	---	85.78
	04/03/91		12.27	---	88.88
MW-10	07/02/91	102.36	14.17	---	86.98
	10/02/91		15.68	---	85.47
	01/02/91		15.65	---	85.50
	04/07/92		13.84	---	87.31
	08/13/92		15.50	---	85.65
	12/03/92		16.66	---	84.49
	03/25/93		11.48	---	89.67
	01/05/89		12.64	---	89.72
	04/06/89		11.38	---	90.98
	06/28/89		13.64	---	88.72
	10/03/89		13.85	---	88.51
	01/04/90		13.75	---	88.61
	04/03/90		12.86	---	89.50
	07/03/90		13.43	---	88.93
	11/06/90		14.82	---	87.54
	01/04/91		13.98	---	88.38
	04/03/91		9.79	---	92.57
	07/02/91		12.28	---	90.08
	10/02/91		14.53	---	87.83
	01/02/91		13.60	---	88.76
	04/07/92		11.83	---	90.53
	08/13/92		13.95	---	88.41
	12/03/92		13.96	---	88.40
	03/25/93		8.45	---	93.91

-- Table 1 continues on next page --

**TABLE 1. Ground Water Elevation Data, Chevron Service Station #9-0260, 21995  
Foothill Boulevard, Hayward, California (continued)**

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) <sup>a</sup>	Ground Water Elevation (ft above msl)
MW-11	06/28/89	99.97	14.33	---	85.64
	10/03/89		14.61	---	85.36
	01/04/90		14.55	---	85.42
	04/03/90		13.82	---	86.15
	07/03/90		14.00	---	85.97
	11/06/90		15.56	---	84.41
	01/04/91	d	14.88	0.30	---
	04/03/91		10.75	0.21	---
	07/02/91		13.97	0.02	---
	10/02/91		15.60	---	---
	01/02/92		14.51	---	85.46
	04/07/92		13.13	---	86.84
	08/13/92	99.57 <sup>b</sup>	17.04	---	82.53
	12/03/92		15.59	---	83.98
	03/25/93		10.06	---	89.51
MW-12	06/28/89	99.64	14.10	---	85.54
	10/03/89		14.30	---	85.34
	01/04/90		14.35	---	85.29
	04/03/90		13.59	---	86.05
	07/03/90		13.77	---	85.87
	11/06/90		15.19	---	84.45
	01/04/91	d	14.52	0.06	---
	04/03/91		10.91	---	---
	07/02/91		13.51	---	---
	10/02/91		14.93	---	---
	01/02/92		14.45	---	85.19
	04/07/92		13.05	---	86.59
	08/13/92	99.22 <sup>b</sup>	17.39	---	81.83
	12/03/92		15.34	---	83.88
	03/25/93		10.37	---	88.85
MW-13	06/28/89	98.47	13.22	---	85.25
	10/03/89		13.54	---	84.93
	01/04/90		13.64	---	84.83
	04/03/90		12.95	---	85.52
	07/03/90		13.05	---	85.42
	11/06/90		14.12	---	84.35
	01/04/91		14.05	---	84.42
	04/03/91		11.41	---	87.06
	07/02/91		13.17	---	85.30
	10/02/91		14.24	---	84.23
	01/02/92		14.13	0.03	84.34
	04/07/92		13.06	---	85.41
	08/13/92		14.26	---	84.21

-- Table 1 continues on next page --

TABLE 1. Ground Water Elevation Data, Chevron Service Station #9-0260, 21995  
Foothill Boulevard, Hayward, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) <sup>a</sup>	Ground Water Elevation (ft above msl)
MW-14	12/03/92	99.68	14.82	---	83.65
	03/25/93		10.73	---	87.74
	08/29/90		21.39	---	78.29
	11/06/90		21.62	---	78.06
	01/04/91		21.69	---	77.99
	04/03/91		19.53	---	80.15
	07/02/91		20.93	---	78.75
	10/02/91		21.52	---	78.16
	01/02/92		21.43	---	78.25
	04/07/92		21.36	---	78.32
	08/13/92		21.07	---	78.61
	12/03/92		21.67	---	78.01
	03/25/93		19.03	---	80.65
MW-15	08/29/90	96.06	16.58	---	79.48
	11/06/90		17.43	---	78.63
	01/04/91		16.37	---	79.69
	04/03/91		12.46	---	83.60
	07/02/91		16.53	---	79.53
	10/02/91		17.33	---	78.73
	01/02/92		16.46	---	79.60
	04/07/92		14.70	---	81.36
	08/13/92		16.72	---	79.34
	12/03/92		17.43	---	78.63
	03/25/93		13.33	---	82.73
MW-16	08/29/90	98.15	20.89	---	77.26
	11/06/90		21.27	---	76.88
	01/04/91		21.63	---	76.52
	04/03/91		19.32	---	78.83
	07/02/91		20.68	---	77.47
	10/02/91		21.18	---	76.97
	01/02/92		21.30	---	76.85
	04/07/92		20.19	---	77.96
	08/13/92		20.77	---	77.38
	12/03/92		21.44	---	76.71
	03/25/93		18.83	---	79.32
MW-17	08/13/92	106.00	23.30	---	82.70
	12/03/92		24.74	---	81.26
	03/25/93		22.14	---	83.86

-- Table 1 continues on next page --

**TABLE 1. Ground Water Elevation Data, Chevron Service Station #9-0260, 21995  
Foothill Boulevard, Hayward, California (continued)**

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) <sup>a</sup>	Ground Water Elevation (ft above msl)
P-1	08/13/92	86.43	10.02	---	76.41
	12/03/92		10.80	---	75.63
	03/25/93		8.95	---	77.48

a = When floating hydrocarbons are present ground water elevation corrected by the formula:  
Ground water elevation = Top-of-casing elevation - Depth to ground water + (0.8 x hydrocarbon thickness)

b = Top-of-casing resurveyed on August 13, 1992

c = Estimated thickness

d = Top-of-casing cut down; elevation unknown

TABLE 2. Analytic Results for Ground Water - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

Sample ID (Sampling Frequency)	Sample Date	Analytical Lab	Depth to Water (ft)	TPH-G	B	E	T	X	EDC	EDB	VOCs
-----parts per billion (lg/L)-----											
MW-4 (2nd & 4th quarters)	02/05/88	B&C		88,000	24,000	1,700	19,000	10,000	---	---	---
	06/15/88	B&C	12.92	95,000	45,000	2,100	30,000	17,000	---	---	---
	09/27/88 <sup>a</sup>	CCAS	14.22	500,000	41,000	<5,000	27,000	16,000	<5,000	<5,000	---
	09/27/88 <sup>ab</sup>	CCAS	14.22	88,000	1,200	1,600	4,100	12,000	270	230	---
	01/05/89	SPA	13.20	64,000	41,000	2,700	29,000	14,000	---	---	---
	06/28/89	SPA	14.25	110,000	34,000	2,400	24,000	13,000	---	---	---
	10/03/89	SPA	14.75	240,000	36,000	3,200	31,000	19,000	---	---	---
	01/04/90	SPA	14.75	130,000	33,000	2,400	28,000	14,000	---	---	---
	04/03/90	SPA	13.81	110,000	41,000	2,900	32,000	17,000	---	---	---
	07/03/90	SPA	14.06	180,000	32,000	2,600	30,000	15,000	---	---	---
	11/06/90	SPA	15.66	170,000	31,000	2,700	30,000	17,000	---	---	---
	04/03/91	SPA	11.00	130,000	21,000	2,300	24,000	14,000	---	---	---
	10/02/91	SPA	16.16	240,000	27,000	2,600	33,000	16,000	---	---	---
	04/07/92 <sup>c</sup>	---	12.38	---	---	---	---	---	---	---	---
	12/03/92	SPA	16.17	1,300,000	17,000	12,000	41,000	90,000	---	---	---
MW-5 (2nd & 4th quarters)	02/05/88	B&C		80,000	16,000	2,600	15,000	17,000	---	---	---
	06/15/88	B&C	12.30	77,000	42,000	2,500	38,000	16,000	---	---	---
	09/27/88 <sup>a</sup>	CCAS	13.25	470,000	39,000	<5,000	32,000	16,000	<5,000	<5,000	---
	09/27/88 <sup>ab</sup>	CCAS	13.25	48,000	1,800	1,600	3,500	10,000	410	420	---
	01/05/89	SPA	12.70	82,000	44,000	2,400	37,000	14,000	---	---	---
	06/28/89	SPA	13.81	80,000	36,000	2,400	24,000	13,000	---	---	---
	10/03/89	SPA	14.27	240,000	40,000	2,600	35,000	15,000	---	---	---
	01/04/90	SPA	14.31	130,000	37,000	2,400	31,000	13,000	---	---	---
	04/03/90	SPA	13.50	120,000	41,000	2,500	33,000	14,000	---	---	---
	07/03/90	SPA	13.64	200,000	28,000	1,800	25,000	10,000	---	---	---
	11/06/90	SPA	15.14	370,000	38,000	4,700	36,000	31,000	---	---	---
	04/03/91	SPA	11.56	140,000	36,000	2,700	32,000	17,000	---	---	---
	10/02/91	SPA	15.26	230,000	34,000	2,700	31,000	16,000	---	---	---
	04/07/92	SPA	13.44	220,000	35,000	2,500	30,000	14,000	---	---	---
	12/03/92 <sup>d</sup>	---	16.29	---	---	---	---	---	---	---	---
MW-6 (1st & 3rd quarters)	02/05/88	B&C		53,000	5,100	2,100	4,400	14,000	---	---	---
	06/15/88	B&C	13.51	33,000	9,200	520	5,500	20,000	---	---	---
	09/27/88 <sup>a</sup>	CCAS	14.56	17,000	2,200	1,700	2,800	5,100	130	<10	---
	01/05/89	SPA	13.48	37,000	5,000	2,200	3,400	10,000	---	---	---
	06/28/89	SPA	14.58	80,000	7,000	2,000	4,100	9,700	---	---	---
	10/03/89	SPA	13.03	110,000	8,500	2,600	5,100	14,000	---	---	---
	01/04/90	SPA	15.08	59,000	5,200	2,000	2,600	11,000	---	---	---
	04/03/90	SPA	14.06	31,000	6,600	2,200	2,600	12,000	---	---	---
	07/03/90	SPA	14.28	66,000	5,800	2,000	2,900	9,800	---	---	---
	01/04/91	SPA	15.52	50,000	5,600	1,800	2,200	9,400	---	---	---
	07/02/91	SPA	14.44	81,000	11,000	2,100	2,700	13,000	---	---	---
	01/02/92	SPA	15.71	67,000	7,500	1,800	1,900	9,500	---	---	---

-- Table 2 continues on next page --

TABLE 2. Analytic Results for Ground Water - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Sample ID (Sampling Frequency)	Sample Date	Analytical Lab	Depth to Water (ft)	TPH-G	B	E	T	X	EDC	EDB	VOCs
-----parts per billion (lg/L)-----											
	08/13/92 <sup>e</sup>	---	15.97	---	---	---	---	---	---	---	---
	03/25/93	SPA	10.58	110,000	12,000	2,900	4,200	14,000	---	---	---
MW-7 (2nd & 4th quarters)	02/05/88	B&C		81,000	34,000	2,400	36,000	16,000	---	---	---
	06/15/88	B&C	12.57	77,000	40,000	1,400	41,000	24,000	---	---	---
	09/27/88 <sup>a</sup>	CCAS	13.60	30,000	9,700	400	8,900	4,100	2,600	<10	---
	01/05/89	SPA	12.98	96,000	36,000	2,800	38,000	16,000	---	---	---
	06/28/89	SPA	14.08	110,000	31,000	2,600	30,000	16,000	---	---	---
	10/03/89	SPA	14.53	230,000	34,000	2,400	34,000	15,000	---	---	---
	01/04/90	SPA	14.49	150,000	41,000	2,400	40,000	15,000	---	---	---
	04/03/90	SPA	13.66	100,000	31,000	2,100	28,000	16,000	---	---	---
	07/03/90	SPA	13.86	190,000	30,000	1,800	27,000	13,000	---	---	---
	11/06/90	SPA	15.58	160,000	27,000	1,900	25,000	15,000	---	---	---
	04/03/91	SPA	11.41	240,000	40,000	2,400	36,000	18,000	---	---	---
	10/02/91	SPA	15.78	220,000	26,000	2,500	27,000	18,000	---	---	---
	04/07/92	SPA	13.48	260,000	27,000	2,400	26,000	15,000	---	---	---
	12/03/92	SPA	16.43	330,000	29,000	3,300	31,000	18,000	---	---	---
MW-8 (2nd & 4th quarters)	10/27/88 <sup>a</sup>	CCAS		190,000	27,000	2,200	43,000	15,000	<500	<500	---
	01/05/89	SPA	12.02	87,000	24,000	3,000	39,000	15,000	---	---	---
	06/28/89	SPA	13.40	120,000	22,000	2,900	35,000	16,000	---	---	---
	10/03/89 <sup>d</sup>		13.84	---	---	---	---	---	---	---	---
	01/04/90 <sup>d</sup>		13.99	---	---	---	---	---	---	---	---
	04/03/90 <sup>d</sup>		13.07	---	---	---	---	---	---	---	---
	07/03/90 <sup>d</sup>		13.11	---	---	---	---	---	---	---	---
	11/06/90 <sup>d</sup>		14.77	---	---	---	---	---	---	---	---
	04/03/91 <sup>d</sup>		11.53	---	---	---	---	---	---	---	---
	10/02/91 <sup>d</sup>		14.84	---	---	---	---	---	---	---	---
	04/07/92 <sup>e</sup>		12.17	---	---	---	---	---	---	---	---
	12/03/92 <sup>e</sup>		15.85	---	---	---	---	---	---	---	---
MW-9 (1st & 3rd quarters)	10/27/88 <sup>a</sup>	CCAS		50,000	2,000	2,000	9,900	14,000	<500	<500	---
	01/05/89	SPA	12.63	55,000	670	3,400	8,900	16,000	---	---	---
	06/28/90	SPA	14.04	100,000	510	2,600	4,500	13,000	---	---	---
	10/03/89	SPA	14.61	130,000	540	3,200	8,000	17,000	---	---	---
	01/04/90	SPA	14.59	83,000	600	2,600	4,600	14,000	---	---	---
	04/03/90	SPA	13.75	52,000	1,600	3,100	5,400	16,000	---	---	---
	07/03/90	SPA	13.84	100,000	520	3,200	5,400	16,000	---	---	---
	01/04/91	SPA	15.37	59,000	1,100	2,500	5,600	13,000	---	---	---
	07/02/91	SPA	14.17	130,000	1,900	3,600	7,600	20,000	---	---	---
	01/02/92	SPA	15.65	100,000	3,300	2,800	8,200	14,000	---	---	---
	08/13/92	SPA	15.50	45,000	1,300	1,500	3,000	7,100	---	---	---
	03/25/93	SPA	11.48	220,000	540	3,200	2,100	18,000	---	---	---

-- Table 2 continues on next page --

TABLE 2. Analytic Results for Ground Water - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Sample ID (Sampling Frequency)	Sample Date	Analytical Lab	Depth to Water (ft)	TPH-G -----	B	E	T	X	EDC	EDB	VOCs
-----parts per billion (lg/L)-----											
MW-10	10/27/88 <sup>a</sup>	CCAS		<500	26	<5	13	<5	<5	<5	---
(1st quarter)	01/05/89	SPA	12.64	<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---
	06/28/89	SPA	13.64	<500	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/03/89	SPA	13.85	<500	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/90	SPA	13.75	<50	0.5	<0.5	1.1	1.7	---	---	---
	04/03/90	SPA	12.86	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/91	SPA	13.98	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/02/92	SPA	13.60	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/25/93	SPA	8.45	<50	<0.5	<0.5	<0.5	<1.5	---	---	---
MW-11	06/28/89	SPA	14.33	60,000	36,000	2,500	13,000	12,000	---	---	f
(1st & 3rd quarters)	10/03/89	SPA	14.61	14,000	4,200	240	1,400	1,300	---	---	---
	01/04/90	SPA	14.55	82,000	33,000	2,000	11,000	10,000	---	---	---
	04/03/90	SPA	13.82	78,000	35,000	2,300	12,000	12,000	---	---	---
	07/03/90	SPA	14.00	140,000	32,000	2,100	12,000	10,000	---	---	---
	01/04/91 <sup>d</sup>	---	14.88	---	---	---	---	---	---	---	---
	04/03/91 <sup>d</sup>	---	10.75	---	---	---	---	---	---	---	---
	07/02/91	SPA	13.97	340,000	29,000	3,700	14,000	24,000	---	---	---
	01/02/92	SPA	14.51	130,000	27,000	2,200	14,000	12,000	---	---	---
	08/13/92	SPA	17.04	77,000	18,000	1,900	14,000	10,000	---	---	---
	03/25/93	SPA	10.06	110,000	13,000	2,100	5,900	9,800	---	---	---
MW-12	06/28/89	SPA	14.10	55,000	30,000	2,900	21,000	19,000	---	---	f
(2nd & 4th quarters)	10/03/89	SPA	14.30	170,000	30,000	2,700	23,000	15,000	---	---	---
	01/04/90	SPA	14.35	110,000	24,000	2,300	19,000	12,000	---	---	---
	04/03/90	SPA	13.59	89,000	41,000	3,300	28,000	17,000	---	---	---
	07/03/90	SPA	13.77	170,000	27,000	2,200	20,000	12,000	---	---	---
	11/06/90	SPA	15.19	110,000	28,000	2,400	21,000	14,000	---	---	---
	04/09/91	SPA	10.91	170,000	39,000	2,400	17,000	14,000	---	---	---
	10/02/91	SPA	14.93	170,000	27,000	2,600	15,000	17,000	---	---	---
	04/07/92 <sup>c</sup>	---	13.05	---	---	---	---	---	---	---	---
	12/03/92	SPA	15.34	2,400,000	19,000	14,000	21,000	110,000	---	---	---
MW-13	06/28/89	SPA	13.22	54,000	12,000	1,900	10,000	15,000	---	---	f
(1st & 3rd quarters)	10/03/89	SPA	13.54	120,000	10,000	2,300	10,000	15,000	---	---	---
	01/04/90	SPA	13.64	87,000	6,800	2,000	10,000	12,000	---	---	---
	04/03/90	SPA	12.95	53,000	12,000	2,900	14,000	17,000	---	---	---
	07/03/90	SPA	13.05	90,000	8,400	2,000	11,000	11,000	---	---	---
	01/04/91	SPA	14.05	72,000	5,500	2,300	12,000	12,000	---	---	---
	07/02/91	SPA	13.17	120,000	12,000	2,500	13,000	14,000	---	---	---
	01/02/92 <sup>e</sup>	SPA	14.13	---	---	---	---	---	---	---	---

-- Table 2 continues on next page --



TABLE 2. Analytic Results for Ground Water - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Sample ID (Sampling Frequency)	Sample Date	Analytical Lab	Depth to Water (ft)	TPH-G	B	E	T	X	EDC	EDB	VOCs
-----parts per billion (lg/L)-----											
MW-14 (All quarters)	08/13/92	SPA	14.26	84,000	7,400	2,600	11,000	13,000	---	---	---
	03/25/93	SPA	10.73	97,000	5,200	2,500	7,200	12,000	---	---	---
	08/29/90	SPA	21.39	970	4	0.7	2	2	1	---	g
	11/06/90	SPA	21.62	920	10	4	10	9	---	---	---
	01/04/91	SPA	21.69	1,000	<0.5	2.6	4.0	4.2	---	---	---
	04/03/91	SPA	19.53	1,200	380	7	6	18	---	---	---
	07/02/91	SPA	20.93	460	27	1.2	1.0	1.0	---	---	---
	10/02/91	SPA	21.52	480	6.7	1.4	0.8	1.8	---	---	---
	01/02/92	SPA	21.43	1,100	2.4	6.2	1.5	18	---	---	---
	04/07/92	SPA	21.36	290	<0.5	<0.5	1.4	1.2	---	---	---
	08/13/92	SPA	21.07	370	10	<0.5	1.2	0.9	---	---	---
	12/03/92	SPA	21.67	230	1.3	<0.5	<0.5	<0.5	---	---	---
	03/25/93	SPA	19.03	390	57	2.1	1.3	1.7	---	---	---
	03/25/93	SPA	19.03	390	57	2.1	1.3	1.7	---	---	---
MW-15 (All quarters)	08/29/90	SPA	16.58	2,000	26	72	2	110	<0.5	---	h
	11/06/90	SPA	17.43	1,300	40	45	5	63	---	---	---
	01/04/91	SPA	16.37	1,700	46	58	2.8	86	---	---	---
	04/03/91	SPA	12.46	2,100	74	44	0.8	85	---	---	---
	07/02/91	SPA	16.53	1,700	39	35	<0.5	46	---	---	---
	10/02/91	SPA	17.33	1,100	50	40	<0.5	33	---	---	---
	01/02/92	SPA	16.46	1,300	51	30	<0.5	30	---	---	---
	04/07/92	SPA	14.70	2,600	98	64	<5	36	---	---	---
	08/13/92	SPA	16.72	510	55	35	<0.5	2.8	---	---	---
	12/03/92	SPA	17.43	1,000	64	22	0.9	4.4	---	---	---
	03/25/93	SPA	13.33	1,300	86	52	0.7	7.7	---	---	---
	03/25/93	SPA	13.33	1,300	86	52	0.7	7.7	---	---	---
	03/25/93	SPA	13.33	1,300	86	52	0.7	7.7	---	---	---
	03/25/93	SPA	13.33	1,300	86	52	0.7	7.7	---	---	---
MW-16 (All quarters)	08/29/90	SPA	20.89	11,000	6,000	1,100	51	20	<0.5	---	h
	11/06/90	SPA	21.27	15,000	6,300	1,300	340	540	---	---	---
	01/04/91	SPA	21.63	16,000	6,800	1,300	820	1,500	---	---	---
	04/03/91	SPA	19.32	45,000	7,300	1,800	2,200	4,900	---	---	---
	07/02/91	SPA	20.68	30,000	6,400	1,500	530	1,800	---	---	---
	10/02/91	SPA	21.18	24,000	4,600	1,400	450	1,600	---	---	---
	01/02/92	SPA	21.30	20,000	4,700	1,200	240	1,100	---	---	---
	04/07/92	SPA	20.19	40,000	5,000	1,100	980	2,100	---	---	---
	08/13/92	SPA	20.77	17,000	4,500	860	240	530	---	---	---
	12/03/92	SPA	21.44	39,000	4,600	1,100	410	2,200	---	---	---
	03/25/93	SPA	18.83	39,000	5,500	1,400	690	2,000	---	---	---
	03/25/93	SPA	18.83	39,000	5,500	1,400	690	2,000	---	---	---
	03/25/93	SPA	18.83	39,000	5,500	1,400	690	2,000	---	---	---
	03/25/93	SPA	18.83	39,000	5,500	1,400	690	2,000	---	---	---
MW-17 (All quarters)	08/13/92	SPA	23.30	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	12/03/92	SPA	24.74	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/25/93	SPA	22.14	<50	<0.5	<0.5	<0.5	<1.5	---	---	---

-- Table 2 continues on next page --

TABLE 2. Analytic Results for Ground Water - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California (continued)

Sample ID (Sampling Frequency)	Sample Date	Analytical Lab	Depth to Water (ft)	TPH-G	B	E	T	X	EDC	EDB	VOCs
-----parts per billion (lg/L)-----											
Bailer Blank	01/05/89	SPA		<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---
Trip Blank	01/05/89	SPA		<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---
	10/03/89	SPA		<500	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/90	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/03/90	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/03/90	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	11/06/90	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/91	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/03/91	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/02/91	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/02/91	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/02/92	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/07/92	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	08/13/92	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	12/03/92	SPA		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/25/93	SPA		<50	<0.5	<0.5	<0.5	<1.5	---	---	---
DTSC MCLs				NE	1	680	100 <sup>i</sup>	1,750	0.5	0.02	j

**Abbreviations:**

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015

B = Benzene by Method 602 or 8020

E = Ethylbenzene by EPA Method 602 or 8020

T = Toluene by EPA Method 602 or 8020

X = Xylenes by EPA Method 602 or 8020

EDC = 1,2-dichloroethane by EPA Method 524.2/8240

EDB = Ethylene dibromide by EPA Method 524.2/8240

VOCs = Volatile Organic Compounds by EPA Method 8010

--- = Not analyzed

&lt;n = Not detected at laboratory method detection limit of n parts per billion

DTSC MCL = California Department of Toxic Substances Control maximum contaminant level for drinking water

NE = Not established

**Analytical Laboratory:**

B&amp;C = BC Analytical of Emeryville, California

CCAS = Central Coast Analytical Services of San Luis Obispo, California

SPA = Superior Precision Analytical of San Francisco and Martinez, California

**Notes:**

a = Samples analyzed by Fuel Fingerprint Analysis - EPA Method 524.2/8240 for total fuel and aromatic volatile hydrocarbons

b = Sample was analyzed a second time after the holding time expired to confirm the high TPH-G concentration reported in the original analysis.

c = Not sampled due to ground water extraction pump installation

d = Well not sampled due to the presence of floating hydrocarbons

e = Well dry, not sampled

f = Not detected at detection limits ranging from 500 to 2,000 ppb

g = Not detected at detection limits ranging from 0.5 to 4.0 ppb

h = Chloroform detected detection limits ranging from 25 to 500 ppb

i = DTSC recommended action level for drinking water

j = DTSC MCL for chloroform = 100 ppb - MCLs vary for other compounds

**ATTACHMENT A**  
**WATER SAMPLE COLLECTION RECORDS**



## WATER SAMPLING DATA

Well Name MW-6 Date 3/25/93 Time of Sampling 1252  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials APK  
 Sample Point Description M (M = Monitoring Well)  
 Location NE EDGE OF SITE

WELL DATA: Depth to Water 10.58 ft (static, pumping) Depth to Product      ft.  
 Product Thickness      Well Depth 16.5 ft (spec) Well Depth 16.63 ft (sounded) Well Diameter 4 in  
 Initial Height of Water in Casing 6.05 ft. = volume 3.95 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 11.65 gal.

EVACUATION METHOD: Pump # and type GRUNDFOS #1 Hose # and type NALGENE  
 Bailer# and type 3x PVC Dedicated N (Y/N)  
 Other     

Evacuation Time: Stop 11:10  
 Start 11:05  
 Total Evacuation Time 5  
 Total Evacuated Prior to Sampling 10.5 gal.  
 Evacuation Rate 2.1 gal. per minute

Depth to Water during Evacuation      ft.      time  
 Depth to Water at Sampling 10.50 ft. 1250 time  
 Evacuated Dry? Y After 10.5 gal. Time 11:10  
 80% Recovery = 11.79  
 % Recovery at Sample Time 99% Time 1250

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " 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: Meter Brand/Number     

Calibration: 4.0 7.0 10.0  
 Measured: SC/ $\mu$ mhos pH T°C Time

Volume Evacuated (gal.)

SAMPLE: Color CLEAR Odor       
 Description of matter in sample:       
 Sampling Method: DED-BUR.  
 Sample Port: Rate      gpm Totalizer      gal.  
 Time     

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
2	MW-6	w/cv	40ml	N	Y	HCl	EPA 8015/8020	N	SPA

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other.

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name MW-9 Date 3/25/93 Time of Sampling 13:10  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description M (M = Monitoring Well)  
 Location NE EDGE OF REX RD.

WELL DATA: Depth to Water 11.48 ft (static, pumping) Depth to Product      ft.  
 Product Thickness      Well Depth 19.2 ft (spec) Well Depth 19.14 ft (sounded) Well Diameter 4 in  
 Initial Height of Water in Casing 7.66 ft. = volume 5.00 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 15.0 gal.

EVACUATION METHOD: Pump # and type Grundfos H Hose # and type No. 100  
 Bailer # and type 3x PVC Dedicated Y N (Y/N)  
 Other     

Evacuation Time: Stop 12:05  
 Start 12:01  
 Total Evacuation Time 4  
 Total Evacuated Prior to Sampling 5 gal.  
 Evacuation Rate 1.25 gal. per minute

Depth to Water during Evacuation      ft.      time  
 Depth to Water at Sampling      ft.      time  
 Evacuated Dry? Y After 5 gal. Time 12:05  
 80% Recovery = 13.01  
 % Recovery at Sample Time 99% Time 13:01

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " 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: Meter Brand/Number     

Calibration: 4.0 7.0 10.0

Measured: SC/ $\mu$ mhos pH T°C Time Volume Evacuated (gal.)

SAMPLE: Color Slightly cloudy Odor IR Slight  
 Description of matter in sample: Suspended particulate matter  
 Sampling Method: Pert on dedicated VIL  
 Sample Port: Rate      gpm Totalizer      gal.  
 Time     

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
<u>2</u>	<u>MW-9</u>	<u>W/CV</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCl</u>	<u>EPA 8015/8020</u>	<u>N</u>	<u>SPA</u>

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name MW-10 Date 3/25/93 Time of Sampling 1228  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials AK  
 Sample Point Description M (M = Monitoring Well)  
 Location MEDIAN, FOOTHILL BLVD.

WELL DATA: Depth to Water 8.45 ft (static, pumping) Depth to Product — ft.  
 Product Thickness — Well Depth 27.65 ft (spec) Well Depth 27.55 ft (sounded) Well Diameter 4 in  
 Initial Height of Water in Casing 19.10 ft. = volume 12.47 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 37.42 gal.

EVACUATION METHOD: Pump # and type GRUNDFOS#1 Hose # and type NALGENE  
 Bailer# and type 3x "PVC" Dedicated N Y (Y/N)  
 Other —

Evacuation Time: Stop 0834  
 Start 0827  
 Total Evacuation Time 7  
 Total Evacuated Prior to Sampling 21 gal.  
 Evacuation Rate 3.0 gal. per minute

Depth to Water during Evacuation — ft. — time  
 Depth to Water at Sampling — ft. — time  
 Evacuated Dry? Y After 21 gal. Time 08:34  
 80% Recovery = —  
 % Recovery at Sample Time — Time —

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " casing =  $0.163 \text{ gal/ft}$   
 $V_3$ " casing =  $0.367 \text{ gal/ft}$   
 $V_4$ " casing =  $0.653 \text{ gal/ft}$   
 $V_{4.5}$ " casing =  $0.826 \text{ gal/ft}$   
 $V_6$ " casing =  $1.47 \text{ gal/ft}$   
 $V_8$  casing =  $2.61 \text{ gal/ft}$

CHEMICAL DATA: Meter Brand/Number —

Calibration: — 4.0 — 7.0 — 10.0

Measured: — SC/ $\mu$ mhos — pH — T°C — Time — Volume Evacuated (gal.) —

SAMPLE: Color CLEAR Odor —  
 Description of matter in sample: —  
 Sampling Method: DED. BUR.  
 Sample Port: Rate — gpm Totalizer — gal.  
 Time —

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
2	MW-10	w/cv	40ml	N	Y	HCl	EPA 8015/8020	N	SPA

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name MW-11 Date 3/25/93 Time of Sampling 12:38  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description M (M = Monitoring Well)  
 Location W CORNER OF SITE

WELL DATA: Depth to Water 10.06 ft (static pumping) Depth to Product — ft.  
 Product Thickness — Well Depth 1961 ft (spec) Well Depth 18.34 ft (sounded) Well Diameter 4 in  
 Initial Height of Water in Casing 8.33 ft. = volume 5.41 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 16.2 gal.

EVACUATION METHOD: Pump # and type GRUNDFOS #1 Hose # and type NALGENE  
 Bailer# and type 3x PVC Dedicated N Y (Y/N)  
 Other —

Evacuation Time: Stop 12:25  
 Start 12:19  
 Total Evacuation Time 6  
 Total Evacuated Prior to Sampling 6 gal.  
 Evacuation Rate 1.0 gal. per minute

Depth to Water during Evacuation — ft. — time  
 Depth to Water at Sampling — ft. — time  
 Evacuated Dry? No After — gal. Time —  
 80% Recovery = —  
 % Recovery at Sample Time — Time —

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " 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: Meter Brand/Number —

Calibration: 4.0 7.0 10.0

Measured: SC/μmhos pH T°C Time Volume Evacuated (gal.)

N/A

SAMPLE: Color Clear Odor Slight  
 Description of matter in sample: Acid  
 Sampling Method: Acidic bulk dispos BIR  
 Sample Port: Rate — gpm Totalizer — gal.  
 Time —

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
<u>2</u>	<u>MW-11</u>	<u>W/CV</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCl</u>	<u>EPA 8015/8020</u>	<u>N</u>	<u>SPA</u>

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name MW-13 Date 3/25/93 Time of Sampling 11:43  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description M (M = Monitoring Well)  
 Location PLANTER, SE. SIDE OF REX RD.

WELL DATA: Depth to Water 10.73 ft (static, pumping) Depth to Product — ft.  
 Product Thickness — Well Depth 17.77 ft (spec) Well Depth 17.64 ft (sounded) Well Diameter 4 in  
 Initial Height of Water in Casing 7.11 ft. = volume 4.64 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 13.93 gal.

EVACUATION METHOD: Pump # and type Grundfos #1 Hose # and type Nalgene  
 Bailer # and type 38" PVC Dedicated N Y (Y/N)  
 Other —

Evacuation Time: Stop 11:36  
 Start 10:25 11:25  
 Total Evacuation Time 11  
 Total Evacuated Prior to Sampling 14 gal.  
 Evacuation Rate 1.3 gal. per minute

Depth to Water during Evacuation — ft. — time  
 Depth to Water at Sampling — ft. — time  
 Evacuated Dry? No After — gal. Time —  
 80% Recovery = —  
 % Recovery at Sample Time — Time —

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " 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: Meter Brand/Number —

Calibration: — 4.0 — 7.0 — 10.0

Measured: SC/ $\mu$ mhos pH T°C Time Volume Evacuated (gal.)

SAMPLE: Color Clear Odor Slight  
 Description of matter in sample: None  
 Sampling Method: duplicate with ded. vth.  
 Sample Port: Rate — gpm Totalizer — gal.  
 Time —

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
<u>2</u>	<u>MW-13</u>	<u>w/cv</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCL</u>	<u>EPA 8015/8020</u>	<u>N</u>	<u>SPA</u>

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:





## WATER SAMPLING DATA

Well Name MW-14 Date 3/25/93 Time of Sampling 0954  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description M (M = Monitoring Well)  
 Location PEX RD., SW OF SITE

WELL DATA: Depth to Water 19.03 ft (static, pumping) Depth to Product \_\_\_\_\_ ft.  
 Product Thickness \_\_\_\_\_ Well Depth 41.5 ft (spec) Well Depth 40.95 ft (sounded) Well Diameter 2 in  
 Initial Height of Water in Casing 21.92 ft = volume 3.57 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 10.72 gal.

EVACUATION METHOD: Pump # and type GRUNDFOS #1 Hose # and type NALGENE  
 Bailer # and type PRE Dedicated N Y (Y/N)  
 Other \_\_\_\_\_

Evacuation Time: Stop 0949  
 Start 0943  
 Total Evacuation Time 6

Total Evacuated Prior to Sampling 11 gal.  
 Evacuation Rate 1.83 gal. per minute

Depth to Water during Evacuation \_\_\_\_\_ ft. \_\_\_\_\_ time

Depth to Water at Sampling \_\_\_\_\_ ft. \_\_\_\_\_ time

Evacuated Dry? \_\_\_\_\_ After \_\_\_\_\_ gal. Time \_\_\_\_\_

80% Recovery = \_\_\_\_\_

% Recovery at Sample Time \_\_\_\_\_ Time \_\_\_\_\_

## 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<sup>3</sup>

$V_2$ " 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: Meter Brand/Number \_\_\_\_\_

Calibration: \_\_\_\_\_ 4.0 \_\_\_\_\_ 7.0 \_\_\_\_\_ 10.0

Measured: SC/ $\mu$ mhos pH N/A T $^{\circ}$ C \_\_\_\_\_ Time \_\_\_\_\_ Volume Evacuated (gal.) \_\_\_\_\_

SAMPLE: Color Cloudy Odor ND

Description of matter in sample: Amalgam suspended particles

Sampling Method: \_\_\_\_\_

Sample Port: Rate \_\_\_\_\_ gpm Totalizer \_\_\_\_\_ gal.

Time \_\_\_\_\_

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
<u>2</u>	<u>MW-14</u>	<u>W/cv</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCl</u>	<u>EPA 8015/8020</u>	<u>N</u>	<u>SPA</u>

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name MW-15 Date 3/25/93 Time of Sampling 10:16  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description m (M = Monitoring Well)  
 Location \_\_\_\_\_

WELL DATA: Depth to Water 13.33 ft (static pumping) Depth to Product \_\_\_\_\_ ft.  
 Product Thickness \_\_\_\_\_ Well Depth 22 ft (spec) Well Depth 22.02 ft (sounded) Well Diameter 2 in  
 Initial Height of Water in Casing 8.129 ft = volume 1.42 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 4.25 gal.

EVACUATION METHOD: Pump # and type GRUNDY 1 Hose # and type NA LG ONE  
 Bailer # and type 200.0th PVC Dedicated Y (Y/N)  
 Other \_\_\_\_\_

Evacuation Time: Stop 10:13  
 Start 10:10  
 Total Evacuation Time 3  
 Total Evacuated Prior to Sampling 4.5 gal.  
 Evacuation Rate 1.5 gal. per minute

Depth to Water during Evacuation \_\_\_\_\_ ft. \_\_\_\_\_ time  
 Depth to Water at Sampling \_\_\_\_\_ ft. \_\_\_\_\_ time  
 Evacuated Dry? No After \_\_\_\_\_ gal. Time \_\_\_\_\_  
 80% Recovery = \_\_\_\_\_  
 % Recovery at Sample Time \_\_\_\_\_ Time \_\_\_\_\_

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " 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: Meter Brand/Number \_\_\_\_\_

Calibration: \_\_\_\_\_ 4.0 \_\_\_\_\_ 7.0 \_\_\_\_\_ 10.0

Measured: SC/ $\mu$ mhos pH T°C Time Volume Evacuated (gal.)

SAMPLE: Color Cloudy Odor NO  
 Description of matter in sample: Fine silt  
 Sampling Method: decant with dedicated BLR  
 Sample Port: Rate \_\_\_\_\_ gpm Totalizer \_\_\_\_\_ gal.  
 Time \_\_\_\_\_

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
2	MW-15	W/CV	40ml	N	Y	HCL	EPA 8015/8020	N	SPA

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name MW-16 Date 3/25/93 Time of Sampling 10:45  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description M (M = Monitoring Well)  
 Location CUL-DE-SAC, REX RD.

WELL DATA: Depth to Water 18.83 ft (static/pumping) Depth to Product 18.83 ft.  
 Product Thickness None Well Depth 40 ft (spec) Well Depth 38.14 ft (sounded) Well Diameter 2 in  
 Initial Height of Water in Casing 19.36 ft. = volume 3.16 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 9.47 gal. 9.47

EVACUATION METHOD: Pump # and type GRUNDFOS #1 Hose # and type NALGENE  
 Bailer# and type TVC Dedicated N + (Y/N)  
 Other \_\_\_\_\_

Evacuation Time: Stop 10:37 10:44  
 Start 10:32 10:39  
 Total Evacuation Time 10  
 Total Evacuated Prior to Sampling 10 gal.  
 Evacuation Rate 1.0 gal. per minute

Depth to Water during Evacuation \_\_\_\_\_ ft. \_\_\_\_\_ time  
 Depth to Water at Sampling \_\_\_\_\_ ft. \_\_\_\_\_ time  
 Evacuated Dry? No After \_\_\_\_\_ gal. Time \_\_\_\_\_  
 80% Recovery = \_\_\_\_\_  
 % Recovery at Sample Time \_\_\_\_\_ Time \_\_\_\_\_

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " 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: Meter Brand/Number \_\_\_\_\_

Calibration: \_\_\_\_\_ 4.0 \_\_\_\_\_ 7.0 \_\_\_\_\_ 10.0  
 Measured: SC/ $\mu$ mhos pH T°C Time Volume Evacuated (gal.)

SAMPLE: Color Cloudy Odor moderate  
 Description of matter in sample: Fine silt + sand  
 Sampling Method: DEP. BLR.  
 Sample Port: Rate \_\_\_\_\_ gpm Totalizer \_\_\_\_\_ gal.  
 Time \_\_\_\_\_

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
2	MW-16	N/CV	40ml	N	Y	HCl	EPA 8015/8020	N	SPA

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name MW-17 Date 3/25/93 Time of Sampling 09:22  
 Job Name CHEV HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description M (M = Monitoring Well)

Location CORNER OF MAIN AND SUNSET

WELL DATA: Depth to Water 22.14 ft (static, pumping) Depth to Product — ft.  
 Product Thickness — Well Depth 38.5 ft (spec) Well Depth 23.3 ft (sounded) Well Diameter 2 in  
 Initial Height of Water in Casing 11.73 ft. = volume 1.43 gal.  
3 Casing Volumes to be Evacuated. Total to be evacuated 5.5 gal.

EVACUATION METHOD: Pump # and type GEAUGES Hose # and type NALGENE  
 Bailer# and type — Dedicated N (Y/N)  
 Other —

Evacuation Time: Stop 09:12  
 Start 04:07  
 Total Evacuation Time 5  
 Total Evacuated Prior to Sampling 6 gal.  
 Evacuation Rate 1.2 gal. per minute

Depth to Water during Evacuation — ft. — time  
 Depth to Water at Sampling — ft. — time  
 Evacuated Dry? N After — gal. Time —  
 80% Recovery = —  
 % Recovery at Sample Time — Time —

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $vol. in cyl. = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " 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: Meter Brand/Number —

Calibration: 4.0 7.0 10.0

Measured: SC/ $\mu$ mhos pH T°C Time Volume Evacuated (gal.)

SAMPLE: Color Cloudy Odor ND  
 Description of matter in sample: Fine Soil  
 Sampling Method: DED. BLR.  
 Sample Port: Rate — gpm Totalizer — gal.  
 Time —

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
2	MW-17	W/VC	40ml	N	Y	HCl	EPA 8015/8020	N	SPIA

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:



## WATER SAMPLING DATA

Well Name TRAVEL BLANKS Date 3/25/93 Time of Sampling 0730  
 Job Name CHEV. HAYWARD Job Number 4-310-91 Initials HT  
 Sample Point Description \_\_\_\_\_ (M = Monitoring Well)  
 Location \_\_\_\_\_

WELL DATA: Depth to Water \_\_\_\_\_ ft (static, pumping) Depth to Product \_\_\_\_\_ ft.  
 Product Thickness \_\_\_\_\_ Well Depth \_\_\_\_\_ ft (spec) Well Depth \_\_\_\_\_ ft (sounded) Well Diameter \_\_\_\_\_ in  
 Initial Height of Water in Casing \_\_\_\_\_ ft. = volume \_\_\_\_\_ gal.  
 Casing Volumes to be Evacuated. Total to be evacuated \_\_\_\_\_ gal.

EVACUATION METHOD: Pump # and type \_\_\_\_\_ Hose # and type \_\_\_\_\_  
 Bailer # and type \_\_\_\_\_ Dedicated \_\_\_\_\_ (Y/N)  
 Other \_\_\_\_\_

Evacuation Time: Stop \_\_\_\_\_  
 Start \_\_\_\_\_  
 Total Evacuation Time \_\_\_\_\_  
 Total Evacuated Prior to Sampling \_\_\_\_\_ gal.  
 Evacuation Rate \_\_\_\_\_ gal. per minute

Depth to Water during Evacuation \_\_\_\_\_ ft. \_\_\_\_\_ time  
 Depth to Water at Sampling \_\_\_\_\_ ft. \_\_\_\_\_ time  
 Evacuated Dry? \_\_\_\_\_ After \_\_\_\_\_ gal. Time \_\_\_\_\_  
 80% Recovery = \_\_\_\_\_  
 % Recovery at Sample Time \_\_\_\_\_ Time \_\_\_\_\_

## Formulas/Conversions

$r$  = well radius in ft.  
 $h$  = ht of water col in ft.  
 $\text{vol. in cyl.} = \pi r^2 h$   
 $7.48 \text{ gal/ft}^3$   
 $V_2$ " casing =  $0.163 \text{ gal/ft}$   
 $V_3$ " casing =  $0.367 \text{ gal/ft}$   
 $V_4$ " casing =  $0.653 \text{ gal/ft}$   
 $V_{4.5}$ " casing =  $0.826 \text{ gal/ft}$   
 $V_6$ " casing =  $1.47 \text{ gal/ft}$   
 $V_8$  casing =  $2.61 \text{ gal/ft}$

## CHEMICAL DATA: Meter Brand/Number \_\_\_\_\_

Calibration: \_\_\_\_\_ 4.0 \_\_\_\_\_ 7.0 \_\_\_\_\_ 10.0  
 Measured: SC/ $\mu$ mhos pH T°C Time Volume Evacuated (gal.)

SAMPLE: Color \_\_\_\_\_ Odor \_\_\_\_\_  
 Description of matter in sample: \_\_\_\_\_  
 Sampling Method: \_\_\_\_\_  
 Sample Port: Rate \_\_\_\_\_ gpm Totalizer \_\_\_\_\_ gal.  
 Time \_\_\_\_\_

# of Cont.	Sample ID	Cont. Type <sup>1</sup>	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analytic Method	Turn <sup>5</sup>	LAB
2	TB-LB	W/CV	40ml	N	Y	HCl	EPA 8015/8020	N	SPA

1 Sample Type Codes: W = Water, S = Soil, Describe Other

Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B = Clear/Brown Glass, Describe Other

Cap Codes: PT = Plastic, Teflon lined;

2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)

5 Turnaround [N = Normal, W = 1 week, R = 24 hour, HOLD (spell)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

**ATTACHMENT B**  
**ANALYTIC REPORT AND CHAIN-OF-CUSTODY FORMS**



# Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Weiss Associates  
Attn: MARIETTE SHIN

Project 4-310-91  
Reported 04/02/93

## TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14298- 1	MW-6	03/25/93	04/01/93 Water
14298- 2	MW-9	03/25/93	03/31/93 Water
14298- 3	MW-10	03/25/93	03/31/93 Water
14298- 4	MW-11	03/25/93	04/01/93 Water
14298- 5	MW-13	03/25/93	04/01/93 Water
14298- 6	MW-14	03/25/93	04/01/93 Water
14298- 7	MW-15	03/25/93	04/01/93 Water
14298- 8	MW-16	03/25/93	04/01/93 Water
14298- 9	MW-17	03/25/93	03/31/93 Water
14298-10	TB-LB	03/25/93	03/31/93 Water

## RESULTS OF ANALYSIS

Laboratory Number: 14298- 1 14298- 2 14298- 3 14298- 4 14298- 5

Gasoline:	110000	220000	ND<50	110000	97000
Benzene:	12000	540	ND<0.5	13000	5200
Toluene:	4200	2100	ND<0.5	5900	7200
Ethyl Benzene:	2900	3200	ND<0.5	2100	2500
Xylenes:	14000	18000	ND<1.5	9800	12000

Concentration: ug/L ug/L ug/L ug/L ug/L

Laboratory Number: 14298- 6 14298- 7 14298- 8 14298- 9 14298-10

Gasoline:	390	1300	39000	ND<50	ND<50
Benzene:	57	86	5500	ND<0.5	ND<0.5
Toluene:	1.3	0.7	690	ND<0.5	ND<0.5
Ethyl Benzene:	2.1	52	1400	ND<0.5	ND<0.5
Xylenes:	1.7	7.7	2000	ND<1.5	ND<1.5

Concentration: ug/L ug/L ug/L ug/L ug/L



# Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

## C E R T I F I C A T E   O F   A N A L Y S I S

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2  
QA/QC INFORMATION  
SET: 14298

NA = ANALYSIS NOT REQUESTED  
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT  
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:  
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:  
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:  
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE  
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE -----	MS/MSD RECOVERY -----	RPD ---	CONTROL LIMIT -----
Gasoline:	88/93	6%	76-111
Benzene:	88/91	3%	78-110
Toluene:	88/91	3%	78-118
Ethyl Benzene:	95/99	4%	78-111
Xylenes:	90/94	4%	73-113

Richard Srna, Ph.D.

*Ornuta Nwogu for*  
Laboratory Director



Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591 510	Chevron Facility Number	9-0260	Chevron Contact (Name)	JEFF ZINDEL	
	Facility Address	21995 FOOTHILL BLVD HAYWARD	(Phone)	510-842-8896	
	Consultant Project Number	4-310-0491 23	Laboratory Name	SUPERIOR PRECISION ANALYTICAL	
	Consultant Name	WEISS ASSOCIATES	Laboratory Release Number	6999320	
	Address	5500 SHELLMOUND ST EMERYVILLE	Samples Collected by (Name)	ANNI KREML / HERB TOOR	
	Project Contact (Name)	MARIETTE SHIN	Collection Date	3/25/93	
	(Phone)	510-547-5420 (Fax Number)	510-547-5043	Signature	Ann Kreml

[illegible]