WEISS ASSOCIATES
Geologic and Environmental Services
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5500 Shellmound Street, Emeryville, CA 94608

February 4, 1991

Walter F. Posluszny
Chevron USA
P.O. Box 5004
San Ramon, CA 94583-0804

Re: Chevron Service Station #9-0260
21995 Foothill Boulevard
Hayward, California
WA Job #4-310-01

Dear Mr. Posluszny:

Weiss Associates (WA) collected ground water samples from seven of thirteen monitoring wells on January 4, 1991 as part of the quarterly ground water monitoring program at Chevron Service Station #9-0260 in Hayward, California (Figure 1). Floating hydrocarbons were measured in monitoring wells MW-5, MW-8, MW-11 and MW-12 (Figure 2) in thicknesses of 0.01, 0.18, 0.30, and 0.06 ft, respectively. Benzene in ground water samples from wells MW-6, MW-9, MW-13, MW-15 and MW-16, ethylbenzene in samples from wells MW-6, MW-9, MW-13 and MW-16 and xylenes in samples from wells MW-6, MW-9 and MW-13 exceeded the California Department of Health Services (DHS) maximum contaminant levels (MCLs). Lastly, toluene in samples from wells MW-6, MW-9, MW-13 and MW-16 exceeded the DHS recommended action level (RAL) for drinking water.

GROUND WATER SAMPLING

Sampling personnel: WA Environmental Technician David Charles

Monitoring wells sampled: MW-6, MW-9, MW-10 and MW-13 through MW-16

- Well not sampled due to the presence of floating hydrocarbons: MW-11

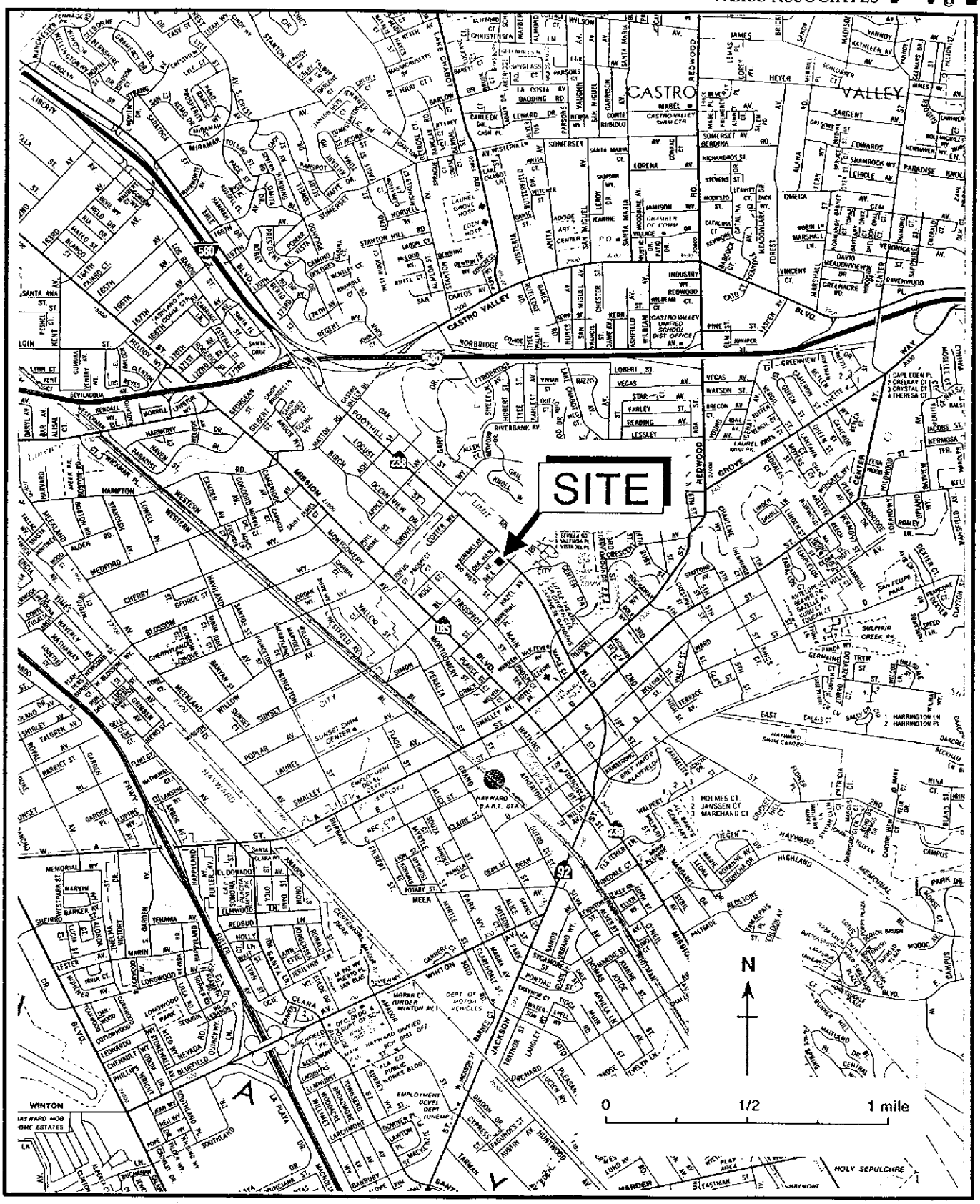

Figure 1. Site Location Map - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

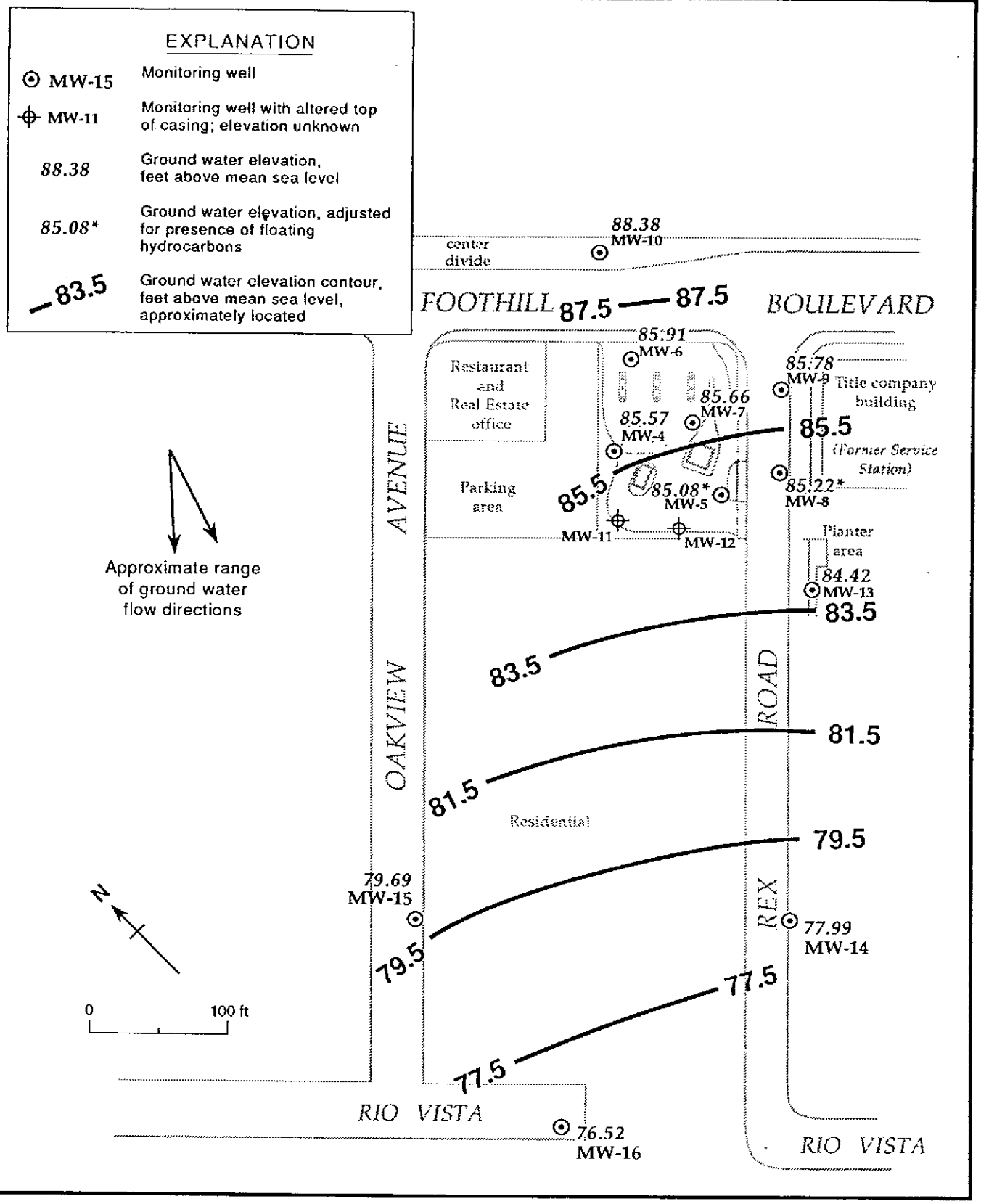

Figure 2. Ground Water Elevation Contours - January 4, 1991 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

- Wells not sampled this quarter according to the approved sampling frequency reduction program: MW-4, MW-5, MW-7, MW-8 and MW-12

Method of purging wells:

- Dedicated PVC bailers

Volume of water purged prior to sampling:

- Wells that were purged of three well-casing volumes, about 2.5 to 27 gallons each: MW-9, MW-10 and MW-13 through MW-16

- Well that was purged dry; water level was allowed to recover for at least two hours prior to sampling: MW-6

Method of collecting ground water samples:

- Drawn through sampling ports on the sides of dedicated PVC bailers: wells MW-6, MW-9, MW-10, and MW-13

- Decanted from dedicated PVC bailers: wells MW-14, MW-15, and MW-16

Method of containing ground water samples:

- 40 ml glass volatile organic analysis (VOA) vials, preserved with hydrochloric acid and packed in protective foam sleeves

All samples were refrigerated and transported under chain-of-custody to the analytical laboratory.

Water samples transported to:

- Superior Analytical Laboratory, Inc., Martinez, California and were received on January 7, 1991

Quality assurance/quality control:

- A travel blank was submitted for analysis.

- An equipment blank was not necessary because all bailers are dedicated to specific wells.

Water sample collection records and chain-of-custody forms are included in Attachments A and B, respectively.

GROUND WATER ELEVATIONS

- Water levels were measured in all wells on January 4, 1991. Ground water elevations increased up to one ft from the previous quarter in all wells except MW-14 and MW-16.

- Ground water flows southwestward which is consistent with the general direction over the past year.

Depth to water measurements and historical ground water elevations are presented in Table 1. Ground water elevation contours are plotted on Figure 2. Previous ground water elevation contour maps are included in Attachment C.

CHEMICAL ANALYSES

The ground water samples were analyzed for:

- Total petroleum hydrocarbons as gasoline by modified EPA Method 8015 and

- Benzene, ethylbenzene, toluene and xylenes (BETX) by EPA Method 8020

The laboratory analyzed the samples on January 11 and 13, 1991. The results are presented in Table 2 and the analytic reports are included as Attachment C. Isoconcentration contour maps of TPH-G and benzene in ground water are included as Figures 3 and 4, respectively.

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)	Thickness of Floating Hydrocarbons (ft)	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
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[a]
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
	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
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

-- 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)	Thickness of Floating Hydrocarbons (ft)	Water Elevation (ft above msl)
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[a]
	01/04/90		13.99	0.10	85.76[a]
	04/03/90		13.07	0.30	86.84[a]
	07/03/90		13.11	0.04	86.59[a]
	11/06/90		14.77	0.15	85.02[a]
	01/04/91		14.59	0.18	85.22[a]
MW-9	01/05/89	101.15	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
MW-10	01/05/89	102.36	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
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	[b]	14.88	0.30	---

-- 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)	Thickness of Floating Hydrocarbons (ft)	Water Elevation (ft above msl)
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	[b]	14.52	0.06	---
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
MW-14	08/29/90	99.68	21.39	---	78.29
	11/06/90		21.62	---	78.06
	01/04/91		21.69	---	77.99
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
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

[a] = Ground water elevation corrected for floating hydrocarbons by the formula: Ground Water Elevation = Top-of-casing elevation - Depth to ground water + (0.8 x hydrocarbon thickness)

[b] = Top-of-casing cut down; elevation unknown

TABLE 2. Analytic Results for Ground Water, Chevron Service Station #90260, 21995 Foothill Boulevard, Hayward, California

Sample ID and Sampling Frequency	Sample Date	Analytical Lab	Depth to Water (ft)	TPH-G	B	E	T	X	EDC	EDB	VOCs
				<----------parts per billion (µg/L)---------->							
MW-4	02/05/88	B&C		88,000	24,000	1,700	19,000	10,000	---	---	---
(Semi-Annually	06/15/88	B&C	12.92	95,000	45,000	2,100	30,000	17,000	---	---	---
2nd & 4th	09/27/88[a]	CCAS	14.22	500,000	41,000	<5,000	27,000	16,000	<5,000	<5,000	---
quarters)	09/27/88[ab]	CCAS	14.22	88,000	1,200	1,600	4,100	12,000	270	230	---
	01/05/89	SAL	13.20	64,000	41,000	2,700	29,000	14,000	---	---	---
	06/28/89	SAL	14.25	110,000	34,000	2,400	24,000	13,000	---	---	---
	10/03/89	SAL	14.75	240,000	36,000	3,200	31,000	19,000	---	---	---
	01/04/90	SAL	14.75	130,000	33,000	2,400	28,000	14,000	---	---	---
	04/03/90	SAL	13.81	110,000	41,000	2,900	32,000	17,000	---	---	---
	07/03/90	SAL	14.06	180,000	32,000	2,600	30,000	15,000	---	---	---
	11/06/90	SAL	15.66	170,000	31,000	2,700	30,000	17,000	---	---	---
MW-5	02/05/88	B&C		80,000	16,000	2,600	15,000	17,000	---	---	---
(Semi-Annually	06/15/88	B&C	12.30	77,000	42,000	2,500	38,000	16,000	---	---	---
2nd & 4th	09/27/88[a]	CCAS	13.25	470,000	39,000	<5,000	32,000	16,000	<5,000	<5,000	---
quarters)	09/27/88[ab]	CCAS	13.25	48,000	1,800	1,600	3,500	10,000	410	420	---
	01/05/89	SAL	12.70	82,000	44,000	2,400	37,000	14,000	---	---	---
	06/28/89	SAL	13.81	80,000	36,000	2,400	24,000	13,000	---	---	---
	10/03/89	SAL	14.27	240,000	40,000	2,600	35,000	15,000	---	---	---
	01/04/90	SAL	14.31	130,000	37,000	2,400	31,000	13,000	---	---	---
	04/03/90	SAL	13.50	120,000	41,000	2,500	33,000	14,000	---	---	---
	07/03/90	SAL	13.64	200,000	28,000	1,800	25,000	10,000	---	---	---
	11/06/90	SAL	15.14	370,000	38,000	4,700	36,000	31,000	---	---	---
MW-6	02/05/88	B&C		53,000	5,100	2,100	4,400	14,000	---	---	---
(Semi-Annually	06/15/88	B&C	13.51	33,000	9,200	520	5,500	20,000	---	---	---
1st & 3rd	09/27/88[a]	CCAS	14.56	17,000	2,200	1,700	2,800	5,100	130	<10	---
quarters)	01/05/89	SAL	13.48	37,000	5,000	2,200	3.400	10,000	---	---	---
	06/28/89	SAL	14.58	80,000	7,000	2,000	4,100	9,700	---	---	---
	10/03/89	SAL	13.03	110,000	8,500	2,600	5,100	14,000	---	---	---
	01/04/90	SAL	15.08	59,000	5,200	2,000	2,600	11,000	---	---	---
	04/03/90	SAL	14.06	31,000	6,600	2,200	2,600	12,000	---	---	---
	07/03/90	SAL	14.28	66,000	5,800	2,000	2,900	9,800	---	---	---
	01/04/91	SAL	15.52	50,000	5,600	1,800	2,200	9,400	---	---	---
MW-7	02/05/88	B&C		81,000	34,000	2,400	36,000	16,000	---	---	---
(Semi-Annually	06/15/88	B&C	12.57	77,000	40,000	1,400	41,000	24,000	---	---	---
2nd & 4th	09/27/88[a]	CCAS	13.60	30,000	9,700	400	8,900	4,100	2,600	<10	---
quarters)	01/05/89	SAL	12.98	96,000	36,000	2,800	38,000	16,000	---	---	---
	06/28/89	SAL	14.08	110,000	31,000	2,600	30,000	16,000	---	---	---
	10/03/89	SAL	14.53	230,000	34,000	2,400	34,000	15,000	---	---	---
	01/04/90	SAL	14.49	150,000	41,000	2,400	40,000	15,000	---	---	---
	04/03/90	SAL	13.66	100,000	31,000	2,100	28,000	16,000	---	---	---
	07/03/90	SAL	13.86	190,000	30,000	1,800	27,000	13,000	---	---	---
	11/06/90	SAL	15.58	160,000	27,000	1,900	25,000	15,000	---	---	---

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TABLE 2. Analytic Results for Ground Water, Chevron Service Station #90260, 21995 Foothill Boulevard, Hayward, California (continued)

Sample ID and Sampling Frequency	Sample Date	Analytical Lab	Depth to Water	TPH-G	B	E	T	X	EDC	EDB	VOCs
				<----------parts per billion (µg/L)---------->							
MW-8	10/27/88[a]	CCAS		190,000	27,000	2,200	43,000	15,000	<500	<500	---
(Semi-Annually	01/05/89	SAL	12.02	87,000	24,000	3,000	39,000	15,000	---	---	---
2nd & 4th	06/28/89	SAL	13.40	120,000	22,000	2,900	35,000	16,000	---	---	---
quarters)	10/03/89[c]		13.84	---	---	---	---	---	---	---	---
	01/04/89[c]		13.99	---	---	---	---	---	---	---	---
	04/03/90[c]		13.07	---	---	---	---	---	---	---	---
	07/03/90[c]		13.11	---	---	---	---	---	---	---	---
	11/06/90[c]		14.77	---	---	---	---	---	---	---	---
MW-9	10/27/88[a]	CCAS		50,000	2,000	2,000	9,900	14,000	<500	<500	---
(Semi-Annually	01/05/89	SAL	12.63	55,000	670	3,400	8,900	16,000	---	---	---
1st & 3rd	06/28/90	SAL	14.04	100,000	510	2,600	4,500	13,000	---	---	---
quarters)	10/03/89	SAL	14.61	130,000	540	3,200	8,000	17,000	---	---	---
	01/04/90	SAL	14.59	83,000	600	2,600	4,600	14,000	---	---	---
	04/03/90	SAL	13.75	52,000	1,600	3,100	5,400	16,000	---	---	---
	07/03/90	SAL	13.84	100,000	520	3,200	5,400	16,000	---	---	---
	01/04/91	SAL	15.37	59,000	1,100	2,500	5,600	13,000	---	---	---
MW-10	10/27/88[a]	CCAS	<500	26	<5	13	<5	<5	<5	---	---
(Annually	01/05/89	SAL	12.64	<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---
1st quarter)	06/28/89	SAL	13.64	<500	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/03/89	SAL	13.85	<500	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/90	SAL	13.75	<50	0.5	<0.5	1.1	1.7	---	---	---
	04/03/90	SAL	12.86	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/91	SAL	13.98	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW-11	06/28/89	SAL	14.33	60,000	36,000	2,500	13,000	12,000	---	---	ND[d]
(Semi-Annually	10/03/89	SAL	14.61	14,000	4,200	240	1,400	1,300	---	---	---
1st & 3rd	01/04/90	SAL	14.55	82,000	33,000	2,000	11,000	10,000	---	---	---
quarters)	04/03/90	SAL	13.82	78,000	35,000	2,300	12,000	12,000	---	---	---
	07/03/90	SAL	14.00	140,000	32,000	2,100	12,000	10,000	---	---	---
	01/04/91[c]		14.88	---	---	---	---	---	---	---	---
MW-12	06/28/89	SAL	14.10	55,000	30,000	2,900	21,000	19,000	---	---	ND[d]
(Semi-Annually	10/03/89	SAL	14.30	170,000	30,000	2,700	23,000	15,000	---	---	---
2nd & 4th	01/04/90	SAL	14.35	110,000	24,000	2,300	19,000	12,000	---	---	---
quarters)	04/03/90	SAL	13.59	89,000	41,000	3,300	28,000	17,000	---	---	---
	07/03/90	SAL	13.77	170,000	27,000	2,200	20,000	12,000	---	---	---
	11/06/90	SAL	15.19	110,000	28,000	2,400	21,000	14,000	---	---	---
MW-13	06/28/89	SAL	13.22	54,000	12,000	1,900	10,000	15,000	---	---	ND[d]
(Semi-Annually	10/03/89	SAL	13.54	120,000	10,000	2,300	10,000	15,000	---	---	---
1st & 3rd	01/04/90	SAL	13.64	87,000	6,800	2,000	10,000	12,000	---	---	---
quarters)	04/03/90	SAL	12.95	53,000	12,000	2,900	14,000	17,000	---	---	---
	07/03/90	SAL	13.05	90,000	8,400	2,000	11,000	11,000	---	---	---
	01/04/91	SAL	14.05	72,000	5,500	2,300	12,000	12,000	---	---	---

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TABLE 2. Analytic Results for Ground Water, Chevron Service Station #90260, 21995 Foothill Boulevard, Hayward, California (continued)

Sampling ID and Sampling Frequency	Sample Date	Analytical Lab	Depth to Water (ft)	TPH-G	B	E	T	X	EDC	EDB	VOCs
				<----------parts per billion (µg/L)---------->							
MW-14	08/29/90	SAL	21.39	970	4	0.7	2	2	1	---	ND[e]
(Quarterly)	11/06/90	SAL	21.62	920	10	4	10	9	---	---	---
	01/04/91	SAL	21.69	1,000	<0.5	2.6	4.0	4.2	---	---	---
MW-15	08/29/90	SAL	16.58	2,000	26	72	2	110	<0.5	---	0.6[f]
(Quarterly)	11/06/90	SAL	17.43	1,300	40	45	5	63	---	---	---
	01/04/91	SAL	16.37	1,700	46	58	2.8	86	---	---	---
MW-16	08/29/90	SAL	20.89	11,000	6,000	1,100	51	20	<0.5	---	ND[g]
(Quarterly)	11/06/90	SAL	21.27	15,000	6,300	1,300	340	540	---	---	---
	01/04/91	SAL	21.63	16,000	6,800	1,300	820	1,500	---	---	---
Bailer Blank	01/05/89	SAL		<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---
Trip Blank	01/05/89	SAL		<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---
	10/03/89	SAL		<500	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/89	SAL		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/03/90	SAL		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/03/90	SAL		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	11/06/90	SAL		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/91	SAL		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
DHS MCLs				NE	1	680	100[h]	1,750	0.5	0.02	100[i]

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
DHS MCL = Department of Health Services Maximum Contaminant Level
NE = DHS action level not established
<n = Not detected at detection limit of n ppb
ppb = parts per billion

Analytical Laboratory:

B&C = Brown and Caldwell Laboratories of Emeryville, California
CCAS = Central Coast Analytical Services of San Luis Obispo, California
SAL = Superior Analytical Laboratory 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] = Samples from MW-4 and MW-5 were analyzed a second time after the holding time expired to confirm the high TPH-G reported in the original analysis. Although the samples were preserved with $NaHSO_4$ and refrigerated, the second analysis was not conducted until 52 days after sample collection.
[c] = Well not sampled due to the presence of floating hydrocarbons.
[d] = Not detected at detection limits ranging from 500 to 2,000 ppb.
[e] = Not detected at detection limits ranging from 0.5 to 4.0 ppb.
[f] = Chloroform detected at 0.6 ppb. No other VOCs were detected.
[g] = Not detected at detection limits ranging from 25 to 500 ppb.
[h] = DHS Recommended Action Level for Drinking Water.
[i] = DHS MCL for Chloroform = 100 ppb - MCLs vary for other compounds.

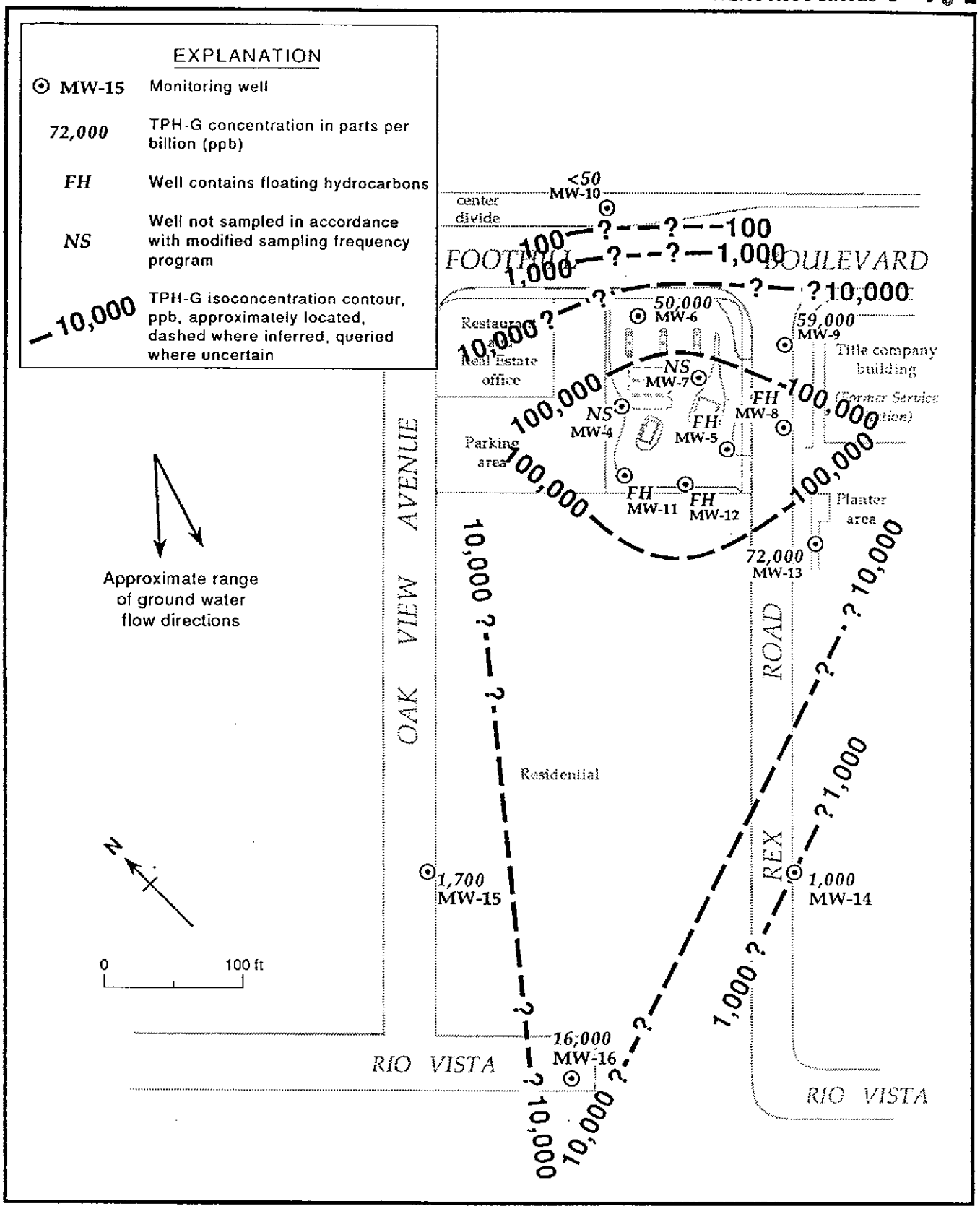


Figure 3. TPH-G Isoconcentration Contours - January 4, 1991 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

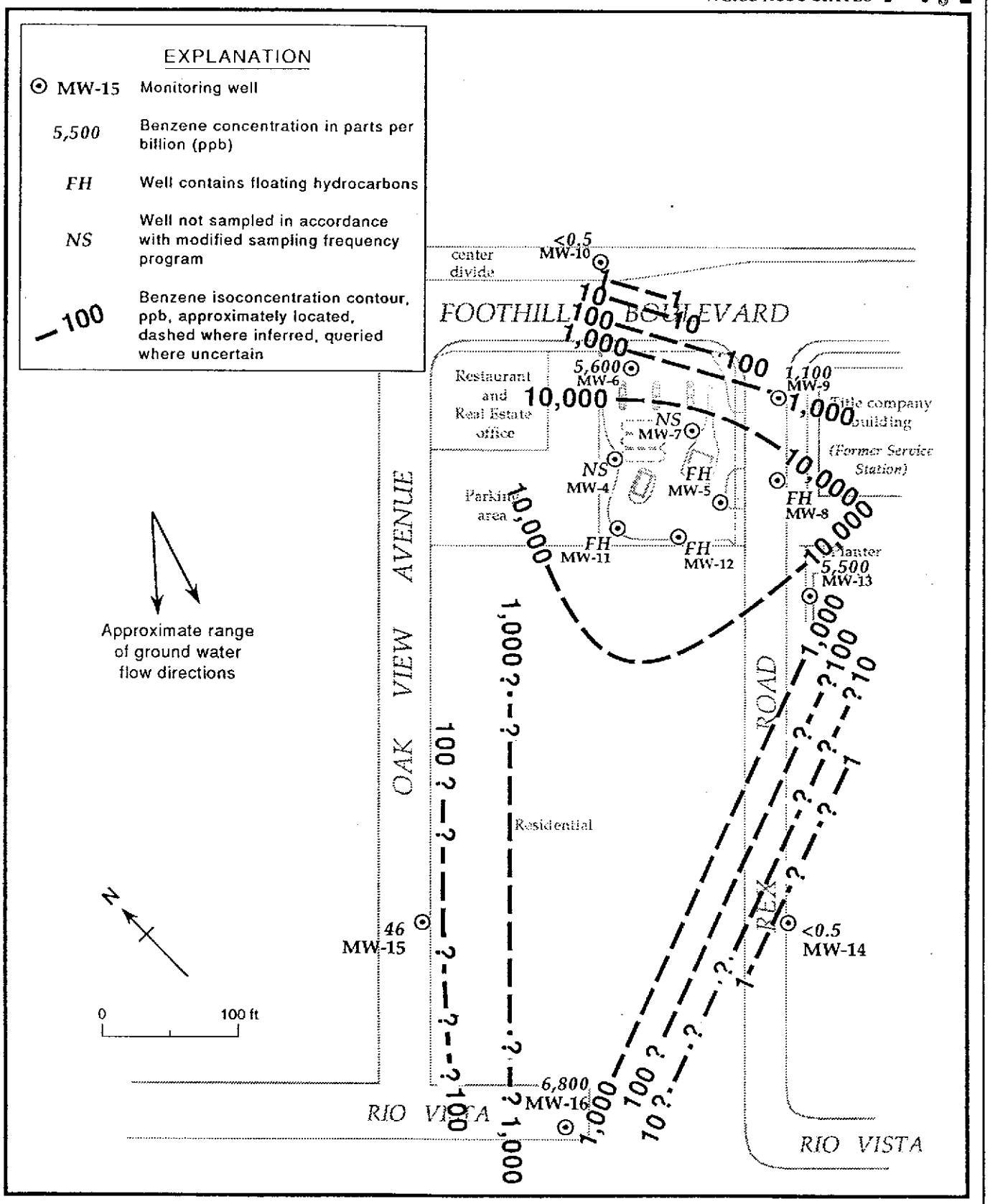


Figure 4. Benzene Isoconcentration Contours - January 4, 1991 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

Discussion of ground water analytic results for this quarter:

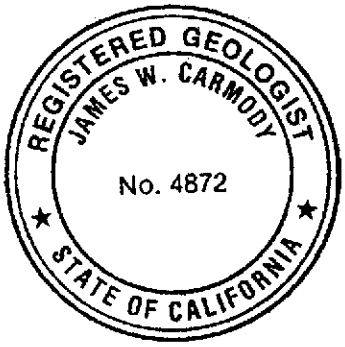
- Floating hydrocarbons were measured in monitoring wells MW-5, MW-8, MW-11, and MW-12 in thicknesses of 0.01, 0.18, 0.30 and 0.06 ft, respectively.

- Benzene in ground water samples from monitoring wells MW-6, MW-9, MW-13, MW-15 and MW-16, ethylbenzene in samples from wells MW-6, MW-9, MW-13 and MW-16 and xylenes in samples from wells MW-6, MW-9 and MW-13 exceeded DHS MCLs and toluene in samples from wells MW-6, MW-9, MW-13 and MW-16 exceeded the DHS RAL for drinking water.

- No hydrocarbons have been detected in samples from well MW-10 since January 1990.

- Toluene and xylene concentration in samples from well MW-16 have increased significantly over the past three quarters.

We appreciate the opportunity to provide hydrogeologic consulting services to Chevron and trust that this report meets your needs. Please contact Tom Fojut or Robert Kitay if you have any questions.



Sincerely,
Weiss Associates

Thomas J. Fojut
Staff Geologist

James W. Carmody, R.G.
Senior Project Hydrogeologist

TJF/JWC:jg

E:\ALL\CHEV\300\310QMJA1.WP

Attachments:
A - Water Sample Collection Records
B - Analytic Reports and Chain-of-Custody Form
C - Previous Ground Water Elevation Contour Maps

ATTACHMENT A

WATER SAMPLE COLLECTION RECORDS

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-6 Date 1/4/91 Time of Sampling 1633

Job Name CHEV-HAYWARD Job Number 4-310-01 Initials DC

Sample Point Description M (M = Monitoring Well)

Location BY PUMPS ON SITE

WELL DATA: Depth to Water 15.52 ft (static, pumping) Depth to Product 0 ft.

Product Thickness 0 Well Depth 16.5 ft (spec) Well Depth 16.61 ft(sounded) Well Diameter 4 in

Initial Height of Water in Casing 1.09 (DC) ft. = volume (DC) .71 gal.

3 Casing Volumes to be Evacuated. Total to be evacuated 2.13 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —

Bailer# and type 3X36" PVC Dedicated YES (Y/N)

Other

Evacuation Time: Stop 1436

Start 1435

Total Evacation Time 1 MIN

Total Evacuated Prior to Sampling 0.5 gal.

Evacuation Rate .5 gal. per minute

Depth to Water during Evacuation — ft. — time

Depth to Water at Sampling 15.95 ft. 1627 time

Evacuated Dry? YES After 0.5 gal. Time 1436

80% Recovery = 15.74 DTW

% Recovery at Sample Time 61 % Time 1627

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

$V_{2"}$ 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

V8 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.)

SAMPLE: Color NONE Odor LT.

Description of matter in sample: VERY MINUTE AMT. FINE SILT

Sampling Method: FROM PORT ON DED. BLR.

Sample Port: Rate — gpm Totalizer — gal.

Time —

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	011-06	w/cV	40mL	N	Y	HCL	8015/602	N	SAL

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:

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-9 Date 1/4/91 Time of Sampling 1758
Job Name CHEV.-HAYWARD Job Number H-310-01 Initials OC
Sample Point Description M (M = Monitoring Well)
Location IN STREET - REX ROAD

WELL DATA: Depth to Water 15.37 ft (static, pumping) Depth to Product 0 ft.
Product Thickness 0 Well Depth 19.2 ft (spec) Well Depth N/A ft(sounded) Well Diameter 4 in
Initial Height of Water in Casing 3.83 ft. = volume 2.5 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 7.5 gal.

EVACUATION METHOD: Pump # and type ~ Hose # and type ~
Bailer# and type 2X36" PVC Dedicated YES (Y/N)
Other

Evacuation Time: Stop 1517
Start 1503
Total Evacation Time 4 MIN
Total Evacuated Prior to Sampling 2.5 gal.
Evacuation Rate ~0.6~ gal. per minute
Depth to Water during Evacuation ~ ft. ~ time
Depth to Water at Sampling 15.40 ft. 1552 time
Evacuated Dry? YES After 2.5 gal. Time 1507
80% Recovery = 16.14 DTW
% Recovery at Sample Time 100% Time 1552

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" 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
V8 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.)

SAMPLE: Color NONE Odor MOD. STRONG
Description of matter in sample: NONE
Sampling Method: FROM PORT ON DED. BLR.
Sample Port: Rate ~ gpm Totalizer ~ gal.
Time

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	011-09	W/CV	40mL	N	Y	HCL	8015/602	N	SAC

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:

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-10 Date 1/4/91 Time of Sampling 1615
Job Name CHEV.-HAYWARD Job Number 4-210-61 Initials DC
Sample Point Description MW (M = Monitoring Well)
Location MEDIAN ON FOOTHILL BLVD.

WELL DATA: Depth to Water 13.98 ft (static, pumping) Depth to Product -0- ft.
Product Thickness -0- Well Depth 27.65 ft (spec) Well Depth N/A ft(sounded) Well Diameter 4 in
Initial Height of Water in Casing 13.67 ft. = volume 8.9 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 26.7 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
Bailer# and type 3/4 X 36" PVC Dedicated YES (Y/N)
Other —

Evacuation Time: Stop 1543 1553 1609
Start 1538 1548 1604
Total Evacation Time 15 MIN
Total Evacuated Prior to Sampling 27 gal.
Evacuation Rate 1.8 gal. per minute
Depth to Water during Evacuation — ft. — time
Depth to Water at Sampling 21.28 ft. 1617 time
Evacuated Dry? YES After 16 gal. Time 1553
80% Recovery = * CONTD BAILING UNTIL 3 CAS. VOLS. PURGED
% 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^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
V8 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.)

SAMPLE: Color NONE Odor NONE
Description of matter in sample: NONE
Sampling Method: FROM DED. BLR. PORT
Sample Port: Rate — gpm Totalizer — gal.
Time —

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	011-10	w/cV	40mL	N	Y	HCL	8015/602	N	SAL

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:

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-11 Date 1/4/91 Time of Sampling NOT TAKEN
Job Name CHEV - HAYWARD Job Number 4-310-01 Initials DC
Sample Point Description _____ (M = Monitoring Well)
Location _____

WELL DATA: Depth to Water 14.88 ft (static, pumping) Depth to Product 14.58 ft.
Product Thickness 0.30 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 Evacation 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.
vol. in cyl. = $\pi r^2 h$
7.48 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
V8 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.)

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

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
___	WELL NOT SAMPLED DUE TO PRESENCE OF FREE PROD.								
___									
___									
___									
___									
___									
___									
___									
___									

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:

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-13 Date 1/4/91 Time of Sampling 1517
Job Name CHEV. - HAYWARD Job Number 4-210-01 Initials DC
Sample Point Description M (M = Monitoring Well)
Location IN BUSHES NEAR TITLE CO.

WELL DATA: Depth to Water 14.05 ft (static, pumping) Depth to Product 0 ft.
Product Thickness 0 Well Depth 17~~7~~ ft (spec) Well Depth 17.73 ft(sounded) Well Diameter 4 in
Initial Height of Water in Casing 3.72 ft. = volume 2.43 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 7.28 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
Bailer# and type 3X36" PVC Dedicated YES (Y/N)
Other —

Evacuation Time: Stop 1427 1446 1456 1509
Start 1425 1439 1455 1508
Total Evacation Time 5 MIN.
Total Evacuated Prior to Sampling 8.0 gal.
Evacuation Rate 1.6 gal. per minute
Depth to Water during Evacuation — ft. — time
Depth to Water at Sampling N/A ft. — time
Evacuated Dry? YES After 3 gal. Time 1427
80% Recovery = 1* CONT'D BAILING TILL 3 CAS. VOLS. PURGED
% 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^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
V8 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.)

SAMPLE: Color NONE Odor VERY LIGHT
Description of matter in sample: ALMOST NOTHING - VERY LITTLE SILT
Sampling Method: FROM DED. BLR. PORT.
Sample Port: Rate — gpm Totalizer — gal.
Time

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	011-13	W/CV	40mL	N	Y	HCL	8015/602	N	SAC

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:

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-14 Date 1/4/90 Time of Sampling 1410
Job Name CHEV - HAYWARD Job Number 4-310-01 Initials OC
Sample Point Description M (M = Monitoring Well)
Location ON REX RD. - HALFWAY DOWN

WELL DATA: Depth to Water 21.69 ft (static, pumping) Depth to Product -0- ft.
Product Thickness -0- Well Depth 41.5 ft (spec) Well Depth 41.01 ft(sounded) Well Diameter ___ in
Initial Height of Water in Casing 19.32 ft. = volume 3.15 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 9.45 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
Bailer# and type 1¼" 60' PVC Dedicated YES (Y/N)
Other —

Evacuation Time: Stop 1352 1405 ___
Start 1350 1353 ___
Total Evacation Time 14 min
Total Evacuated Prior to Sampling 9.5 gal.
Evacuation Rate 0.7 gal. per minute
Depth to Water during Evacuation — ft. — time
Depth to Water at Sampling 21.91 ft. 1414 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.
vol. in cyl. = $\pi r^2 h$
7.48 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
V8 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.)

SAMPLE: Color MED. BROWN Odor MODERATE - GAS
Description of matter in sample: 3-5% FINE SAND / SILT
Sampling Method: DECANT FROM RINSED BED. BLR.
Sample Port: Rate — gpm Totalizer — gal.
Time

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	D11-14	w/cV	40ml	N	Y	HCl	8015/602	N	SAL

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:

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-15 Date 1/4/91 Time of Sampling 1338
Job Name CHEV. - HAYWARD Job Number 4-310-01 Initials DC
Sample Point Description M (M = Monitoring Well)
Location ON OAKVIEW AVE. - HALFWAY DOWN

WELL DATA: Depth to Water 16.37 ft (static, pumping) Depth to Product 0 ft.
Product Thickness 0 Well Depth 22 ft (spec) Well Depth 22 ft(sounded) Well Diameter 2 in
Initial Height of Water in Casing 5.63 ft. = volume .91 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 2.75 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
Bailer# and type 1¼ X 60" PVC Dedicated YES (Y/N)
Other —

Evacuation Time: Stop 1323 1327 ____
Start 1319 1326 ____
Total Evacation Time 5 MIN
Total Evacuated Prior to Sampling 2.75 gal.
Evacuation Rate 0.5 gal. per minute
Depth to Water during Evacuation — ft. — time
Depth to Water at Sampling 20.68 ft. 1336 time
Evacuated Dry? YES After 2.5-3.0 gal. @ TIME CASING VOLS.)
80% Recovery = N/A
% 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^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
V8 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.)

SAMPLE: Color LT. BROWN Odor LT. - MOD. ODOR
Description of matter in sample: SUSPENDED BR. SILT
Sampling Method: DECANT FROM RINSED DED. BLR.
Sample Port: Rate — gpm Totalizer — gal.
Time

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	011-15	w/cv	40mL	N	Y	HCL	8015/602	N	SAL

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:

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name MW-16 Date 1/4/91 Time of Sampling 1302
Job Name CHEV. - HAYWARD Job Number 4-310-01 Initials OC
Sample Point Description M (M = Monitoring Well)
Location ON RIO VISTA DR. NEAR DEAD END

WELL DATA: Depth to Water 21.63 ft (static, pumping) Depth to Product 0 ft.
Product Thickness 0 Well Depth 40 ft (spec) Well Depth 38.13 ft(sounded) Well Diameter 2 in
Initial Height of Water in Casing 16.5 ft. = volume 2.68 gal.
3 Casing Volumes to be Evacuated. — Total to be evacuated 8.1 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
Bailer# and type 1¼X60" PVC Dedicated YES (Y/N)
Other —

Evacuation Time: Stop 1257
Start 1248
Total Evacation Time 9 MIN.
Total Evacuated Prior to Sampling 8.1 gal.
Evacuation Rate 0.9 gal. per minute
Depth to Water during Evacuation — ft. — time
Depth to Water at Sampling 23.89 ft. 1305 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.
vol. in cyl. = $\pi r^2 h$
7.48 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
V8 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.)

SAMPLE: Color LT. BROWN Odor STRONG GAS
Description of matter in sample: VERY FINE SAND / SUSPENDED SILT
Sampling Method: DECANT FROM RINSED DED. BLR.
Sample Port: Rate — gpm Totalizer — gal.
Time

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	011-16	W/cV	40mL	N	Y	HCL	8015 / 602	N	SAL

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:

TRAVEL BLANKS

WEISS ASSOCIATES

WATER SAMPLING DATA

Well Name — Date 1/4/91 Time of Sampling 1800

Job Name CHEV. - HAYWARD Job Number 4-310-01 Initials DC

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 Diamcter ____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 Evacation 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.

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

7.48 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

V8 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.)

SAMPLE: Color NONE Odor NONE

Description of matter in sample: NONE

Sampling Method: _____

Sample Port: Rate ____gpm Totalizer _____gal.

Time _____

# of Cont.	Sample ID	Cont. Type[1]	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analytic Method	Turn[5]	LAB
2	011-21	W/CV	40mL	N	Y	HCL	8015/602	N	SAL

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 REPORTS AND CHAIN-OF-CUSTODY FORM

SUPERIOR ANALYTICAL LABORATORIES, INC.

825 ARNOLD, STE. 114 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512

DOHS #319
DOHS #220

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 82239
CLIENT: Weiss Associates
CLIENT JOB NO.: 4-310-01

DATE RECEIVED: 01/07/91
DATE REPORTED: 01/14/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
82239- 1	011-06	01/04/91	01/13/91
82239- 2	011-09	01/04/91	01/11/91
82239- 3	011-10	01/04/91	01/13/91
82239- 4	011-13	01/04/91	01/13/91
82239- 5	011-14	01/04/91	01/13/91
82239- 6	011-15	01/04/91	01/11/91
82239- 7	011-16	01/04/91	01/13/91
82239- 8	011-21	01/04/91	01/13/91

Laboratory Number:	82239 1	82239 2	82239 3	82239 4	82239 5
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	50000	59000	ND<50	72000	1000
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	5600	1100	ND<0.5	5500	ND<0.5
TOLUENE:	2200	5600	ND<0.5	12000	4.0
ETHYL BENZENE:	1800	2500	ND<0.5	2300	2.6
XYLENES:	9400	13000	ND<0.5	12000	4.2

Laboratory Number:	82239 6	82239 7	82239 8
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)		
OIL AND GREASE:	NA	NA	NA
TPH/GASOLINE RANGE:	1700	16000	ND<50
TPH/DIESEL RANGE:	NA	NA	NA
BENZENE:	46	6800	ND<0.5
TOLUENE:	2.8	820	ND<0.5
ETHYL BENZENE:	58	1300	ND<0.5
XYLENES:	86	1500	ND<0.5

SUPERIOR ANALYTICAL LABORATORIES, INC.

825 ARNOLD, STE. 114 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512

DOHS #319
DOHS #220

CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 82239

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

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/l
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/l
Standard Reference: 10/25/90

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 12/14/90

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	10/25/90	200 ng	97	2	70-130
Benzene	12/14/90	200 ng	101	5	70-130
Toluene	12/14/90	200 ng	101	10	70-130
Ethyl Benzene	12/14/90	200 ng	96	4	70-130
Total Xylene	12/14/90	200 ng	106	5	70-130

Richard Srna, Ph.D.
Laboratory Director

OUTSTANDING QUALITY AND SERVICE

82239 Chain-of-Custody-Record

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

Chevron Facility Number 90260 (HAYWARD)
Facility Address 21995 FOOTHILL BLVD. HAYWARD
Consultant Project Number 4-310-01
Consultant Name WEISS ASSOCIATES
Address 5500 SHELLMOUND ST., EMERYVILLE, 94608
Project Contact (Name) JIM CARMODY
(Phone) (415) 547 5420 (Fax Number) (415) 547 5043

Chevron Contact (Name) WALTER F. POSLUZNEY JR.
(Phone)
Laboratory Name SUPERIOR ANALYTICAL LABORATORY
Laboratory Release Number 2564320
Samples Collected by (Name) D. CHARLES
Collection Date 1/4/91
Signature [signature]

	Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Chlorinated HC (8010)	Non Chlorinated HC (8020)	Total Lead (AA)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
1	011-06	2	W	G	1633	HCL	Y	X												
2	011-09	↓	↓	↓	1758	↓	↓	↓												
3	011-10	↓	↓	↓	1615	↓	↓	↓												
4	011-13	↓	↓	↓	1517	↓	↓	↓												
5	011-14	↓	↓	↓	1410	↓	↓	↓												
6	011-15	↓	↓	↓	1338	↓	↓	↓												
7	011-16	↓	↓	↓	1302	↓	↓	↓												
8	011-21	↓	↓	↓	1800	↓	↓	↓												

Please initial: [initials]
Samples Stored in ice. OK
Appropriate containers.
Samples preserved.
VOA's without headspace
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	Weiss Assoc.	1/4/91 1920	[signature]	Weiss Assoc.	1/7/91 900
[signature]	Weiss Assoc.	1/7/91 1206	[signature]	Express-It	1/7 1205
[signature]	Express-It	1/7 1310	Received For Laboratory By (Signature) [signature]	Express-It	1/7/91 1436

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

Relinquished to alarm locked area for weekend - Kept Cool

COC-1.DWG/11 90/HCH

ATTACHMENT C

PREVIOUS GROUND WATER ELEVATION CONTOUR MAPS

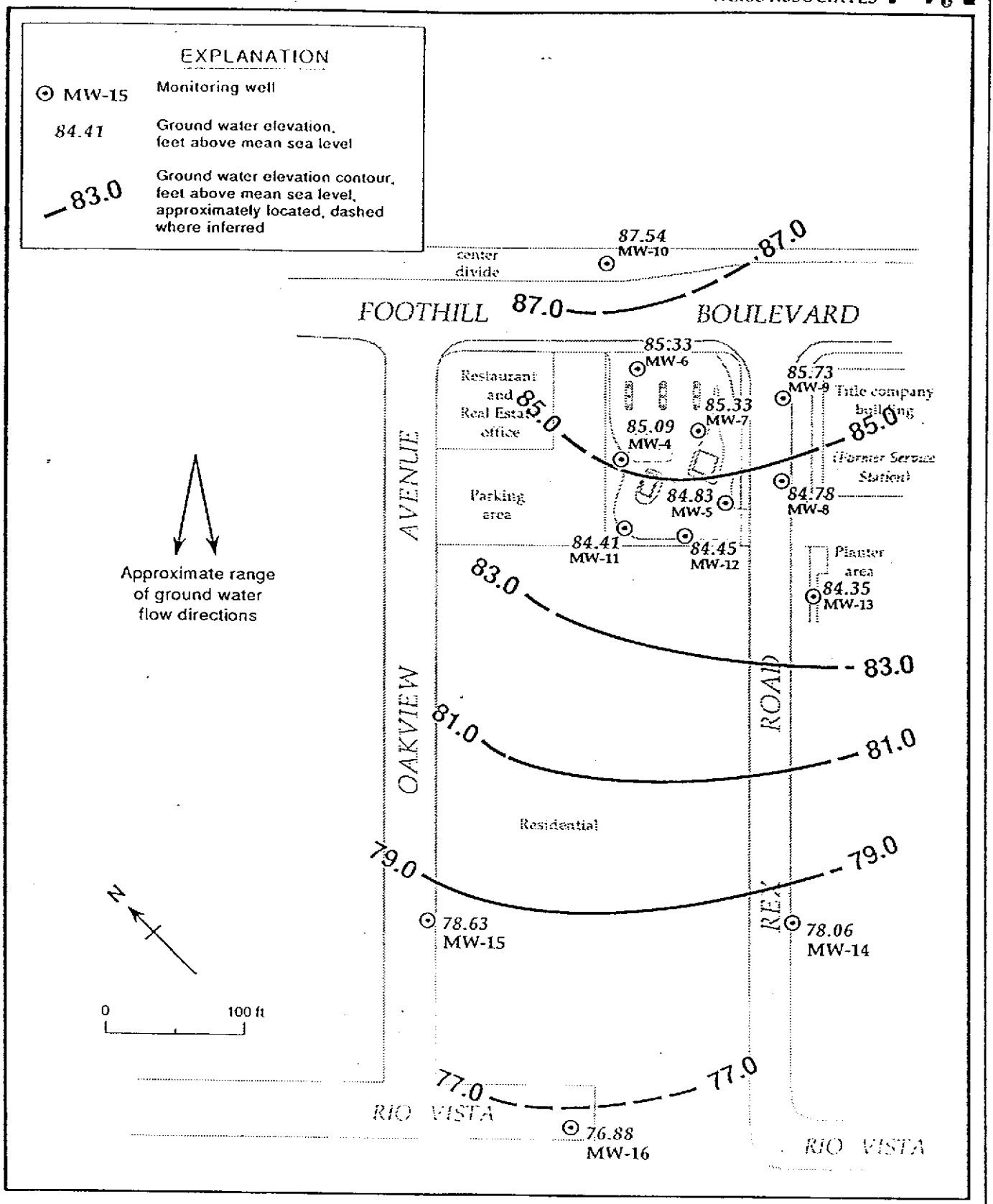


Figure 2. Ground Water Elevation Contours - November 6, 1990 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

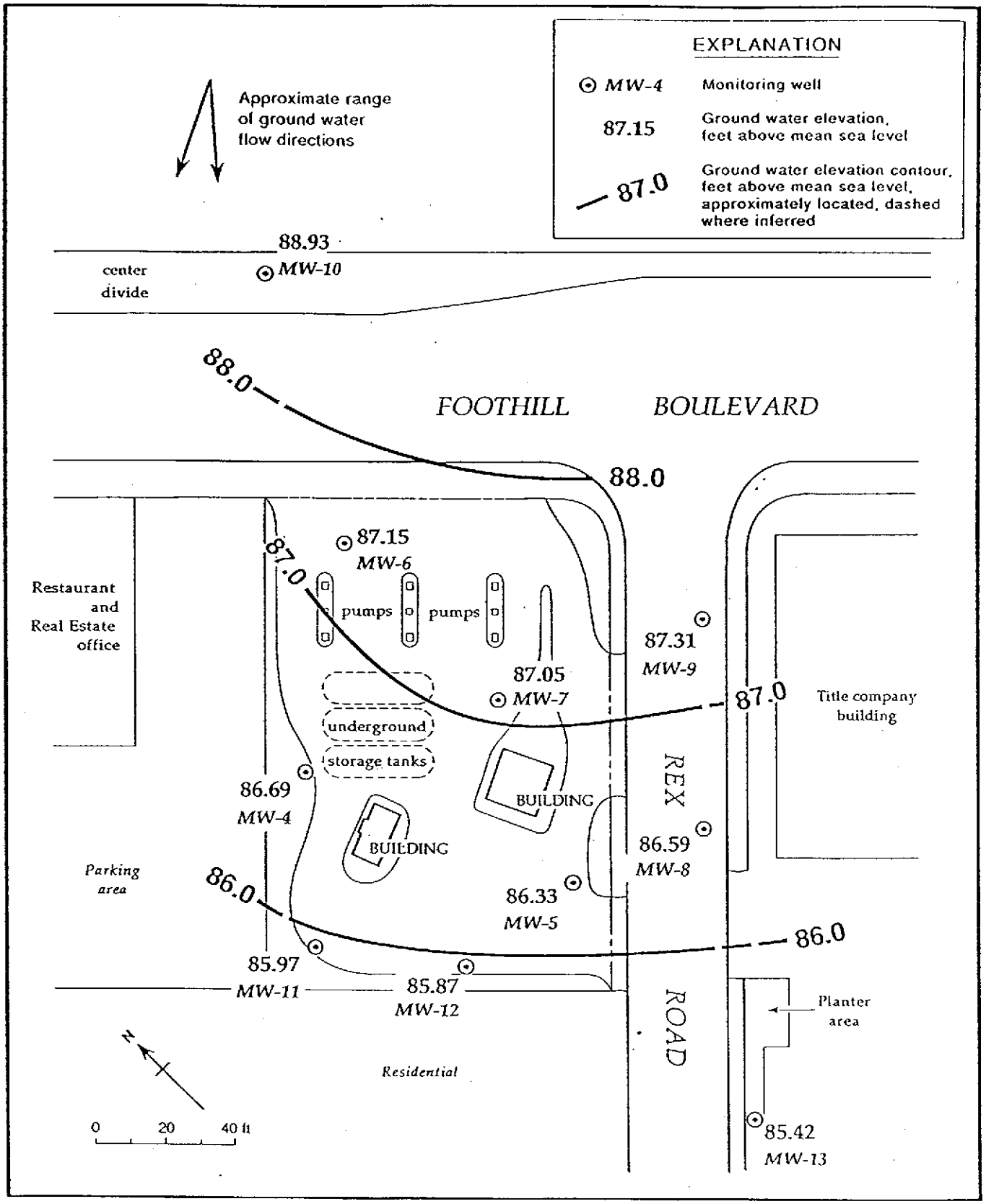


Figure 2. Ground Water Elevation Contours - July 3, 1990 - Chevron Service Station #90260, 21995 Foothill Boulevard, Hayward, California

8/2/90

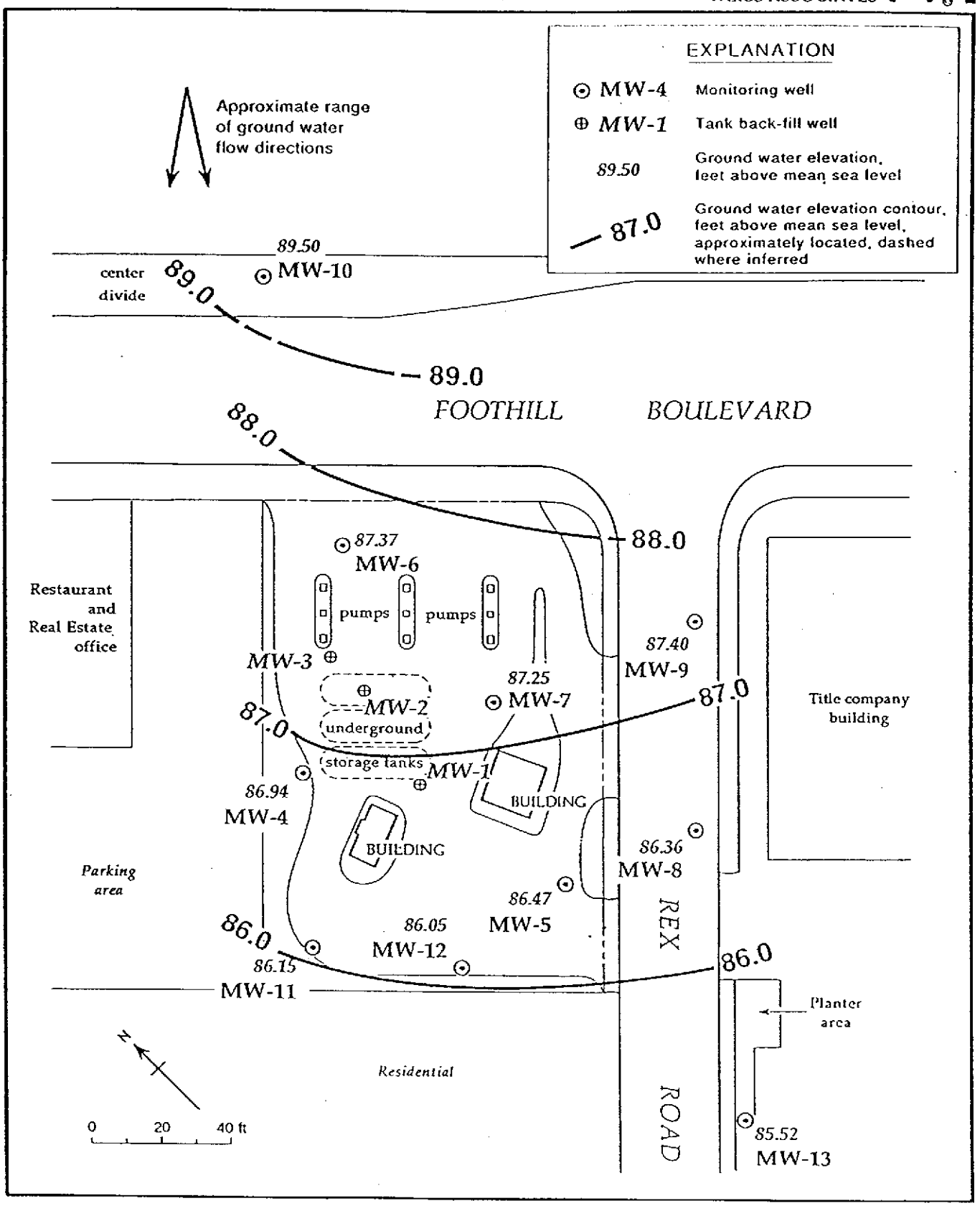


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - April 3, 1990 - Chevron Service Station #90260, 21995 Foothill Boulevard, Hayward, California

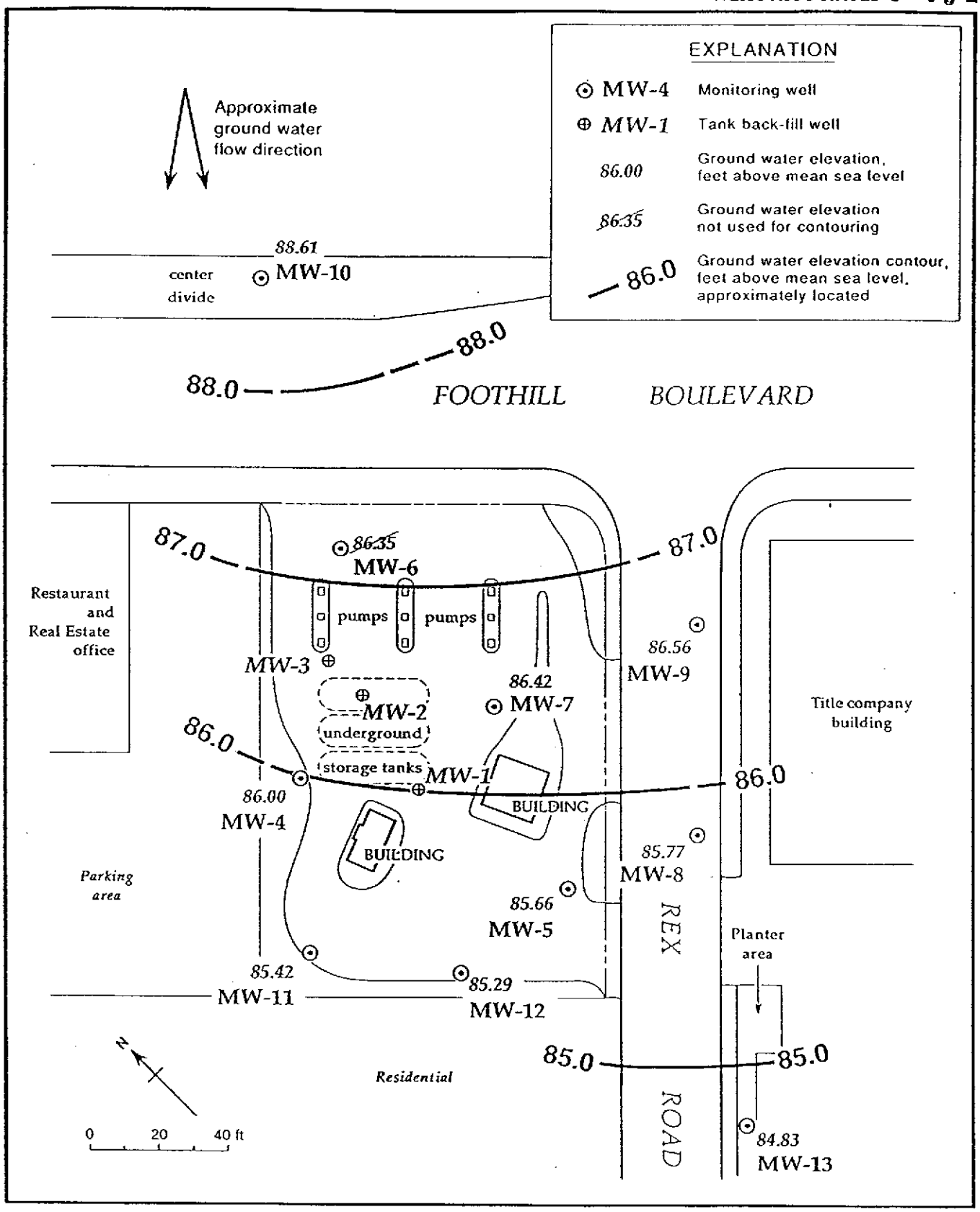


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - January 4, 1990 - Chevron Service Station #90260, 21995 Foothill Boulevard, Hayward, California