



Chevron U.S.A. Inc.

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

Marketing Department

November 18, 1991

Ms. Penny Silzer
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 Ms. Silzer,

Please find attached a copy of the most recent quarterly monitoring report for the above referenced site. Chevron is currently monitoring a total of fifteen groundwater wells with eight being on-site and seven being offsite. Groundwater is at approximately 15 feet below grade and is moving to the southwest at a rate of 0.015 ft./ft.. Phase separated hydrocarbons are showing up in two monitoring wells. (Skimmers have been installed in those wells.)

The free-product sample that was taken and analyzed out of well MW-8(off-site) turned out to be a product other than Chevron's. MW-8 also happens to have the largest amount of free-product. We are checking for any underground conduits, pipelines, trenches, etc.. that might be a pathway for the product to migrate towards our direction.

The Oro Loma Sanitary District has been very helpful in trying to assist us in gaining a variance with the RWQCB regarding the discharging of the water containing the arsenic into the sanitary sewer. As we have discussed earlier, this service station was once the site of an apricot orchard where they routinely sprayed arsenic on the trees. The OLSD says that they can easily handle the insignificant amounts of arsenic we have without any problem. We are working with the OLSD to help satisfy the concerns of the RWQCB on this issue.

We are gearing up to perform a longer term(6-week) test modifying the current WTS UV-OX system to obtain even better destruction. The system should be back on line in the next 2-weeks pending a solution to the arsenic problem.

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.

We are also preparing to continue our off-site investigation. Weiss Associates is formulating a workplan to that effect.

Should you have any questions, please feel free to call me at (510) 842-9040.



November 12, 1991

Walter F. Posluszny, Jr.
Chevron U.S.A., Inc.
P.O. Box 5004
San Ramon, CA 94583-0804

Re: Fourth Quarter 1991
Ground Water Monitoring Report
Chevron Service Station #9-0260
21995 Foothill Boulevard
Hayward, California
WA Job #4-310-01

Dear Mr. Posluszny:

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 October 2, 1991, 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 electric sounder (Table 1). We also checked the wells for floating hydrocarbons or sheen. About 0.27 feet of floating hydrocarbons were measured in monitoring well MW-8, and approximately 0.2 gallons of floating hydrocarbons were removed from the well with a bailer.

WA collected ground water samples for analysis after purging at least 3 well-casing volumes of ground water from each well. Each sample was decanted from a dedicated 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 stored onsite in DOT-approved 55-gallon drums until properly disposed of offsite.



MONITORING AND ANALYTIC RESULTS

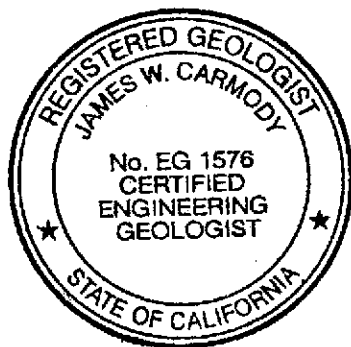
The top-of-casing elevation, depth to ground water and the ground water elevation for each well is presented in Table 1. Ground water elevation contours and the ground water flow direction are shown on Figure 2. The ground water elevation contours indicate that ground water flows southwestward with a gradient of about 0.015 ft/ft. A TPH-G isoconcentration contour map is included as Figure 3. Ground water elevation contour maps for the past year are included in Figure 4.

Current and historical ground water analytic results are summarized in Table 2. The water sample collection records, and analytic report and chain-of-custody forms are included as Attachments A and B, respectively.

PROPOSED WORK SCHEDULE

The First Quarter 1992 ground water sampling is scheduled for January 2, 1992. We will submit a report presenting the field and analytic data by mid-February 1992.

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



Sincerely,
Weiss Associates

Mariette M. Shin
Staff Geologist

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

MMS/JWC:cr

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

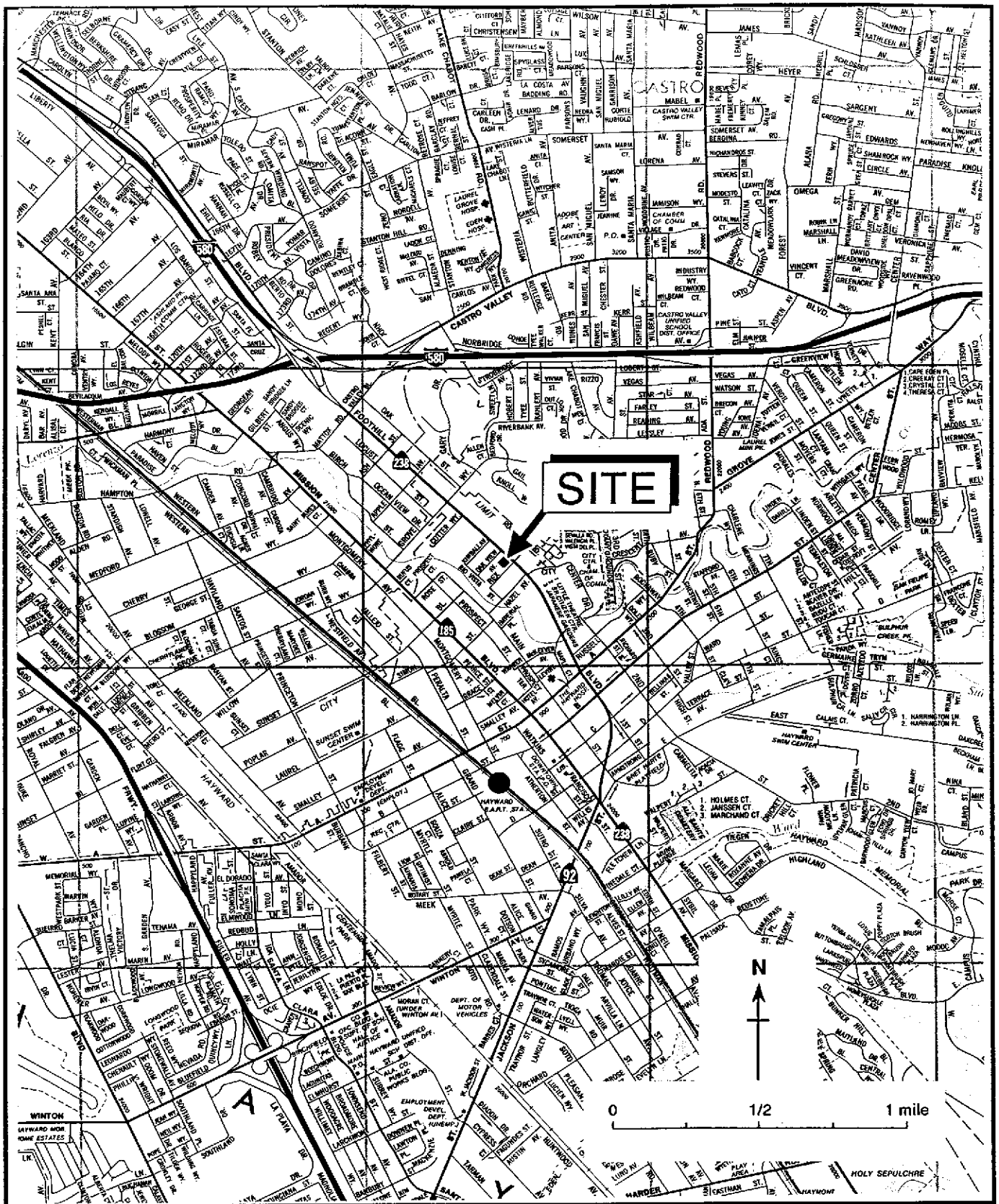


Figure 1. Site Location Map - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

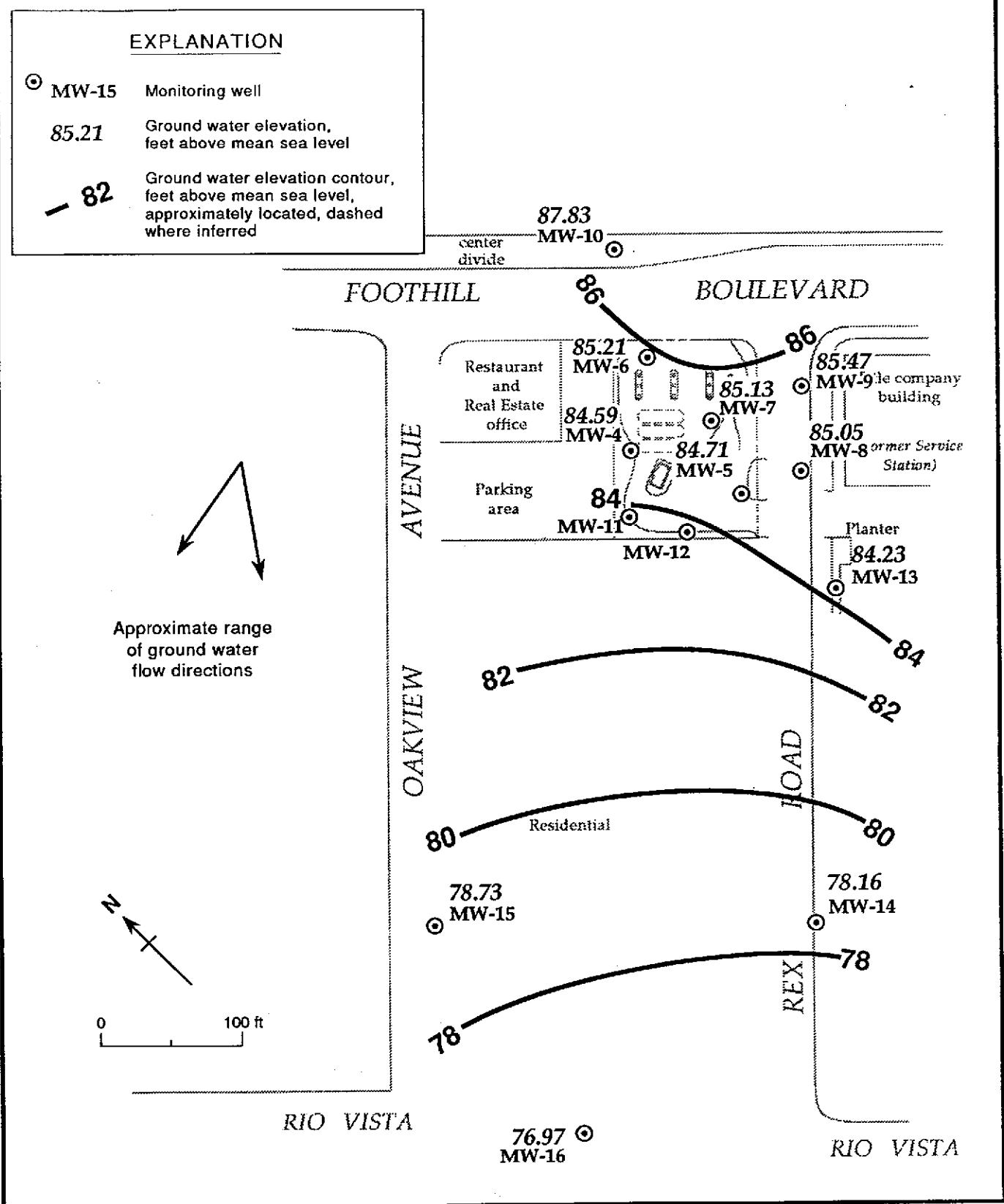


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - October 2, 1991 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

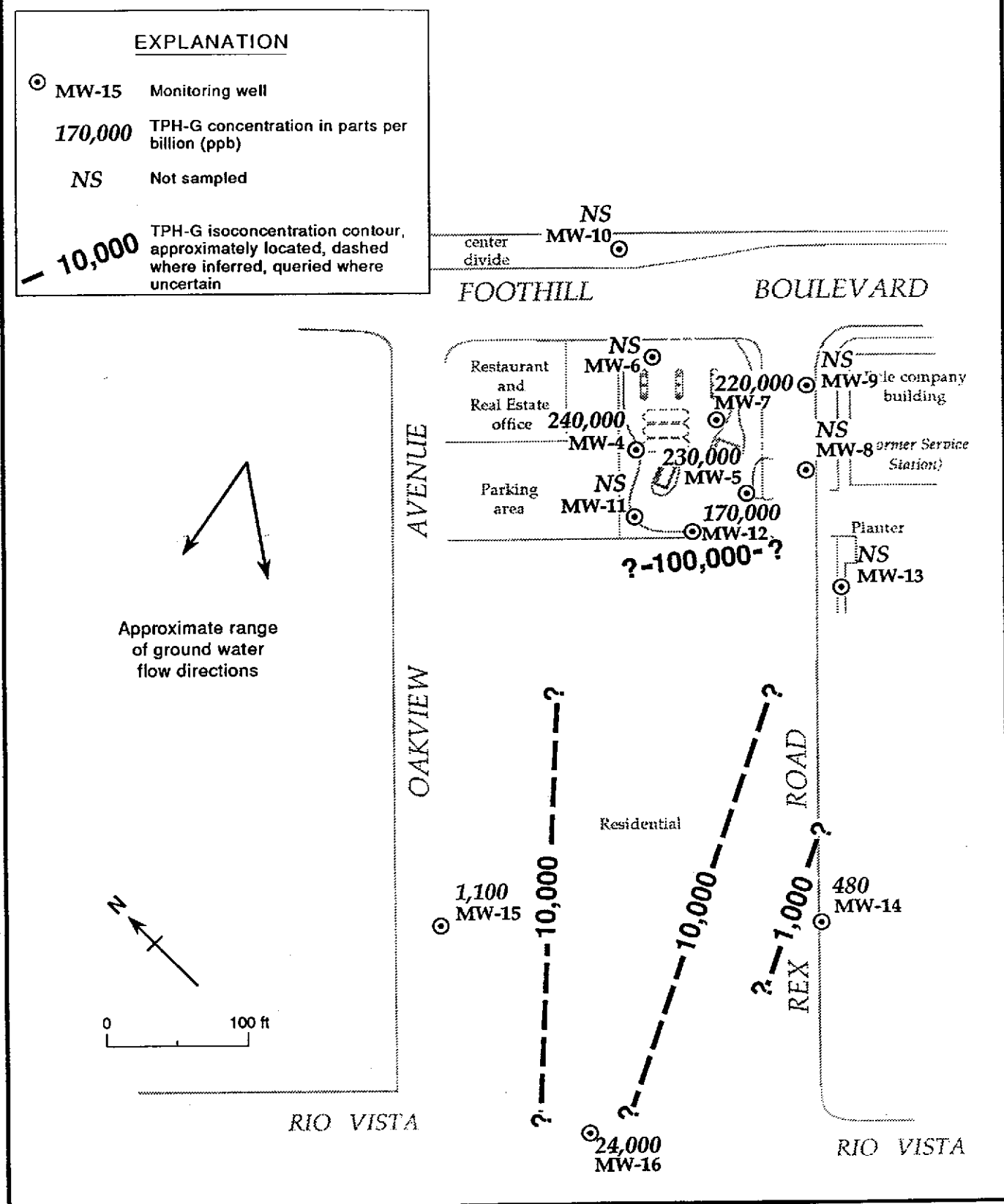


Figure 3. TPH-G Concentrations in Ground Water - October 2, 1991 - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

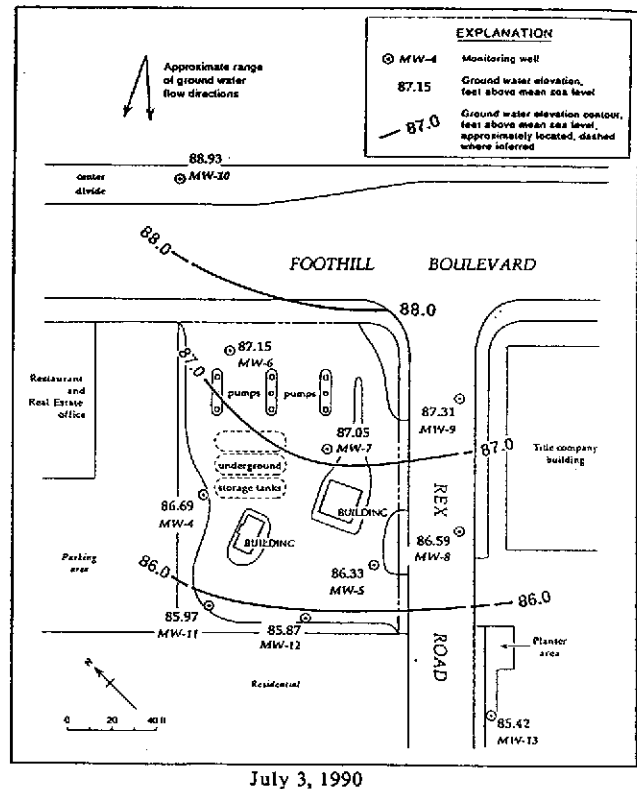
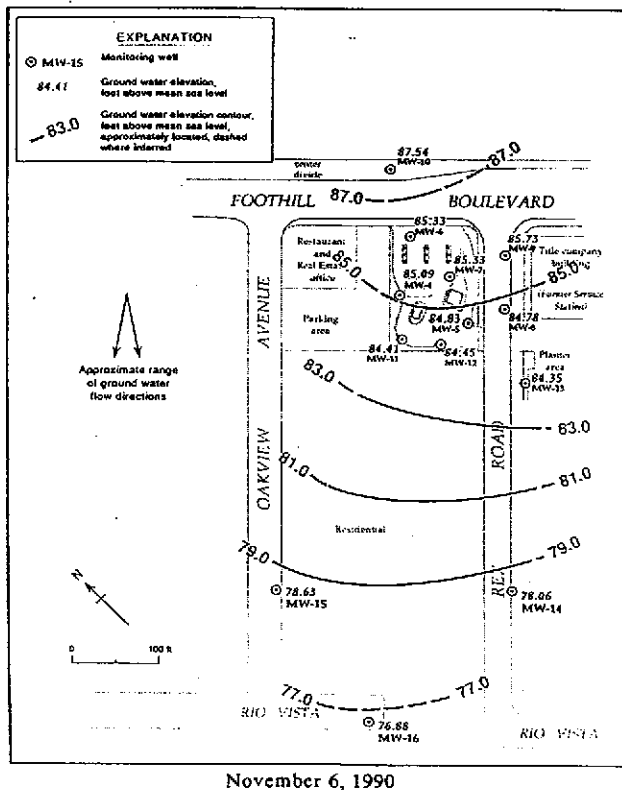
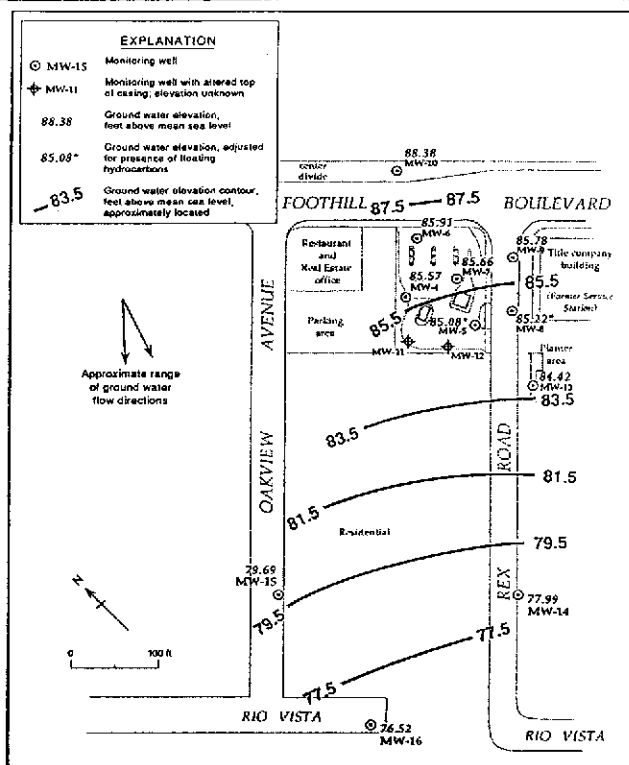
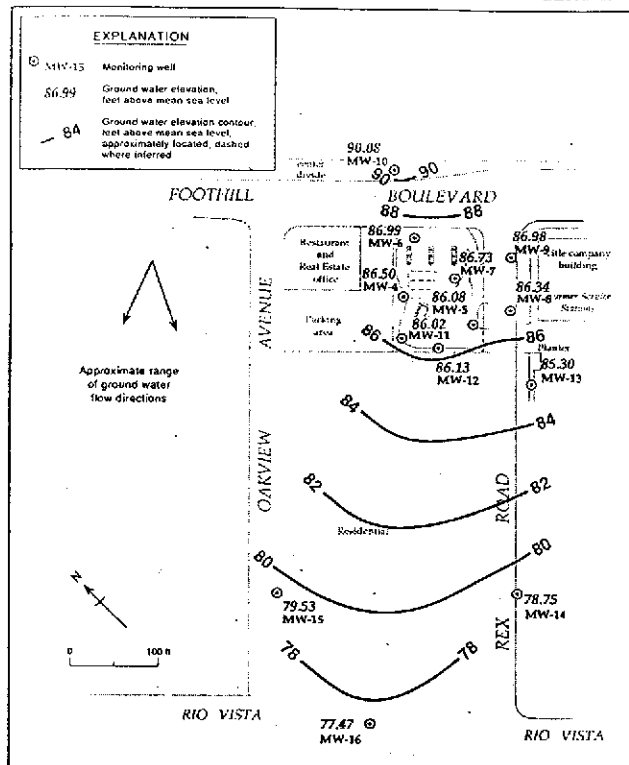


Figure 4. Previous Ground Water Elevation Contour Maps - Chevron Service Station #9-0260, 21995 Foothill Boulevard, Hayward, California

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)	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
	04/03/91		11.00	—	89.75
	07/02/91		14.25	—	86.50
	10/02/91		16.16	—	84.59
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
	04/03/91		11.56	—	88.41
	07/02/91		13.89	—	86.08
	10/02/91		15.26	—	84.71
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
	04/03/91		11.03	—	90.40
	07/02/91		14.44	—	86.99
	10/02/91		16.22	—	85.21

— 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)	Thickness of Floating Hydrocarbons (ft)	Water Elevation (ft above msl)
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
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
	04/03/91		11.53	0.05	88.18 ^a
	07/02/91		13.71	0.48	86.34
	10/02/91		14.84	0.27	85.05
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
	04/03/91		12.27	—	88.88
	07/02/91		14.17	—	86.98
	10/02/91		15.68	—	85.47

— 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-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
	04/03/91		9.79	—	92.57
	07/02/91		12.28	—	90.08
	10/02/91		14.53	—	87.83
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		14.88	0.30	—
	04/03/91		10.75	0.21	—
	07/02/91		13.97	0.02	—
	10/02/91		15.60	—	—
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		14.52	0.06	—
	04/03/91		10.91	—	—
	07/02/91		13.51	—	—
	10/02/91		14.93	—	—
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

— 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-14	08/29/90	99.68	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
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
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

^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 (Semi-Annually 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 ^a	CCAS	14.22	500,000	41,000	<5,000	27,000	16,000	<5,000	<5,000	---
	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	---	---	---
	04/03/91	SAL	11.00	130,000	21,000	2,300	24,000	14,000	---	---	---
	10/02/91	SAL	16.16	240,000	27,000	2,600	33,000	16,000	---	---	---
MW-5 (Semi-Annually 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 ^a	CCAS	13.25	470,000	39,000	<5,000	32,000	16,000	<5,000	<5,000	---
	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	---	---	---
	04/03/91	SAL	11.56	140,000	36,000	2,700	32,000	17,000	---	---	---
	10/02/91	SAL	15.26	230,000	34,000	2,700	31,000	16,000	---	---	---
MW-6 (Semi-Annually 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 ^a	CCAS	14.56	17,000	2,200	1,700	2,800	5,100	130	<10	---
	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	---	---	---
	07/02/91	SAL	14.44	81,000	11,000	2,100	2,700	13,000	---	---	---

--Table 2 continues on next page--

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-7 (Semi-Annually 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 ^a	CCAS	13.60	30,000	9,700	400	8,900	4,100	2,600	<10	---
	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	---	---	---
	04/03/91	SAL	11.41	240,000	40,000	2,400	36,000	18,000	---	---	---
	10/02/91	SAL	15.78	220,000	26,000	2,500	27,000	18,000	---	---	---
MW-8 (Semi-Annually 2nd & 4th quarters)	10/27/88 ^a	CCAS		190,000	27,000	2,200	43,000	15,000	<500	<500	---
	01/05/89	SAL	12.02	87,000	24,000	3,000	39,000	15,000	---	---	---
	06/28/89	SAL	13.40	120,000	22,000	2,900	35,000	16,000	---	---	---
	10/03/89 ^c		13.84	---	---	---	---	---	---	---	---
	01/04/90 ^c		13.99	---	---	---	---	---	---	---	---
	04/03/90 ^c		13.07	---	---	---	---	---	---	---	---
	07/03/90 ^c		13.11	---	---	---	---	---	---	---	---
	11/06/90 ^c		14.77	---	---	---	---	---	---	---	---
	04/03/91 ^b	---	11.53	---	---	---	---	---	---	---	---
	10/02/91 ^c	---	14.84	---	---	---	---	---	---	---	---
MW-9 (Semi-Annually 1st & 3rd quarters)	10/27/88 ^a	CCAS		50,000	2,000	2,000	9,900	14,000	<500	<500	---
	01/05/89	SAL	12.63	55,000	670	3,400	8,900	16,000	---	---	---
	06/28/90	SAL	14.04	100,000	510	2,600	4,500	13,000	---	---	---
	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	---	---	---
	07/02/91	SAL	14.17	130,000	1,900	3,600	7,600	20,000	---	---	---
MW-10 (Annually 1st quarter)	10/27/88 ^a	CCAS	<500	26	<5	13	<5	<5	<5	---	---
	01/05/89	SAL	12.64	<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---
	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	---	---	---

- Table 2 continues on next page --

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-11 (Semi-Annually 1st & 3rd quarters)	06/28/89	SAL	14.33	60,000	36,000	2,500	13,000	12,000	---	---	ND ^d
	10/03/89	SAL	14.61	14,000	4,200	240	1,400	1,300	---	---	---
	01/04/90	SAL	14.55	82,000	33,000	2,000	11,000	10,000	---	---	---
	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	---	---	---	---	---	---	---	---
	04/03/91 ^c	---	10.75	---	---	---	---	---	---	---	---
	07/02/91	SAL	13.97	340,000	29,000	3,700	14,000	24,000	---	---	---
MW-12 (Semi-Annually 2nd & 4th quarters)	06/28/89	SAL	14.10	55,000	30,000	2,900	21,000	19,000	---	---	ND ^d
	10/03/89	SAL	14.30	170,000	30,000	2,700	23,000	15,000	---	---	---
	01/04/90	SAL	14.35	110,000	24,000	2,300	19,000	12,000	---	---	---
	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	---	---	---
	04/09/91	SAL	10.91	170,000	39,000	2,400	17,000	14,000	---	---	---
	10/02/91	SAL	14.93	170,000	27,000	2,600	15,000	17,000	---	---	---
MW-13 (Semi-Annually 1st & 3rd quarters)	06/28/89	SAL	13.22	54,000	12,000	1,900	10,000	15,000	---	---	ND ^d
	10/03/89	SAL	13.54	120,000	10,000	2,300	10,000	15,000	---	---	---
	01/04/90	SAL	13.64	87,000	6,800	2,000	10,000	12,000	---	---	---
	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	---	---	---
	07/02/91	SAL	13.17	120,000	12,000	2,500	13,000	14,000	---	---	---
MW-14 (Quarterly)	08/29/90	SAL	21.39	970	4	0.7	2	2	1	---	ND ^e
	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	---	---	---
	04/03/91	SAL	19.53	1,200	380	7	6	18	---	---	---
	07/02/91	SAL	20.93	460	27	1.2	1.0	1.0	---	---	---
	10/02/91	SAL	21.52	480	6.7	1.4	0.8	1.8	---	---	---
MW-15 (Quarterly)	08/29/90	SAL	16.58	2,000	26	72	2	110	<0.5	---	0.6 ^f
	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	---	---	---
	04/03/91	SAL	12.46	2,100	74	44	0.8	85	---	---	---
	07/02/91	SAL	16.53	1,700	39	35	<0.5	46	---	---	---
	10/02/91	SAL	17.33	1,100	50	40	<0.5	33	---	---	---
MW-16 (Quarterly)	08/29/90	SAL	20.89	11,000	6,000	1,100	51	20	<0.5	---	ND ^g
	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	---	---	---
	04/03/91	SAL	19.32	45,000	7,300	1,800	2,200	4,900	---	---	---
	07/02/91	SAL	20.68	30,000	6,400	1,500	530	1,800	---	---	---
	10/02/91	SAL	21.18	24,000	4,600	1,400	450	1,600	---	---	---

- Table 2 continues on next page --

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)----->											
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	---	---	---
	01/04/90	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	---	---	---
	04/03/91	SAL		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/02/91	SAL		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/02/91	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 only 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 NaHSO₄ 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.

ATTACHMENT A
WATER SAMPLE COLLECTION RECORDS.



WATER SAMPLING DATA

Well Name MW-4 Date 10/2/91 Time of Sampling 14:36
 Job Name Chevron Hayward Job Number 4-310-01 Initials BB

Sample Point Description M (M = Monitoring Well)

Location NW side of site, in planter, under TV cable Christy box

WELL DATA: Depth to Water 16.16 ft (static pumping) @ 1125 Depth to Product — ft.

Product Thickness — Well Depth 21.6 ft (spec) Well Depth 21.46 ft (sounded) Well Diameter 4 in

Initial Height of Water in Casing 5.3 ft. = volume 3.5 gal.

3 Casing Volumes to be Evacuated. Total to be evacuated 10.5 gal.

EVACUATION METHOD:

Pump # and type — Hose # and type —

Bailer# and type 3" x 3' PVC Dedicated Yes (Y/N)

Other —

Evacuation Time: Stop 12:16 13:56 —

Start 12:03 13:53 —

Total Evacuation Time 6

Total Evacuated Prior to Sampling 10.5 gal.

Evacuation Rate 1.75 gal. per minute

Depth to Water during Evacuation — ft. — time

Depth to Water at Sampling 16.38 ft. 14:38 time

Evacuated Dry? Yes After 5 gal. Time 12:16

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/ft³

V₂" casing = 0.163 gal/ft

V₃" casing = 0.367 gal/ft

V₄" casing = 0.653 gal/ft

V_{4.5}" casing = 0.826 gal/ft

V₆" 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/ μ mos pH T^oC Time Volume Evacuated (gal.)

N/A

SAMPLE: Color Clear Odor Moderate

Description of matter in sample: None

Sampling Method: sampled from port in ded. PVC b/r. * globules detected on purge water

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	101-04	W/W	40 ml	No	Yes	HCl	EPA 8015/8020	N	SAL
1	101-04	W/P	500 ml	No	Yes	H ₂ O ₂ (BB) NONE	EPA 206.2	HOLD	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:

WATER SAMPLING DATA

Well Name MW-5 Date 10/2/91 Time of Sampling 1441
 Job Name Chevron Hayward Job Number 4-310-01 Initials ee
 Sample Point Description M (M = Monitoring Well)
 Location NEAR SOGA MACHINE

WELL DATA: Depth to Water 15.26 ft (static pumping) @ 1106 Depth to Product — ft.
 Product Thickness — Well Depth 18.5 ft (spec) Well Depth 18.59 ft (sounded) Well Diameter 4 in
 Initial Height of Water in Casing 3.33 ft. = volume 2.1 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 6.2 gal.

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

Evacuation Time: Stop 1151 1326 1434
 Start 1149 1324 1433
 Total Evacuation Time 5
 Total Evacuated Prior to Sampling 7 gal.
 Evacuation Rate 1.4 gal. per minute

Depth to Water during Evacuation — ft. — time

Depth to Water at Sampling 16.41 ft. 1443 time

Evacuated Dry? YES After 3 gal. Time 1151

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/ft³

V₂" casing = 0.163 gal/ft

V₃" casing = 0.367 gal/ft

V₄" casing = 0.653 gal/ft

V_{4.5}" casing = 0.826 gal/ft

V₆" 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/ μ mhos pH T°C Time Volume Evacuated (gal.)

N/A

SAMPLE: Color CLEAR/GREY Odor NONE
 Description of matter in sample: GREY SILT
 Sampling Method: FROM SAMPLE PORT OF DED BAKER
 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	101-05	W/W	40ml	No	Yes	HCl	EPA 8015/8020	N	SAL
1	101-05	W/P	500ml	No	Yes	HNO₃ (BB) NONE	EPA 206.2	HOLD	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:

WATER SAMPLING DATA

Well Name MW-7 Date 10/2/91 Time of Sampling 1458
 Job Name Chevron Hayward Job Number 4-310-01 Initials CD
 Sample Point Description M (M = Monitoring Well)
 Location NEAR NW PUMP ISLAND

WELL DATA: Depth to Water 15.78 ft (static pumping) @ 1019 Depth to Product — ft.
 Product Thickness — Well Depth 17.6 ft (spec) Well Depth 18.08 ft (sounded) Well Diameter 4 in
 Initial Height of Water in Casing 2.3 ft = volume 1.5 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 4.5 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
 Bailer # and type 1" V8 PVC Dedicated YES (Y/N)
 Other —

Evacuation Time: Stop 1200
 Start 1158 13240
 Total Evacuation Time —
 Total Evacuated Prior to Sampling 7 gal.
 Evacuation Rate — gal. per minute

Depth to Water during Evacuation — ft. — time
 Depth to Water at Sampling 17.64 ft. 1500 time
 Evacuated Dry? YES After 2 gal. Time 1200
 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 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/ μ mhos pH T°C Time Volume Evacuated (gal.)

N/A

SAMPLE: Color CLEAR Odor NONE
 Description of matter in sample: NONE FIRST BAIL CONTAINED FREE PRODUCT
 Sampling Method: FROM SAMPLE PORT ON RED BAILER
 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	101-07	W/W	40ml	No	Yes	HCl	EPA 8015/8020	N	SAL
1	101-07	W/P	500ml	No	Yes	HNO ₃ (BB) NONE	EPA 206.2	HOLD	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:

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WATER SAMPLING DATA

Well Name MW-12 Date 10/2/91 Time of Sampling 13:33
 Job Name Chevron Hayward Job Number 4-310-01 Initials BB
 Sample Point Description M (M = Monitoring Well)
 Location REAR OF LOT, NEAR REM. SYSTEM ENCLOSURE

WELL DATA: Depth to Water 14.93 ft (static pumping) @ 11W Depth to Product — ft.
 Product Thickness — Well Depth 16.67 ft (spec) Well Depth 18.57 ft (sounded) Well Diameter 4 in
 Initial Height of Water in Casing 3.64 ft. = volume 2.4 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 7.2 gal.

EVACUATION METHOD:

Pump # and type — Hose # and type —
 Bailer# and type 3"x3' PVC Dedicated Yes (Y/N)
 Other —

Evacuation Time: Stop 11:55 13:32 —

Start 11:52 1330 —

Total Evacuation Time 5 min

Total Evacuated Prior to Sampling 7.5 gal.

Evacuation Rate 1.5 gal. per minute

Depth to Water during Evacuation — ft. — time

Depth to Water at Sampling 16.18 ft. 13:34 time

Evacuated Dry? Yes After 5 gal. Time 11:55

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/ft³

V₂" casing = 0.163 gal/ft

V₃" casing = 0.367 gal/ft

V₄" casing = 0.653 gal/ft

V_{4.5}" casing = 0.826 gal/ft

V₆" 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/ μ mhos pH T°C Time Volume Evacuated (gal.)

N/A

SAMPLE: Color Slightly Cloudy Odor Moderate
 Description of matter in sample: none / maybe some fine suspended particles
 Sampling Method: sampled from port on ded. PVC bailer.
 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	101-12	W/W	40 ml	No	Yes	HCl	EPA 8015/8020	N	SAL
1	101-12	W/P	500 ml	No	Yes	HNO ₃ (BB) → NONE	EPA 206.2	HOLD	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:



WATER SAMPLING DATA

Well Name MW-14 Date 10/2/91 Time of Sampling 14:20
 Job Name Chevron Playward Job Number 4-310-01 Initials BB
 Sample Point Description M (M = Monitoring Well)

Location On REX rd. in front of private residence

WELL DATA: Depth to Water 21.52 ft (static pumping @ 1054) Depth to Product — ft.
 Product Thickness — Well Depth 41.5 ft (spec) Well Depth 40.96 ft (sounded) Well Diameter 2 in
 Initial Height of Water in Casing 19.44 ft = volume 3.1 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 9.3 gal.

EVACUATION METHOD:

Pump # and type — Hose # and type —
 Bailer # and type 1.25" x 5' PVC Dedicated Yes (Y/N)
 Other —

Evacuation Time: Stop 14:28

Start 14:05

Total Evacuation Time 13 min

Total Evacuated Prior to Sampling 9.5 gal.

Evacuation Rate 0.73 gal. per minute

Depth to Water during Evacuation — ft. — time

Depth to Water at Sampling 21.60 ft. 14:21 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/ft³

V_{2"} casing = 0.163 gal/ft

V_{3"} casing = 0.367 gal/ft

V_{4"} casing = 0.653 gal/ft

V_{4.5"} casing = 0.826 gal/ft

V_{6"} casing = 1.47 gal/ft

V_{8"} casing = 2.61 gal/ft

CHEMICAL DATA: Meter Brand/Number

Calibration: 4.0 7.0 10.0

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

N/A

SAMPLE: Color Brown Odor None Detected

Description of matter in sample: suspended silt particles

Sampling Method: sampled from port in ded. PVC bailer.

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	101-14	W/W	40 ml	No	Yes	HCl	EPA 8015/8020	N	SAL
1	101-14	W/P	500 ml	NO	Yes	HNO ₃ (BB) → NONE	EPA 206.2	HOLD	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:

WATER SAMPLING DATA

Well Name MW-15 Date 10/2/91 Time of Sampling 14:55
 Job Name Chevron Hayward Job Number 4-310-01 Initials BB
 Sample Point Description M (M = Monitoring Well)

Location On Oakview ave, 3/4 of the way down street on left.

WELL DATA: Depth to Water 17.33 ft (static) pumping @ 1004 Depth to Product — ft.

Product Thickness — Well Depth 22 ft (spec) Well Depth 22.07 ft (sounded) Well Diameter 2 in

Initial Height of Water in Casing 4.74 ft. = volume BB 3.0 0.77 gal.

3 Casing Volumes to be Evacuated. Total to be evacuated BB 2.3 gal.

EVACUATION METHOD:

Pump # and type — Hose # and type —

Bailer # and type 1.25" x 5' PVC Dedicated YES (Y/N)

Other —

Evacuation Time: Stop 12:34 14:54 —

Start 12:30 14:53 —

Total Evacuation Time 5 min

Total Evacuated Prior to Sampling 1.5 gal.

Evacuation Rate 0.3 gal. per minute

Depth to Water during Evacuation — ft. — time

Depth to Water at Sampling 20.61 ft. 14:55 time

Evacuated Dry? YES After 1.5 gal. Time 12:34

80% Recovery = —

% Recovery at Sample Time — Time —

CHEMICAL DATA: Meter Brand/Number —

Calibration: 4.0 7.0 10.0

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

N/A

SAMPLE: Color Slightly Cloudy Grey Odor None Detected

Description of matter in sample: Some fine suspended silt particles

Sampling Method: Decanted from ded. PVC bailer

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
<u>2</u>	<u>101-15</u>	<u>W/W</u>	<u>40ml</u>	<u>NO</u>	<u>Yes</u>	<u>HCl</u>	<u>EPA 808/8020</u>	<u>N</u>	<u>SAL</u>
<u>1</u>	<u>101-15</u>	<u>W/P</u>	<u>500ml</u>	<u>NO</u>	<u>Yes</u>	<u>HNO₃ (BB)</u>	<u>EPA 206.2</u>	<u>HOLD</u>	<u>SAL</u>
						<u>NONE</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-16 Date 10/2/91 Time of Sampling 1243
 Job Name Chercon Hayward Job Number 4-310-01 Initials ra
 Sample Point Description M (M = Monitoring Well)
 Location NEAR AINA FND IN HIGHBOCHOOD

WELL DATA: Depth to Water 21.18 ft (static) pumping @ 10:00 Depth to Product — ft.
 Product Thickness — Well Depth 40 ft (spec) Well Depth 38.13 ft (sounded) Well Diameter 2 in
 Initial Height of Water in Casing 16.95 ft = volume 2.75 gal.
3 Casing Volumes to be Evacuated. Total to be evacuated 8.25 gal.

EVACUATION METHOD: Pump # and type — Hose # and type —
 Bailer# and type 2" x 5' PVC Dedicated Yes (Y/N)
 Other —

Evacuation Time: Stop 1242
 Start 1226
 Total Evacuation Time 16
 Total Evacuated Prior to Sampling 9 gal.
 Evacuation Rate 0.56 gal. per minute

Depth to Water during Evacuation — ft. — time
 Depth to Water at Sampling 23.10 ft. 1245 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 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/ μ mhos pH T°C Time Volume Evacuated (gal.)

N/A

SAMPLE: Color GREY Odor NONE
 Description of matter in sample: BLACK SILT
 Sampling Method: FROM OLD BAILER WITH SAMPLE 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	101-16	W/W	40ml	No	Yes	HCl	EPA 8015/8020	N	SAL
1	101-16	W/P	500ml	No	Yes	HNO ₃ (BB) → NONE	EPA 206.2	HOLD	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 TRAVEL BLANKS Date 10/2/91 Time of Sampling 0845
Job Name Chevron Hayward Job Number 4-310-01 Initials BB
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.
- vol. in cyl. = $\pi r^2 h$
- 7.48 gal/ft³
- V_{2"} casing = 0.163 gal/ft
- V_{3"} casing = 0.367 gal/ft
- V_{4"} casing = 0.653 gal/ft
- V_{4.5"} casing = 0.826 gal/ft
- V_{6"} casing = 1.47 gal/ft
- V_{8"} casing = 2.61 gal/ft

CHEMICAL DATA: Meter Brand/Number _____

Calibration: _____ 4.0 _____ 7.0 _____ 10.0
Measured: SC/ μ mhos pH T°C Time Volume Evacuated (gal.)

SAMPLE: Color Clear Odor None
Description of matter in sample: none
Sampling Method: prepared by SAL Personnel on 9/24/91
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	101-21	w/w	40ml	No	Yes	HCl	EPA8015/8020	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 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

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

LABORATORY NO.: 12416
CLIENT: Weiss Associates
CLIENT JOB NO.: 4-310-01

DATE RECEIVED: 10/02/91

DATE REPORTED: 10/11/91

Page 1 of 2

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
12416- 1	101-04	10/02/91	10/08/91
12416- 2	101-05	10/02/91	10/08/91
12416- 3	101-07	10/02/91	10/08/91
12416- 4	101-12	10/02/91	10/08/91
12416- 5	101-14	10/02/91	10/10/91
12416- 6	101-15	10/02/91	10/08/91
12416- 7	101-16	10/02/91	10/08/91
12416- 8	101-21	10/02/91	10/08/91

Laboratory Number:	12416	12416	12416	12416	12416
	1	2	3	4	5

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	240000	230000	220000	170000	480
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	27000	34000	26000	27000	6.7
TOLUENE:	33000	31000	27000	15000	0.8
ETHYL BENZENE:	2600	2700	2500	2600	1.4
XYLENES:	16000	16000	18000	17000	1.8

Laboratory Number:	12416	12416	12416
	6	7	8

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)		
OIL AND GREASE:	NA	NA	NA
TPH/GASOLINE RANGE:	1100	24000	ND<50
TPH/DIESEL RANGE:	NA	NA	NA
BENZENE:	50	4600	ND<0.5
TOLUENE:	ND<0.5	450	ND<0.5
ETHYL BENZENE:	40	1400	ND<0.5
XYLENES:	33	1600	ND<0.5



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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: 12416

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: 07/23/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 06/13/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	07/23/91	200ng	89/87	3.3	59-121
Benzene	06/13/91	200ng	82/82	0.0	70-125
Toluene	06/13/91	200ng	93/93	0.0	74-116
Ethyl Benzene	06/13/91	200ng	98/95	2.6	75-120
Total Xylene	06/13/91	600ng	104/100	3.1	75-119

Richard Srna, Ph.D.

Quynh A. Nguyen (for)
Laboratory Director

12416
Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No

Chain-of-Custody-Record

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

Chevron Facility Number 9-0260
Facility Address 21995 FOOTHILL BLVD, HAYWARD
Consultant Project Number 4-310-01
Consultant Name WEISS ASSOCIATES
Address 5500 SHELLMOUND ST, EMERYVILLE, CA
Project Contact (Name) MARLETTE SHIN
(Phone) 510-547-5429 Fax Number 510-547-5043

Chevron Contact (Name) WALT POSLUSZNY
(Phone) 510-842-9040
Laboratory Name SUPERIOR ANALYTICAL
Laboratory Release Number 2564320
Samples Collected by (Name) B. BUSCH, C. CHRISTENSEN
Collection Date 10.2.91
Signature Brian Bush

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)			
101-04		2	W	G	14:36	HCl	Yes	X										
101-05					14:41			X										
101-07					14:58			X										
101-12					13:33			X										
101-14					14:20			X										
101-15					14:55			X										
101-16					12:43			X										
101-21					08:16			X										

Relinquished By (Signature) <u>Brian Bush</u>	Organization <u>WEISS</u>	Date/Time <u>10/2/91 16:30</u>	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>M. Lopez</u>		Date/Time <u>10/2/91 4:30 PM</u>	

COC-3.DWG/03 91/HCH