

RECEIVED BY
HAZARDOUS MATERIALS OFFICE

SEP 02 1994



Chevron

HAYWARD FIRE DEPARTMENT

August 30, 1994

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

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

Marketing - Northwest Region
Phone 510 842 9500

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

Dear Mr. Arigala:

Enclosed is the quarterly Groundwater Monitoring and Sampling Activities report dated July 15, 1994, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. Currently, monitor wells MW-6, MW-9, MW-11, and MW-13 are sampled during the 1st and 3rd quarters and monitor wells MW-4, MW-5, MW-7, MW-8, and MW-12 are sampled during the 2nd and 4th quarters. Monitor well MW-10 is sampled during the first quarter only. Monitor wells MW-14, MW-15, MW-16, and MW-17 are sampled during all four quarters. Depth to water measurements are taken from all wells on a quarterly basis to maintain knowledge of ground water flow direction and gradient.

As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. The levels of dissolved hydrocarbon constituents in the ground water samples analyzed were consistent with previous observations at the site. Separate-phase hydrocarbons (SPH) were detected in monitor wells MW-5, MW-7, and MW-8 at measured thicknesses of 0.32, 0.30, and 0.03 feet.

Depth to ground water was measured at approximately 12.1 to 22.6 feet below grade and the direction of flow is to the southwest.

The ground water extraction system at this site has treated approximately 220,000 gallons of hydrocarbon impacted ground water to date. We are currently evaluating additional remediation options at this site. We currently anticipate formulating a cost-effective remedial approach by the end of 1994.

Chevron will continue to monitor and sample all wells at this site in accordance with the schedule outlined above. We are currently in the process of reassigning the quarterly monitoring and sampling activities to a consultant who can remove bailed product from the site. / ?

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Page 2
August 30, 1994
Chevron SS#9-0260

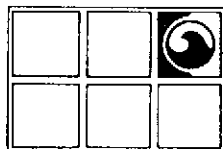
Enclosure

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

File: 9-0260 QM5

SEP 02 1994

HAYWARD FIRE DEPARTMENT



**GROUNDWATER
TECHNOLOGY, INC.**

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387

FAX: (415) 685-9148

July 15, 1994

Project No. 020104113

Mr. Mark Miller
Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583-0804

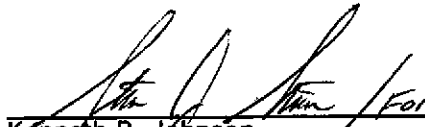
SUBJECT: *Groundwater Monitoring and Sampling Activities*
Chevron Service Station No. 9-0260
21995 Foothill Boulevard, Hayward, California

Dear Mr. Miller:

Groundwater Technology, Inc. presents the groundwater monitoring and sampling data collected on June 13, 1994. Twelve of the fourteen groundwater monitoring wells at this site were gauged to measure depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. Groundwater monitoring well MW-4 is a pumping well and was not monitored or sampled. A car was parked over monitoring well MW-15 and was not monitored or sampled. Separate-phase hydrocarbons were detected in monitoring wells MW-5, MW-7 and MW-8 at a product thickness of 0.32, 0.30 and 0.03 respectively. A potentiometric surface map and a summary of groundwater monitoring data are presented in Attachments 1 and 2, respectively. After the DTW was measured, monitoring wells MW-12, MW-14, MW-16, and MW-17 were purged and sampled. Groundwater monitoring and sample collection protocol, and field data sheets are presented in Attachment 3. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes, and for total petroleum hydrocarbons-as-gasoline. Results of the chemical analyses are summarized in Table 1. The laboratory report and chain-of-custody record are included in Attachment 4. Monitoring-well purge water was removed by Groundwater Technology and transported to the Chevron Terminal in Richmond, California, for recycling.

Groundwater Technology is pleased to assist Chevron on this project. If you have any questions or comments, please contact our Concord office at (510) 671-2387.

Sincerely,
Groundwater Technology, Inc.
Written/Submitted by


Kenneth P. Johnson
Project Manager

PR 

Attachment 1 Figure
Attachment 2 Table
Attachment 3 Protocol and Field Data Sheets
Attachment 4 Laboratory Report

For:
Wendell W. Lattz
Vice President, General Manager
West Region

ATTACHMENT 1

Figure

ATTACHMENT 2

Table



TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-4	02/05/88	88,000	24,000	19,000	1,700	10,000	---	---	---	---	---	---
	06/15/88	95,000	45,000	30,000	2,100	17,000	---	---	---	12.92	---	87.83
100.75	09/27/88 ^a	500,000	41,000	27,000	<5,000	16,000	<5,000	<5,000	---	14.22	---	86.53
(2nd and	09/27/88 ^b	88,000	1,200	4,100	1,600	12,000	270	230	---	---	---	---
4th	01/05/89	64,000	41,000	29,000	2,700	14,000	---	---	---	13.20	---	87.55
quarters)	04/06/89	---	---	---	---	---	---	---	---	12.32	---	88.43
	06/28/89	110,000	34,000	24,000	2,400	13,000	---	---	---	14.25	---	86.50
	10/03/89	240,000	36,000	31,000	3,200	19,000	---	---	---	14.75	---	86.00
	01/04/90	130,000	33,000	28,000	2,400	14,000	---	---	---	14.75	---	86.00
	04/03/90	110,000	41,000	32,000	2,900	17,000	---	---	---	13.81	---	86.94
	07/03/90	180,000	32,000	30,000	2,600	15,000	---	---	---	14.06	---	86.69
	11/06/90	170,000	31,000	30,000	2,700	17,000	---	---	---	15.66	---	85.09
	01/04/91	---	---	---	---	---	---	---	---	15.18	---	85.57
	04/03/91	130,000	21,000	24,000	2,300	14,000	---	---	---	11.00	---	89.75
	07/02/91	---	---	---	---	---	---	---	---	14.25	---	86.50
	10/02/91	240,000	27,000	33,000	2,600	16,000	---	---	---	16.16	---	84.59
	01/02/92	---	---	---	---	---	---	---	---	15.26	---	85.49
	04/07/92	---	---	---	---	---	---	---	---	12.38	---	88.37
	08/13/92	---	---	---	---	---	---	---	---	16.68	---	84.05
100.73	12/03/92	1,300,000	17,000	41,000	12,000	90,000	---	---	---	16.17	---	84.58
	03/25/93	---	---	---	---	---	---	---	---	10.50	---	90.23
	06/23/93	---	---	---	---	---	---	---	---	---	---	---
	09/21/93	---	---	---	---	---	---	---	---	---	---	---
	12/02/93	---	---	---	---	---	---	---	---	---	---	---
	03/08/94	---	---	---	---	---	---	---	---	---	---	---
	06/13/94	---	---	---	---	---	---	---	---	---	---	---

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-5	02/05/88	80,000	16,000	15,000	2,600	17,000	---	---	---	---	---	---
	06/15/88	77,000	42,000	38,000	2,500	16,000	---	---	---	12.30	---	87.67
99.97 (2nd and 4th quarters)	09/27/88 ^a	470,000	39,000	32,000	<5,000	16,000	<5,000	<5,000	---	13.25	---	86.72
	09/27/88 ^{ab}	48,000	1,800	3,500	1,600	10,000	410	420	---	---	---	---
	01/05/89	82,000	44,000	37,000	2,400	14,000	---	---	---	12.70	---	87.27
	04/06/89	---	---	---	---	---	---	---	---	12.22	---	87.75
	06/28/89	80,000	36,000	24,000	2,400	13,000	---	---	---	13.81	---	86.16
	10/03/89	240,000	40,000	35,000	2,600	15,000	---	---	---	14.27	---	85.70
	01/04/90	130,000	37,000	31,000	2,400	13,000	---	---	---	14.31	---	85.66
	04/03/90	120,000	41,000	33,000	2,500	14,000	---	---	---	13.50	---	86.47
	07/03/90	200,000	28,000	25,000	1,800	10,000	---	---	---	13.64	---	86.33
	11/06/90	370,000	38,000	36,000	4,700	31,000	---	---	---	15.14	---	84.83
	01/04/91	---	---	---	---	---	---	---	---	14.90	0.01	85.08
	04/03/91	140,000	36,000	32,000	2,700	17,000	---	---	---	11.56	---	88.41
	07/02/91	---	---	---	---	---	---	---	---	13.89	---	86.08
	10/02/91	230,000	34,000	31,000	2,700	16,000	---	---	---	15.26	---	84.71
	01/02/92	---	---	---	---	---	---	---	---	14.97	---	85.00
	04/07/92	220,000	35,000	30,000	2,500	14,000	---	---	---	13.44	---	86.53
	08/13/92	---	---	---	---	---	---	---	---	15.61	---	84.36
	12/03/92	---	---	---	---	---	---	---	---	16.29	<0.02 ^c	83.68
	03/25/93	---	---	---	---	---	---	---	---	10.97	---	89.00
	06/23/93	---	---	---	---	---	---	---	---	12.60	0.04	87.40
	09/21/93	---	---	---	---	---	---	---	---	14.00	0.03	85.99
	12/02/93	---	---	---	---	---	---	---	---	14.27	0.04	85.73
	03/08/94	---	---	---	---	---	---	---	---	12.16	0.00	87.81
	06/13/94	---	---	---	---	---	---	---	---	13.01	0.32	87.22

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-6 101.43 (1st and 3rd quarters)	02/05/88	53,000	5,100	4,400	2,100	14,000	---	---	---	---	---	---
	06/15/88	33,000	9,200	5,500	520	20,000	---	---	---	13.51	---	87.92
	09/27/88 ^a	17,000	2,200	2,800	1,700	5,100	130	< 10	---	14.56	---	86.87
	01/05/89	37,000	5,000	3,400	2,200	10,000	---	---	---	13.48	---	87.95
	04/06/89	---	---	---	---	---	---	---	---	12.60	---	88.83
	06/28/89	80,000	7,000	4,100	2,000	9,700	---	---	---	14.58	---	86.85
	10/03/89	110,000	8,500	5,100	2,600	14,000	---	---	---	13.03	---	88.40
	01/04/90	59,000	5,200	2,600	2,000	11,000	---	---	---	15.08	---	86.35
	04/03/90	31,000	6,600	2,600	2,200	12,000	---	---	---	14.06	---	87.37
	07/03/90	66,000	5,800	2,900	2,000	9,800	---	---	---	14.28	---	87.15
	11/06/90	---	---	---	---	---	---	---	---	16.10	---	85.33
	01/04/91	50,000	5,600	2,200	1,800	9,400	---	---	---	15.52	---	85.91
	04/03/91	---	---	---	---	---	---	---	---	11.03	---	90.40
	07/02/91	81,000	11,000	2,700	2,100	13,000	---	---	---	14.44	---	86.99
	10/02/91	---	---	---	---	---	---	---	---	16.22	---	85.21
	01/02/92	67,000	7,500	1,900	1,800	9,500	---	---	---	15.71	---	85.72
	04/07/92	---	---	---	---	---	---	---	---	13.47	---	87.96
	08/13/92	---	---	---	---	---	---	---	---	15.97	---	85.46
	12/03/92	---	---	---	---	---	---	---	---	16.62	---	< 84.81
	03/25/93	110,000	12,000	2,900	4,200	14,000	---	---	---	10.58	---	90.85
	06/23/93	---	---	---	---	---	---	---	---	13.01	0.00	88.42
	09/21/93	62,000	12,000	1,400	2,100	12,000	---	---	---	14.74	0.00	86.69
	12/02/93	---	---	---	---	---	---	---	---	14.87	0.00	86.56
	03/08/94	61,000	7,000	1,500	1,500	7,400	---	---	---	12.04	0.00	89.39
	06/13/94	---	---	---	---	---	---	---	---	13.37	0.00	88.06

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-7	02/05/88	81,000	34,000	36,000	2,400	16,000	---	---	---	---	---	---
	06/15/88	77,000	40,000	41,000	1,400	24,000	---	---	---	12.57	---	88.34
100.91 (2nd and 4th quarters)	09/27/88*	30,000	9,700	8,900	400	4,100	2,600	<10	---	13.60	---	87.31
	01/05/89	96,000	36,000	38,000	2,800	16,000	---	---	---	12.98	---	87.93
	04/06/89	---	---	---	---	---	---	---	---	12.34	---	88.57
	06/28/89	110,000	31,000	30,000	2,600	16,000	---	---	---	14.08	---	86.83
	10/03/89	230,000	34,000	34,000	2,400	15,000	---	---	---	14.53	---	86.38
	01/04/90	150,000	41,000	40,000	2,400	15,000	---	---	---	14.49	---	86.42
	04/03/90	100,000	31,000	28,000	2,100	16,000	---	---	---	13.66	---	87.25
	07/03/90	190,000	30,000	27,000	1,800	13,000	---	---	---	13.86	---	87.05
	11/06/90	160,000	27,000	25,000	1,900	15,000	---	---	---	15.58	---	85.33
	01/04/91	---	---	---	---	---	---	---	---	15.25	---	85.66
	04/03/91	240,000	40,000	36,000	2,400	18,000	---	---	---	11.41	---	89.50
	07/02/91	---	---	---	---	---	---	---	---	14.18	---	86.73
	10/02/91	220,000	26,000	27,000	2,500	18,000	---	---	---	15.78	---	85.13
	01/02/92	---	---	---	---	---	---	---	---	15.45	---	85.46
	04/07/92	260,000	27,000	26,000	2,400	15,000	---	---	---	13.48	---	87.43
	08/13/92	---	---	---	---	---	---	---	---	15.89	---	85.02
	12/03/92	330,000	29,000	31,000	3,300	18,000	---	---	---	16.43	---	84.48
	03/25/93	---	---	---	---	---	---	---	---	11.10	---	89.81
	06/23/93	---	---	---	---	---	---	---	---	13.63	1.06	88.13
	09/21/93	---	---	---	---	---	---	---	---	14.88	0.67	86.57
	12/02/93	---	---	---	---	---	---	---	---	14.74	0.19	86.32
	03/08/94	---	---	---	---	---	---	---	---	12.37	0.00	88.54
	06/13/94	---	---	---	---	---	---	---	---	13.12	0.30	88.03

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-8 99.67 (2nd and 4th quarters)	10/27/88	190,000	27,000	43,000	2,200	15,000	<500	<500	---	---	---	---
	01/05/89	87,000	24,000	39,000	3,000	15,000	---	---	---	12.02	---	87.65
	04/06/89	---	---	---	---	---	---	---	---	11.78	---	87.89
	06/28/89	120,000	22,000	35,000	2,900	16,000	---	---	---	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
	07/02/91	---	---	---	---	---	---	---	---	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
	06/23/93	---	---	---	---	---	---	---	---	12.27	0.25	87.60
	09/21/93	---	---	---	---	---	---	---	---	13.68	0.32	86.25
	12/02/93	---	---	---	---	---	---	---	---	14.00	0.24	85.86
	03/08/94	---	---	---	---	---	---	---	---	11.84	0.00	87.83
	06/13/94	---	---	---	---	---	---	---	---	12.11	0.03	87.58

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-9 101.15 (1st and 3rd quarters)	10/27/88	50,000	2,000	9,900	2,000	14,000	<500	<500	---	---	---	---
	01/05/89	55,000	670	8,900	3,400	16,000	---	---	---	12.63	---	88.52
	04/06/89	---	---	---	---	---	---	---	---	12.46	---	88.69
	06/28/89	100,000	510	4,500	2,600	13,000	---	---	---	14.04	---	87.11
	10/03/89	130,000	540	8,000	3,200	17,000	---	---	---	14.61	---	86.54
	01/04/90	83,000	600	4,600	2,600	14,000	---	---	---	14.69	---	86.56
	04/03/90	52,000	1,600	5,400	3,100	16,000	---	---	---	13.75	---	87.40
	07/03/90	100,000	520	5,400	3,200	16,000	---	---	---	13.84	---	87.31
	11/06/90	---	---	---	---	---	---	---	---	15.42	---	85.73
	01/04/91	59,000	1,100	5,600	2,500	13,000	---	---	---	15.37	---	85.78
	04/03/91	---	---	---	---	---	---	---	---	12.27	---	88.88
	07/02/91	130,000	1,900	7,600	3,600	20,000	---	---	---	14.17	---	86.98
	10/02/91	---	---	---	---	---	---	---	---	15.68	---	85.47
	01/02/92	100,000	3,300	8,200	2,800	14,000	---	---	---	15.65	---	85.50
	04/07/92	---	---	---	---	---	---	---	---	13.84	---	87.31
	08/13/92	45,000	1,300	3,000	1,500	7,100	---	---	---	15.50	---	85.65
	12/03/92	---	---	---	---	---	---	---	---	16.66	---	84.49
	03/25/93	220,000	540	3,200	2,100	18,000	---	---	---	11.48	---	89.67
	06/23/93	---	---	---	---	---	---	---	---	12.83	---	88.32
	09/21/93	54,000	1,900	3,400	1,700	9,100	---	---	---	14.31	0.00	86.84
	12/02/93	---	---	---	---	---	---	---	---	14.70	0.01	86.46
	03/08/94	49,000	800	780	390	3,600	---	---	---	12.63	0.00	88.52
	06/13/94	---	---	---	---	---	---	---	---	13.65	0.00	87.50

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-10 102.36 (1st quarter)	10/27/88 ^a	<500	26	13	<5	<5	<5	<5	---	---	---	---
	01/05/89	<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---	12.64	---	89.72
	04/06/89	---	---	---	---	---	---	---	---	11.38	---	90.98
	06/28/89	<500	<0.5	<0.5	<0.5	<0.5	---	---	---	13.64	---	88.72
	10/03/89	<500	<0.5	<0.5	<0.5	<0.5	---	---	---	13.85	---	88.51
	01/04/90	<50	0.5	1.1	<0.5	1.7	---	---	---	13.75	---	88.61
	04/03/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	12.86	---	89.50
	07/03/90	---	---	---	---	---	---	---	---	13.43	---	88.93
	11/06/90	---	---	---	---	---	---	---	---	14.82	---	87.54
	01/04/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	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
	01/02/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	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	<50	<0.5	<0.5	<0.5	<1.5	---	---	---	8.45	---	93.91
	06/23/93	---	---	---	---	---	---	---	---	11.60	0.00	91.03
	09/21/93	---	---	---	---	---	---	---	---	13.32	0.00	89.31
	12/02/93	---	---	---	---	---	---	---	---	13.27	0.00	89.36
	03/08/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	10.85	0.00	91.51
	06/13/94	---	---	---	---	---	---	---	---	---	---	---

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-11	06/28/89	60,000	36,000	13,000	2,500	12,000	---	---	d	14.33	---	85.64
	10/03/89	14,000	4,200	1,400	240	1,300	---	---	---	14.61	---	85.36
	01/04/90	82,000	33,000	11,000	2,000	10,000	---	---	---	14.55	---	85.42
	04/03/90	78,000	35,000	12,000	2,300	12,000	---	---	---	13.82	---	86.15
	07/03/90	140,000	32,000	12,000	2,100	10,000	---	---	---	14.00	---	85.97
	11/06/90	---	---	---	---	---	---	---	---	15.56	---	84.41
	01/04/91	---	---	---	---	---	---	---	---	14.88	0.30	---
	04/03/91	340,000	29,000	14,000	3,700	24,000	---	---	---	10.75	0.21	---
	07/02/91	130,000	27,000	14,000	2,200	12,000	---	---	---	13.97	0.02	---
	10/02/91	---	---	---	---	---	---	---	---	15.60	---	---
99.57	01/02/92	77,000	18,000	14,000	1,900	10,000	---	---	---	14.51	---	85.46
	04/07/92	---	---	---	---	---	---	---	---	13.13	---	86.84
	08/13/92	---	---	---	---	---	---	---	---	17.04	---	82.53
	12/03/92	---	---	---	---	---	---	---	---	15.59	---	83.98
	03/25/93	110,000	13,000	2,100	5,900	9,800	---	---	---	10.06	---	89.51
	06/23/93	---	---	---	---	---	---	---	---	---	---	---
	09/21/93	---	---	---	---	---	---	---	---	---	---	---
	12/02/93	---	---	---	---	---	---	---	---	---	---	---
	03/08/94	---	---	---	---	---	---	---	---	11.70	0.00	87.87
	06/13/94	---	---	---	---	---	---	---	---	12.16	0.00	87.41

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-12	06/28/89	55,000	30,000	21,000	2,900	19,000	---	---	d	14.10	---	85.54
	10/03/89	170,000	30,000	23,000	2,700	15,000	---	---	---	14.30	---	85.34
	01/04/90	110,000	24,000	19,000	2,300	12,000	---	---	---	14.35	---	85.29
	04/03/90	89,000	41,000	28,000	3,300	17,000	---	---	---	13.59	---	86.05
	07/03/90	170,000	27,000	20,000	2,200	12,000	---	---	---	13.77	---	85.87
	11/06/90	110,000	28,000	21,000	2,400	14,000	---	---	---	15.19	0.06	84.45
	01/04/91	---	---	---	---	---	---	---	---	14.52	---	---
	04/03/91	---	---	---	---	---	---	---	---	10.91	---	---
	04/09/91	170,000	39,000	17,000	2,400	14,000	---	---	---	---	---	---
	07/02/91	---	---	---	---	---	---	---	---	13.51	---	---
99.64 (2nd and 4th quarters)	10/02/91	170,000	27,000	15,000	2,600	17,000	---	---	---	14.93	---	---
	01/02/92	---	---	---	---	---	---	---	---	14.45	---	85.19
	04/07/92	---	---	---	---	---	---	---	---	13.05	---	86.59
	08/13/92	---	---	---	---	---	---	---	---	17.39	---	81.83
	12/03/92	2,400,000	19,000	21,000	14,000	110,000	---	---	---	15.34	---	83.88
	03/25/93	---	---	---	---	---	---	---	---	10.37	---	88.85
	06/23/93	110,000	30,000	19,000	2,000	12,000	---	---	---	12.21	0.00	87.01
	09/21/93	---	---	---	---	---	---	---	---	---	---	---
	12/02/93	---	---	---	---	---	---	---	---	---	---	---
	03/08/94	---	---	---	---	---	---	---	---	11.95	0.00	87.27
99.22	06/13/94	62,000	6,600	6,900	2,400	9,900	---	---	---	12.35	0.00	86.87

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-13 98.47 (1st and 3rd quarters)	06/28/89	54,000	12,000	10,000	1,900	15,000	---	---	d	13.22	---	85.25
	10/03/89	120,000	10,000	10,000	2,300	15,000	---	---	---	13.54	---	84.93
	01/04/90	87,000	6,800	10,000	2,000	12,000	---	---	---	13.64	---	84.83
	04/03/90	53,000	12,000	14,000	2,900	17,000	---	---	---	12.95	---	85.52
	07/03/90	90,000	8,400	11,000	2,000	11,000	---	---	---	13.05	---	85.42
	11/06/90	---	---	---	---	---	---	---	---	14.12	---	84.35
	01/04/91	72,000	5,500	12,000	2,300	12,000	---	---	---	14.05	---	84.42
	04/03/91	---	---	---	---	---	---	---	---	11.41	---	87.06
	07/02/91	120,000	12,000	13,000	2,500	14,000	---	---	---	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	84,000	7,400	11,000	2,600	13,000	---	---	---	14.26	---	84.21
	12/03/92	---	---	---	---	---	---	---	---	14.82	---	83.65
	03/25/93	97,000	5,200	2,500	7,200	12,000	---	---	---	10.73	---	87.74
	06/23/93	---	---	---	---	---	---	---	---	11.97	0.00	86.50
	09/21/93	80,000	7,600	9,000	2,900	14,000	---	---	---	13.08	0.00	85.39
	12/02/93	---	---	---	---	---	---	---	---	13.45	0.00	85.02
	03/08/94	78,000	5,300	7,600	2,600	10,000	---	---	---	11.75	0.00	86.72
	06/13/94	---	---	---	---	---	---	---	---	12.30	0.00	86.17

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-14 99.68 (All quarters)	08/29/90	970	4	2	0.7	2	1	---	---	21.39	---	78.29
	11/06/90	920	10	10	4	9	---	---	---	21.62	---	78.06
	01/04/91	1,000	<0.5	4.0	2.6	4.2	---	---	---	21.69	---	77.99
	04/03/91	1,200	380	6	7	18	---	---	---	19.53	---	80.15
	07/02/91	460	27	1.0	1.2	1.0	---	---	---	20.93	---	78.75
	10/02/91	480	6.7	0.8	1.4	1.8	---	---	---	21.52	---	78.16
	01/02/92	1,100	2.4	1.5	6.2	18	---	---	---	21.43	---	78.25
	04/07/92	290	<0.5	1.4	<0.5	1.2	---	---	---	21.36	---	78.32
	08/13/92	370	10	1.2	<0.5	0.9	---	---	---	21.07	---	78.61
	12/03/92	230	1.3	<0.5	<0.5	<0.5	---	---	---	21.67	---	78.01
	03/25/93	390	57	2.1	1.3	1.7	---	---	---	19.03	---	80.65
	06/23/93	4,400	460	220	16	62	---	---	---	19.94	0.00	79.74
	09/21/93	680	8.7	1.7	3.2	12	---	---	---	20.65	0.00	79.03
	12/02/93	900	0.8	7	3	7	---	---	---	21.05	0.00	78.63
	03/08/94	1,700	2.4	7.7	5.6	14	---	---	---	20.05	0.00	79.63
	06/13/94	750	0.8	8.0	3.2	5.7	---	---	---	20.21	0.00	79.47
MW-15 96.06 (All quarters)	08/29/90	2,000	26	2	72	110	<0.5	---	---	16.58	---	79.48
	11/06/90	1,300	40	5	45	63	---	---	---	17.43	---	78.63
	01/04/91	1,700	46	2.8	58	86	---	---	---	16.37	---	79.69
	04/03/91	2,100	74	0.8	44	85	---	---	---	12.46	---	83.60
	07/02/91	1,700	39	<0.5	35	46	---	---	---	16.53	---	79.53
	10/02/91	1,100	50	<0.5	40	33	---	---	---	17.33	---	78.73
	01/02/92	1,300	51	<0.5	30	30	---	---	---	16.46	---	79.60
	04/07/92	2,600	98	<5	64	36	---	---	---	14.70	---	81.36
	08/13/92	510	55	<0.5	35	2.8	---	---	---	16.72	---	79.34
	12/03/92	1,000	64	0.9	22	4.4	---	---	---	17.43	---	78.63
	03/25/93	1,300	86	52	0.7	7.7	---	---	---	13.33	---	82.73
	06/23/93	7,300	34	<0.5	85	160	---	---	---	15.23	0.00	80.83
	09/21/93	1,500	39	<0.5	32	33	---	---	---	16.32	0.00	79.74
	12/02/93	990	28	4	8	10	---	---	---	16.57	0.00	79.49
	03/08/94	3,400	44	4.0	28	53	---	---	---	14.61	0.00	81.45
	06/13/94	---	---	---	---	---	---	---	---	---	---	---

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
MW-16 98.15 (All quarters)	08/29/90	11,000	6,000	51	1,100	20	<0.5	---	---	20.89	---	77.26
	11/06/90	15,000	6,300	340	1,300	540	---	---	---	21.27	---	76.88
	01/04/91	16,000	6,800	820	1,300	1,500	---	---	---	21.63	---	76.52
	04/03/91	45,000	7,300	2,200	1,800	4,900	---	---	---	19.32	---	78.83
	07/02/91	30,000	6,400	530	1,500	1,800	---	---	---	20.68	---	77.47
	10/02/91	24,000	4,600	450	1,400	1,600	---	---	---	21.18	---	76.97
	01/02/92	20,000	4,700	240	1,200	1,100	---	---	---	21.30	---	76.85
	04/07/92	40,000	5,000	980	1,100	2,100	---	---	---	20.19	---	77.96
	08/13/92	17,000	4,500	240	860	530	---	---	---	20.77	---	77.38
	12/03/92	39,000	4,600	410	1,100	2,200	---	---	---	21.44	---	76.71
	03/25/93	39,000	5,500	1,400	690	2,000	---	---	---	18.83	---	79.32
	06/23/93	29,000	6,600	1,200	1,400	3,700	---	---	---	19.72	0.00	78.43
	09/21/93	36,000	6,300	340	1,200	1,800	---	---	---	20.38	0.00	77.77
	12/02/93	28,000	5,600	230	900	820	---	---	---	20.84	0.00	77.31
	03/08/94	35,000	6,500	760	1,000	1,300	---	---	---	20.27	0.00	77.88
	06/13/94	87,000	5,900	1,900	1,800	5,600	---	---	---	20.07	0.00	78.08
MW-17 106.00 (All quarters)	08/13/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	23.30	---	82.70
	12/03/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	24.74	---	81.26
	03/25/93	<50	<0.5	<0.5	<0.5	<1.5	---	---	---	22.14	---	83.86
	06/23/93	<50	<0.5	<0.5	<0.5	1	---	---	---	23.02	0.00	82.98
	09/21/93	<50	<0.5	<0.5	<0.5	<0.8	---	---	---	23.09	0.00	82.91
	12/02/93	---	---	---	---	---	---	---	---	23.37	0.00	82.63
	03/08/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	22.83	0.00	83.17
	06/13/94	<50	1.2	1.1	<0.5	0.9	---	---	---	22.62	0.00	83.38
P-1 86.43	08/13/92	---	---	---	---	---	---	---	---	10.02	---	76.41
	12/03/92	---	---	---	---	---	---	---	---	10.80	---	75.63
	03/25/93	---	---	---	---	---	---	---	---	8.95	---	77.48
	06/23/93	---	---	---	---	---	---	---	---	---	---	---
	09/21/93	---	---	---	---	---	---	---	---	---	---	---
	12/02/93	---	---	---	---	---	---	---	---	---	---	---
	03/08/94	---	---	---	---	---	---	---	---	---	---	---
	06/13/94	---	---	---	---	---	---	---	---	---	---	---

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

Well ID/ Elev	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	EDC	EDB	VOCs	DTW	SPT	GWE
Rinsate	01/05/89 03/08/94	<1,000 <50	<0.3 1	<0.3 1.4	<0.3 <0.5	<0.3 1.5	---	---	---	---	---	---
TBLB	01/05/89	<1,000	<0.3	<0.3	<0.3	<0.3	---	---	---	---	---	---
	10/03/89	<500	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	01/04/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	04/03/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	07/03/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	11/06/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	01/04/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	04/03/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	07/02/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	10/02/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	01/02/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	04/07/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	08/13/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	12/03/92	<50	<0.5	<0.5	<0.6	<0.5	---	---	---	---	---	---
	03/25/93	<50	<0.5	<0.5	<0.5	<1.5	---	---	---	---	---	---
	06/23/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	09/21/93	<50	<0.5	<0.5	<0.5	<0.8	---	---	---	---	---	---
	12/02/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---
	03/08/94	<50	0.6	0.8	<0.5	0.6	---	---	---	---	---	---
06/13/94	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---	

NOTES TO TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Chevron Service Station No. 9-0260 21995 Foothill Boulevard, Hayward, California

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	=	Estimated thickness
d	=	Not detected at detection limits ranging from 500 ppb to 2,000 ppb
e	=	Not detected at detection limits ranging from 0.5 ppb to 4.0 ppb
f	=	Chloroform detected. Detection limits ranging from 25 ppb to 500 ppb
TPH-G	=	Total petroleum hydrocarbons-as-gasoline
EDB	=	Ethylene dibromide
DTW	=	Depth to water
GWE	=	Groundwater elevation in feet above mean sea level
EDC	=	1,2-Dichloroethane
VOCs	=	Volatile Organic Compounds
SPT	=	Separate-phase hydrocarbon thickness
---	=	Not applicable, not sampled, not measured

Elevations are given as feet above mean sea level.

Concentrations shown in parts per billion.

Data from February 5, 1988, to December 3, 1992, taken from Weiss Associates report dated January 22, 1993.

ATTACHMENT 3

**Groundwater Monitoring and Sample Collection Protocol
and
Field Data Shets**

GROUNDWATER TECHNOLOGY GROUNDWATER MONITORING AND SAMPLE COLLECTION PROTOCOL

Groundwater Monitoring

Groundwater monitoring is accomplished using a INTERFACE PROBE™ Well Monitoring System. The INTERFACE PROBE™ Well Monitoring System is a hand held, battery operated device for measuring the depth to separate-phase hydrocarbons and depth to water. The INTERFACE PROBE™ Well Monitoring System consists of a dual-sensing probe which utilizes an optical liquid sensor and electrical conductivity to distinguish between water and petroleum products.

Monitoring is accomplished by measuring from the surveyed top of well casing or grade to groundwater and separate-phase hydrocarbons if present. The static water elevation is then calculated for each well and a potentiometric surface map is constructed. If separate-phase hydrocarbons are detected the water elevation is adjusted by the following calculation:

$$(\text{Product thickness}) \times (0.8) + (\text{Water elevation}) = \text{Corrected water elevation}$$

Groundwater monitoring wells are monitored in order of wells with lowest concentrations of volatile organic compounds to wells with the highest concentrations, based upon historical concentrations. If separate-phase hydrocarbons are encountered in a well, the product is visually inspected to confirm and note color, amount, and viscosity. Monitoring equipment is washed with laboratory grade detergent and rinsed with distilled or deionized water before monitoring each well.

Groundwater Sampling

Before groundwater samples are collected, sufficient water is purged from each well to ensure representative formation water is entering the well. Wells are purged and sampled in the same order as monitoring, from wells with the lowest concentrations of volatile organic compounds to wells with the highest concentrations. Wells are purged using either a polyvinyl chloride (PVC) bailer fitted with a check valve or with a stainless steel submersible Grundfos pump. The purge equipment is decontaminated before use in each well by washing with laboratory grade detergent and triple rinsing with deionized or distilled water. A minimum of 3 well-casing volumes of water are removed from each well while pH, electrical conductivity, and temperature are recorded to verify that "fresh" formation water is being sampled and the parameters have stabilized. If the well is low yielding, it may be purged dry and sampled before 3 casing volumes are purged. The wells are then allowed to recharge to approximately 80 percent of the initial water level before a sample is collected.

Groundwater samples are collected from each well using a new, prepackaged disposable bailer and string. The water sample is decanted from the bailer into laboratory-provided containers (appropriate for the analyses required) so that there is no headspace in the containers. Samples collected for benzene, toluene, ethylbenzene, xylene, and total petroleum hydrocarbons (TPH)-as-gasoline analyses are collected in 40-milliliter vials fitted with Teflon® septum lids. Samples are preserved with hydrochloric acid (HCL) to a pH of less than 2. Dissolved metals samples are filtered through a 0.45-micron paper filter in the field and preserved as required before submitting to the laboratory for analyses. All samples are labeled immediately upon collection and logged on the chain-of-custody record. Sample label and chain-of-custody recorded information includes the project name and number, sample identification, date and time of collection, analyses requested, and the sampler's name. Sample bottles are placed in plastic bags (to protect the bottles and labels) and on ice (frozen water) in an insulated cooler and are shipped under chain-of-custody protocol to the laboratory.

The chain-of-custody record documents who has possession of the samples until the analyses is performed. Other pertinent information is also noted for the laboratory use on the chain-of-custody record.

Trip blanks (TBLBs) are used for each project as a quality assurance/quality control measure. The TBLBs are prepared by the laboratory and are placed in the insulated cooler and accompany the field samples throughout the sampling event.

Project Name: Chevron - Foothill Blvd.

Date: 6-13-94

Site Address: 21995 Foothill Hayward

Page 1 of 6

Project Number: 020104113.0610

Project Manager: Tim Watchers

Well ID: MW-17

DTW Measurements:

Well Diameter: 2

Initial: 22.62

Calc Well Volume: _____ gal

Recharge: _____

Well Volume: _____ gal

Purge Method

Pump Depth _____ ft.

Instruments Used

Peristaltic _____

Hand Bailed _____

YSI: 4

Other: _____

Gear Drive _____

Air Lift _____

Hydac: _____

Submersible +

Other _____

Omega: _____

Time	Temp C F	Conductivity mS/cm	pH	Purge Volume Gallons	Turbidity	Comments
8:39	21.2	.84	7.17	0		brown murky water - silty
8:41	21.2	.85	7.15	2		
8:43	21.1	.84	7.15	4		
8:45	21.1	.84	7.15	6		
8:46	21.2	.84	7.16	8		

Project Name: Chevron - Foothill Blvd.

Date: 6-13-94

Site Address: 21995 Foothill Hayward

Page 2 of 6

Project Number: 020104113.0610

Project Manager: Tim Watchers

Well ID: MW-14

DTW Measurements:

Well Diameter: 2

Initial: 20.21

Calc Well Volume: 10 gal

Recharge: _____

Well Volume: _____ gal

Purge Method

Pump Depth _____ ft.

Instruments Used

Peristaltic _____

Hand Bailed _____

YSI: X

Other: _____

Gear Drive X

Air Lift _____

Hydac: _____

Submersible _____

Other _____

Omega: _____

Time	Temp <u>X</u> C F	Conductivity µS/cm	pH	Purge Volume Gallons	Turbidity	Comments
9:03	17.2	.91	6.71	0		dark brown water/slight odor
9:05	17.3	.72	6.76	2		
9:07	17.7	1.02	6.60	4		
9:09	17.6	1.03	6.57	8		
9:11	17.7	1.02	6.55	10		

Project Name: Chevron - Foothill Blvd.

Date: 6-13-08

Site Address: 21995 Foothill Hayward

Page 3 of 6

Project Number: 020104113.0610

Project Manager: Tim Watchers

Well ID: MW-16

DTW Measurements:

Well Diameter: 2

Initial: 2007

Calc Well Volume: 10 gal

Recharge: _____

Well Volume: _____ gal

Purge Method

Pump Depth _____ ft.

Instruments Used

Peristaltic _____

Hand Bailed _____

YSI: ✓

Other: _____

Gear Drive _____

Air Lift _____

Hydac: _____

Submersible ✓

Other _____

Omega: _____

Time	Temp C E	Conductivity uS/cm	pH	Purge Volume Gallons	Turbidity	Comments
9:52	19.7	1.14	6.55	0		murky l. gray w/ water w/ odor
9:54	19.7	1.11	6.56	2		
9:56	19.6	1.15	6.55	4		
9:58	19.6	1.15	6.56	8		
10:00	19.7	1.15	6.55	10		

Project Name: Chevron - Foothill Blvd.Date: 6-13-94Site Address: 21995 Foothill HaywardPage 4 of 6Project Number: 020104113.0610Project Manager: Tim WatchersWell ID: MW-9

DTW Measurements:

Initial: 13.65Calc Well Volume: 14 galWell Diameter: 4

Recharge: _____

Well Volume: _____ gal

Purge Method ✓ Pump Depth _____ ft.
Peristaltic _____ Hand Bailed _____
Gear Drive _____ Air Lift _____
Submersible ✓ Other _____

Instruments Used

YSI: ✓

Other: _____

Hydac: _____

Omega: _____

Time	Temp <u>✓</u> C F	Conductivity mS/cm	pH	Purge Volume Gallons	Turbidity	Comments
10:18	19.0	.68	6.62	0		dirty brown water w/odor
10:20	19.9	.68	6.55	4		
10:22	20.2	.68	6.55	8		
10:24	20.3	.68	6.56	12		
10:26	20.3	.69	6.55	14		
						Slight product
						layer during sample

Project Name: Chevron - Foothill Blvd.Date: 6-13-94Site Address: 21995 Foothill HaywardPage 5 of 6Project Number: 020104113.0610Project Manager: Tim WatchersWell ID: mw-~~5~~ mw-6

DTW Measurements:

Well Diameter: 4Initial: 12.13Calc Well Volume: 18 gal

Recharge: _____

Well Volume: _____ gal

Purge Method _____ Pump Depth _____ ft.
Peristaltic _____ Hand Bailed ☒
Gear Drive _____ Air Lift _____
Submersible ☒ Other _____

Instruments Used

YSI: 4

Other: _____

Hydac: _____

Omega: _____

Time	Temp <u>7</u> C F	Conductivity ms/cm	pH	Purge Volume Gallons	Turbidity	Comments
11:00	20.6	174	6.55	1100		Murky gray water w/odor
11:02	20.3	170	6.51	5		
11:05	20.1	171	6.49	10		
11:07	19.8	171	6.50	15		
11:09	19.8	171	6.51	20		

Project Name: Chevron - Foothill Blvd.

Date: 6-13-94

Site Address: 21995 Foothill Hayward

Page 6 of 6

Project Number: 020104113.0610

Project Manager: Tim Watchers

Well ID: MW-12

DTW Measurements:

Well Diameter: 4

Initial: 12.35 Calc Well Volume: 8 gal

Recharge: _____ Well Volume: _____ gal

Purge Method _____ Pump Depth _____ ft.
Peristaltic _____ Hand Bailed X
Gear Drive _____ Air Lift _____
Submersible _____ Other _____

Instruments Used

YSI: 7

Other: _____

Hydac: _____

Omega: _____

Time	Temp <u>Y</u> C F	Conductivity <u>MS/cm</u>	pH	Purge Volume Gallons	Turbidity	Comments
11:31	20.3	177	6.56	0		1. brown water w/odor
11:33	20.7	174	6.48	2		
11:35	20.9	175	6.40	4		
11:38	21.1	176	6.39	6		
11:40	21.2	176	6.39	8		

ATTACHMENT 4

Laboratory Report



ENVIRONMENTAL
LABORATORIES, INC.

Western Region

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

June 21, 1994

Tim Watchers
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

RE: GTEL Client ID:	020104113
Login Number:	C4060259
Project ID (number):	020104113
Project ID (name):	Chevron #9-0260, 21995 Foothill

Dear Tim Watchers:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 06/15/94.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the Department of Health Service under Certification Number E1075.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Rashmi Shah
Laboratory Director

GTEL Client ID: 020104113

ANALYTICAL RESULTS

Login Number: C4060259

Project ID (number): 020104113

Project ID (name): Chevron #9-0260, 21995 Foothill

Volatile Organics

Method: EPA 8020

Matrix: Aqueous

GTEL Sample Number	C4060259-01	C4060259-02	C4060259-03	C4060259-04
Client ID	TBLB	MW-17	MW-14	MW-16
Date Sampled	06/13/94	06/13/94	06/13/94	06/13/94
Date Analyzed	06/19/94	06/18/94	06/18/94	06/19/94
Dilution Factor	1.00	1.00	1.00	50.0

Analyte	Reporting		Concentration:			
	Limit	Units				
Benzene	0.5	ug/L	< 0.5	1.2	0.8	5900
Toluene	0.5	ug/L	< 0.5	1.1	8.0	1900
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	3.2	1800
Xylenes (total)	0.5	ug/L	< 0.5	0.9	5.7	5600
TPH as GAS	50.	ug/L	< 50.	< 50.	750	87000
BFB (Surrogate)	--	%	106.	101.	110.	116.

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste, Physical and Chemical Methods, SW-846", Third Edition, Revision 1, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 62-129%. Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap.

C4060259-03:

Uncategorized compound is not included in gasoline concentration.

C4060259-04:

Uncategorized compound is not included in gasoline concentration.

GTEL Client ID: 020104113
Login Number: C4060259
Project ID (number): 020104113
Project ID (name): Chevron #9-0260, 21995 Foothill

ANALYTICAL RESULTS

Volatile Organics
Method: EPA 8020
Matrix: Aqueous

GTEL Sample Number	C4060259-05	--	--	--
Client ID	MW-12	--	--	--
Date Sampled	06/13/94	--	--	--
Date Analyzed	06/21/94	--	--	--
Dilution Factor	100.	--	--	--

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.5	ug/L	6600	--	--	--
Toluene	0.5	ug/L	6900	--	--	--
Ethylbenzene	0.5	ug/L	2400	--	--	--
Xylenes (total)	0.5	ug/L	9900	--	--	--
TPH as GAS	50.	ug/L	62000	--	--	--
BFB (Surrogate)	--	%	98.6	--	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste. Physical and Chemical Methods. SW-846". Third Edition, Revision 1, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 62-129%. Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap.

GTEL Concord, CA
C4060259:2

GTEL Client ID: 020104113
Login Number: C4060259
Project ID (number): 020104113
Project ID (name): Chevron #9-0260, 21995 Foothill

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8020
Matrix: Aqueous

Method Blank Results

QC Batch No: M061894-1
Date Analyzed: 18-JUN-94

Analyte	Method: EPA 8020	Concentration: ug/L
Benzene	< 0.30	
Toluene	< 0.30	
Ethylbenzene	< 0.30	
Xylenes (Total)	< 0.50	
TPH as Gasoline	< 10	

Notes:

GTEL Client ID: 020104113
 Login Number: C4060259
 Project ID (number): 020104113
 Project ID (name): Chevron #9-0260, 21995 Foothill

QUALITY CONTROL RESULTS

Volatile Organics
 Method: EPA 8020
 Matrix: Aqueous

Matrix Spike and Matrix Spike Duplicate Results

Analyte	Original Concentration	Spike Amount	Matrix Spike	Matrix Spike	Matrix Spike Duplicate	Matrix Spike Duplicate	RPD, %	Acceptability Limits	
			Concentration	Recovery, %	Concentration	Recovery, %		RPD, %	Recovery, %
EPA 8020	GTEL Sample ID:C4060226-06		Spike ID:M061894-3		Dup. ID:M061894-4				
Units: ug/L	Analysis Date:15-JUN-94		18-JUN-94		19-JUN-94		Client ID:Batch QC		
Benzene	< 0.50	20.0	14.0	70.0	14.5	72.5	3.5	34	57.3-138%
Toluene	< 0.50 **	20.0	16.8	84.0	17.4	87.0	3.5	31	63-134%
Ethylbenzene	< 0.50	20.0	17.3	86.5	17.5	87.5	1.1	38	59.3-137%
Xylenes (Total)	< 0.50	60.0	56.1	92.7	57.9	95.7	3.1	31	59.3-144%

Notes:

** C4060226-06: Toluene: For data validation purposes an estimated concentration of 0.284, which is below the reporting limit, was used to calculate the spike recovery results.

Fax copy of Lab Report and COC to Chevron Contact:

☐ Yes
☐ No

Chain-of-Custody-Recd

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591Chevron Facility Number 9-0260
Facility Address 21995 Foothill
Consultant Project Number 020104113.0610
Consultant Name Groundwater Technology, Inc.
Address 4057 Port Chicago Hwy, Concord, CA. 94520
Project Contact (Name) Tim Watchers
(Phone) 510-671-2387 (Fax Number)Chevron Contact (Name) J. Zindall
(Phone) (510) 842-9591
Laboratory Name G+L
Laboratory Release Number 822-9262
Samples Collected by (Name) Clayton Gonzales
Collection Date 6-13-94
Signature Clayton Gonzales

Analysis To Be Performed

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Ice (Yes or No)	Analysis 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)				
TBLB	01	2	W	C		HCL	X	X											
MW-17	02	3			8:52														
MW-14	03	3			9:14														
MW-16	04	3			10:07														
MW-16		3			11:15														
MW-12	05	3			11:30														
MW-9		3			10:30														
		</																	

NOTE:
Do NOT BILL
TB-LB SAMPLE

50

Remarks

Relinquished By (Signature) <u>Clayton Gonzales</u>	Organization <u>G+L</u>	Date/Time <u>6-15-94</u>	Received By (Signature) <u>Joan Weber</u>	Organization <u>GTEC</u>	Date/Time <u>6-15-94</u>	Turn Around Time (Circle Choice) 24 hrs. 48 hrs. 5 Days 10 Days (As Contracted)
Relinquished By (Signature) <u>Joan Weber</u>	Organization <u>GTEC</u>	Date/Time <u>6-15-94</u>	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>Ruth Williams</u>	Organization <u>GTEC</u>	Date/Time <u>6-15-94 11:30</u>	