



Chevron

June 2, 1994

Chevron U.S.A. Products Company

2410 Camino Ramon
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Marketing Department
Phone 510 842 9500

Ms. Jennifer Eberle
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

**Re: Former Chevron Service Station #9-0020
1633 Harrison Street, Oakland, CA**

Dear Ms. Eberle:

Enclosed is the quarterly Groundwater Monitoring and Sampling Activities report dated April 15, 1994, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), and BTEX. Monitor well MW-4 was not accessible during this monitoring event due to a vehicle parked over the well. Monitor well MW-7 could not be sampled due to remediation equipment in the well. Per prior agreement between Chevron and Alameda County Health Care Services, monitor wells MW-5, MW-6, MW-8, MW-11, MW-12, and MW-14 were not sampled.

? ok per my
2-17-94
letter

Benzene was detected in monitor wells MW-9 and MW-13 at concentrations of 8 and 44 ppb, respectively. Depth to ground water was measured at approximately 20.0 feet to 21.2 feet below grade and the direction of flow is to the northeast.

We are currently evaluating the feasibility and cost-effectiveness of continued operation of the dewatering and soil vapor extraction remedial systems. We have asked our consultant to review all historical data gathered and develop a comprehensive site management plan to guide future activities at this site. We currently anticipate completing this plan during the 3rd quarter of 1994. Chevron will continue to monitor and sample all wells at this site on a quarterly basis.

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

Enclosure

cc: Mr. Rich Hiatt, RWQCB - Bay Area
Ms. Allison Watts, Weiss Associates
Ms. B.C. Owen

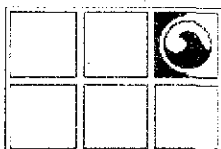
94 JUN -6 PM 4:47

HAZMAT
ALCO

The Oakland Housing Authority
Attn.: Mr. Harold Davis
1619 Harrison Street
Oakland, CA 94612

File: 9-0020 QM3

APR 28 '94 J.M.M.



GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

April 15, 1994

Project No. 020104081

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

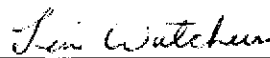
SUBJECT: *Groundwater Monitoring and Sampling Activities*
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Dear Mr. Miller:


Groundwater Technology, Inc. presents the quarterly groundwater monitoring and sampling data collected on March 10, 1994. Nine of the sixteen groundwater monitoring wells at this site were gauged to measure depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not detected in the monitoring wells. Monitoring wells MW-4 and MW-7 were not gauged or sampled because the wells were blocked by vehicles. Groundwater monitoring wells MW-5, MW-6, MW-8, MW-12, and MW-14 are suspended from the monitoring and sampling program as requested by Chevron. A potentiometric surface map and a summary of groundwater monitoring data are presented in Attachments 1 and 2, respectively. After the DTW was measured, the monitoring wells were purged and sampled except for MW-4 and MW-7. Field data sheets are presented in Attachment 3. The groundwater samples collected 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. Table 2 contains historical groundwater analytical results for halogenated volatile organics. Monitoring-well purge water was transported by Groundwater Technology 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



Tim Watchers
Project Manager

PR 

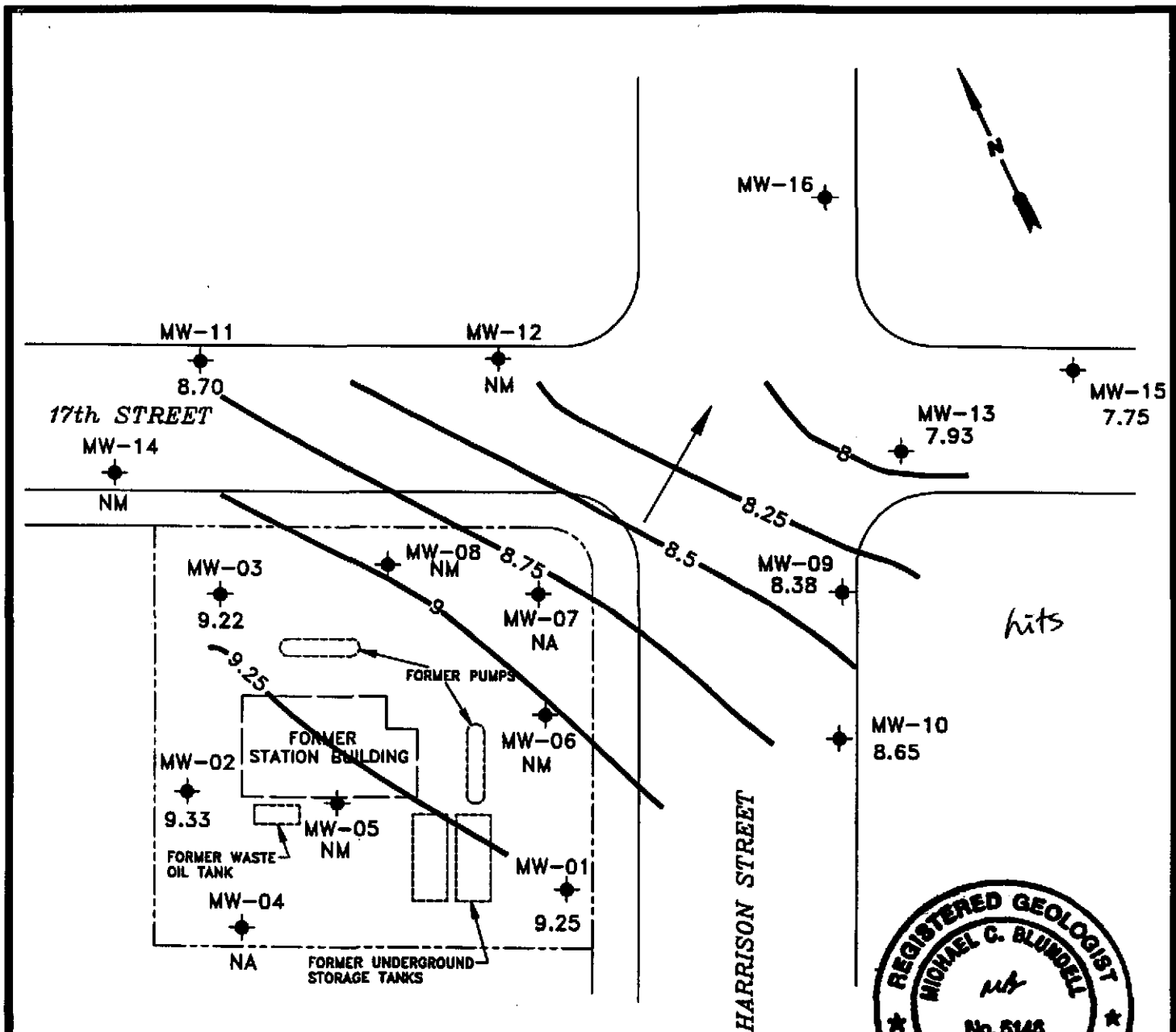
- Attachment 1 Figures
- Attachment 2 Tables
- Attachment 3 Field Data Sheets
- Attachment 4 Laboratory Report

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

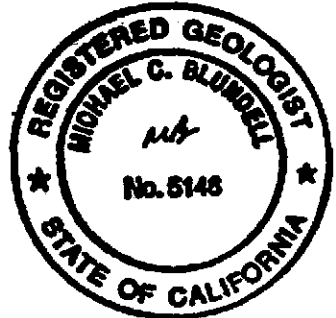
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ATTACHMENT 1

Figure



hits



LEGEND

- PROPERTY LINE
- MONITORING WELL
- NA NOT AVAILABLE
- NM NOT MONITORED PER CLIENT REQUEST
- X.XX POTENTIOMETRIC SURFACE ELEVATION (FT)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION

NOTE:
1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.



GROUNDWATER TECHNOLOGY



POTENTIOMETRIC SURFACE MAP (3/10/94)

CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0020	FILE: 4081PSM, (1:40)	PROJECT NO.: 02010-4081	PM <i>SAW</i>	PE/RG <i>MB</i>
	REV.	FIGURE: 1		
LOCATION: 1633 HARRISON STREET OAKLAND, CALIFORNIA	DES. TW	DET. SS	DATE: 4/5/94	

ATTACHMENT 2

Tables

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-1 29.82	11/03/88	<1,000 ¹	<1.0	<1.0	<1.0	<1.0	---	20.40	0.0	9.42
	02/02/89	---	---	---	---	---	---	20.71	0.0	9.11
	02/10/89	<100	<0.2	<0.2	<0.2	<0.4	---	---	---	---
	04/23/89	---	---	---	---	---	---	20.34	0.0	9.48
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	---	---	---
	07/28/89	<50	<0.1	<0.5	<0.2	<0.5	<3,000	20.58	0.0	9.24
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.52	0.0	9.30
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.77	0.0	9.05
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.95	0.0	8.87
	06/22/90	---	---	---	---	---	---	21.00	0.0	8.82
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.94	0.0	8.88
	11/13/90	<50	<0.5	<0.5	<0.5	<0.5	---	20.98	0.0	8.84
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.64	0.0	9.18
	08/27/91	110 ²	<0.5	<0.5	<0.5	<0.5	---	20.79	0.0	9.03
29.82	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.75	0.0	9.07
	02/20/92	<50	0.5	0.6	<0.5	0.9	---	20.90	0.0	8.92
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.64	0.0	9.18
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.84	0.0	8.98
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	19.91	0.0	9.91
	06/09/93	---	---	---	---	---	---	19.85	0.0	9.97
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.35	0.0	9.47
	12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.68	0.0	9.14
	03/10/94	<50	<0.5	<0.5	<0.5	<0.5	---	20.57	0.0	9.25

TABLE 1
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Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-2 30.59	11/03/88	<1,000 ¹	<1.0	<1.0	<1.0	<1.0	---	20.89	0.0	9.70
	02/02/89	---	---	---	---	---	---	21.21	0.0	9.38
	02/10/89	<100	<0.2	<0.2	<0.2	<0.4	---	---	---	---
	04/23/89	---	---	---	---	---	---	20.82	0.0	9.77
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	---	---	---
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	21.02	0.0	9.57
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.96	0.0	9.63
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.25	0.0	9.34
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.53	0.0	9.06
	06/22/92	---	---	---	---	---	---	21.57	0.0	9.02
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.55	0.0	9.04
	11/13/90	<50	<0.5	0.8	<0.5	0.9	---	21.54	0.0	9.05
	05/15/91	83 ²	<0.5	<0.5	<0.5	<0.5	---	21.15	0.0	9.44
30.56	08/27/91	97 ²	<0.5	<0.5	<0.5	<0.5	---	21.27	0.0	9.32
	11/15/91	<50	0.5	1.5	0.8	3.6	---	21.30	0.0	9.29
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.43	0.0	9.13
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.18	0.0	9.41
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.47	0.0	9.09
	04/07/93	66*	<0.5	<0.5	<0.5	<1.5	---	20.53	0.0	10.03
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.45	0.0	10.11
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	---	---	---	---	---	---	20.97	0.0	9.59
	12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	21.31	0.0	9.25
03/10/94	<50	<0.5	<0.5	<0.5	<0.5	---	21.23	0.0	9.33	

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Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-3 30.09	11/03/88	<1,000 ¹	<1.0	<1.0	<1.0	<1.0	---	20.54	0.0	9.55
	02/02/89	---	---	---	---	---	---	20.85	0.0	9.24
	02/10/89	<100	<0.2	<0.2	<0.2	<0.4	---	---	---	---
	04/23/89	---	---	---	---	---	---	20.43	0.0	9.66
	04/24/92	<50	<0.5	<1.0	<1.0	<1.0	<3,000	---	---	---
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	20.64	0.0	9.45
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.61	0.0	9.48
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.88	0.0	9.21
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.15	0.0	8.94
	06/22/90	---	---	---	---	---	---	21.20	0.0	8.89
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.18	0.0	8.91
	11/13/90	51 ²	<0.5	<0.5	<0.5	<0.5	---	21.15	0.0	8.94
	05/15/91	85 ²	<0.5	<0.5	<0.5	<0.5	---	20.91	0.0	9.18
30.08	08/27/91	91 ²	<0.5	<0.5	<0.5	<0.5	---	20.89	0.0	9.20
	11/15/91	<50	<0.5	0.7	<0.5	1.3	---	21.02	0.0	9.07
	02/02/92	<50	<0.5	<0.5	<0.5	0.9	---	21.07	0.0	9.02
	06/15/92	50 ²	<0.5	<0.5	<0.5	<0.5	---	20.82	0.0	9.27
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.07	0.0	9.07
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	20.13	0.0	9.95
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.05	0.0	10.03
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	09/27/93	---	---	---	---	---	---	20.58	0.0	9.50
	12/17/93	<50 ⁵	<0.5	<0.5	<0.5	<0.5	---	21.01	0.0	9.07
03/10/94	<50	<0.5	<0.5	<0.5	1.1	---	20.86	0.0	9.22	

TABLE 1
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Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-4	04/23/89	---	---	---	---	---	---	21.33	0.0	9.84
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	---	---	---
31.17	07/28/89	<50	<0.1	<0.5	<0.1	<0.2	<3,000	21.58	0.0	9.59
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	21.54	0.0	9.63
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.82	0.0	9.35
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	22.09	0.0	9.08
	06/22/90	---	---	---	---	---	---	22.12	0.0	9.05
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	22.11	0.0	9.06
	11/13/90	<50	<0.5	1	0.5	1	---	22.10	0.0	9.07
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	21.71	0.0	9.46
	08/27/91	<50	<0.5	<0.5	<0.5	<0.5	---	21.87	0.0	9.30
	11/15/91	97	<0.5	0.9	<0.5	1.9	---	21.80	0.0	9.37
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.99	0.0	9.18
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.74	0.0	9.43
31.17	12/16/92	<50	0.7	0.5	0.5	1.3	---	22.05	0.0	9.12
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	21.11	0.0	10.06
	06/09/93	---	---	---	---	---	---	---	---	---
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	<50	<0.5	<0.5	<0.5	<0.5	---	21.54	0.0	9.63
	12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	21.89	0.0	9.28
	03/10/94	---	---	---	---	---	---	---	---	---

TABLE 1
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Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-5	04/23/89	---	---	---	---	---	---	20.62	0.0	9.66
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3,000	---	0.0	---
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	20.86	0.0	9.42
30.28	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.82	0.0	9.46
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.07	0.0	9.21
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.35	0.0	8.93
	06/22/90	---	---	---	---	---	---	21.38	0.0	8.90
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.36	0.0	8.92
	11/13/90	<50	<0.5	1	<0.5	1	---	21.35	0.0	8.93
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	21.29	0.0	8.99
	08/27/91	94	3.0	5.0	1.5	5.5	---	21.11	0.0	9.17
	11/15/91	<50	0.9	1.7	<0.5	2.2	---	21.18	0.0	9.10
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.25	0.0	9.03
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.00	0.0	9.28
30.28	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.23	0.0	9.05
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	20.31	0.0	9.97
	06/09/93	---	---	---	---	---	---	---	---	---
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	---	---	---	---	---	---	20.76	0.0	9.52
	Suspended									

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-6	04/23/89	---	---	---	---	---	---	20.05	0.0	9.41
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3	---	---	---
29.46	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3	20.30	0.0	9.16
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.32	0.0	9.14
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.51	0.0	8.95
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.72	0.0	8.74
	06/22/90	---	---	---	---	---	---	20.77	0.0	8.69
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.74	0.0	8.72
	11/13/90	<50	3	5	0.5	2	---	20.75	0.0	8.71
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.61	0.0	8.85
	08/27/91	180	6.1	12	3.8	14	---	20.53	0.0	8.93
	11/15/91	<50	<0.5	0.6	<0.5	<0.5	---	20.53	0.0	8.93
	02/20/92	<50	0.9	1.1	<0.5	1.4	---	20.69	0.0	8.77
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.38	0.0	9.08
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.57	0.0	8.88
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	19.59	0.0	9.86
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	19.50	0.0	9.95
09/10/93	---	---	---	---	---	---	---	---	---	
09/27/93	---	---	---	---	---	---	20.07	0.0	9.38	
	Suspended									

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-7	04/23/89	---	---	---	---	---	---	18.99	0.0	10.02
	04/24/89	8,400 ³	100	260	160	1,300	3 ⁴	---	---	---
29.01	07/28/89	7,000 ³	230	90	70	440	<3,000	19.94	0.0	9.07
(D)	07/28/89	6,000 ³	280	180	58	430	---	---	---	---
	10/30/89	10,000 ³	570	55	160	400	---	19.97	0.0	9.04
(D)	10/30/89	9,900 ³	520	82	180	410	---	---	---	---
	01/09/90	3,400 ³	290	72	9	200	---	20.15	0.0	8.86
	04/18/90	6,800 ³	350	140	110	400	---	20.37	0.0	8.64
	06/22/90	---	---	---	---	---	---	20.40	0.0	8.61
	08/09/90	11,000 ³	360	130	14	660	---	20.38	0.0	8.63
	11/13/90	6,500	230	110	97	460	---	20.41	0.0	8.60
	05/15/91	4,600	180	55	46	300	---	20.47	0.0	8.54
	08/27/91	7,000	220	53	63	340	---	20.14	0.0	8.87
	11/15/91	3,300	150	19	4.9	200	---	20.22	0.0	8.79
	02/20/92	5,200	520	150	100	380	---	20.32	0.0	8.69
	06/15/92	10,000	760	430	320	1,100	---	19.98	0.0	9.03
29.01	12/16/92	11,000	810	350	280	1,100	---	20.14	0.0	8.87
	04/07/93	150	1.4	0.9	0.9	4.5	---	19.14	0.0	9.87
	06/09/93	180	4	1	1	3	---	19.05	0.0	9.96
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	---	---	---	---	---	---	---	---	---
	12/17/93	---	---	---	---	---	---	---	---	---
	03/10/94	---	---	---	---	---	---	---	---	---

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-8	04/23/89	---	---	---	---	---	---	20.14	0.0	9.43
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	3,000	---	---	---
29.57	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	---	---	---	---
	07/28/89	<100	<0.2	<1.0	<0.2	<0.4	<3,000	20.37	0.0	9.20
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	20.32	0.0	9.25
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.60	0.0	8.97
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.87	0.0	8.70
	08/22/90	---	---	---	---	---	---	20.34	0.0	9.23
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.89	0.0	8.68
	11/13/90	<50	<0.5	0.8	<0.5	2	---	20.86	0.0	8.71
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.49	0.0	9.08
	08/27/91	73 ^c	<0.5	<0.5	<0.5	<0.5	---	20.60	0.0	8.97
	11/15/91	<50	<0.5	0.7	<0.5	2.1	---	20.62	0.0	8.95
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.80	0.0	8.77
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.48	0.0	9.09
29.57	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.68	0.0	8.89
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	19.70	0.0	9.87
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	19.60	0.0	9.97
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	---	---	---	---	---	---	20.22	0.0	9.35
	Suspended	---	---	---	---	---	---	---	---	---

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-9 28.67 28.68	06/22/90	5,700 ^a	47	31	280	530	<1,000	20.80	0.0	7.87
	08/09/90	8,000 ^a	<0.3	17	210	480	---	20.74	0.0	7.93
	11/13/90	6,400	<3	20	240	450	---	20.78	0.0	7.89
	05/15/91	5,700	2	16	190	390	---	20.48	0.0	8.19
	08/27/91	6,700	<3	31	180	350	---	20.55	0.0	8.12
	11/15/91	4,000	8.8	26	150	280	---	20.57	0.0	8.10
	02/20/92	3,400	13	30	230	460	---	21.77	0.0	6.90
	06/15/92	4,500	19	72	280	560	---	20.37	0.0	8.30
	12/16/92	9,900	380	220	380	1,300	---	20.29	0.0	8.39
	04/07/93	8,700	51	150	360	1,000	---	19.32	0.0	9.36
	06/09/93	8,900	170	160	350	1,100	---	19.16	0.0	9.52
	09/10/93	4,600	110	63	190	350	---	---	---	---
	09/27/93	---	---	---	---	---	---	19.94	0.0	8.74
12/17/93	4,600	92	85	180	300	---	20.31	0.0	8.37	
03/10/94	3,300↓	8.0↓	29	120	170	---	20.30	0.0	8.38	
MW-10 28.60 28.62	06/22/90	<50 ^a	<0.5	<0.5	<0.5	<0.5	<1,000	20.48	0.0	8.12
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.45	0.0	8.15
	11/13/90	<50	<0.5	2	0.5	2	---	20.47	0.0	8.13
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.15	0.0	8.45
	08/27/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.27	0.0	8.33
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.33	0.0	8.27
	02/20/92	<50	2.0	2.2	<0.5	2.1	---	21.45	0.0	7.15
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	21.30	0.0	7.30
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.17	0.0	8.45
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	19.26	0.0	9.41
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	19.07	0.0	9.55
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	09/24/93	---	---	---	---	---	---	19.72	0.0	8.90
12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.07	0.0	8.55	
03/10/94	<50	<0.5	<0.5	<0.5	<0.5	---	19.97	0.0	8.65	

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-11 29.37 29.39	06/22/90	<50 ³	<0.5	<0.5	<0.5	<0.5	<1,000	21.03	0.0	8.34
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	21.02	0.0	8.35
	11/13/90	76	0.6	1	0.9	4	---	20.93	0.0	8.44
	05/15/91	78 ²	<0.5	<0.5	<0.5	<0.5	---	20.61	0.0	8.76
	08/27/91	110 ²	<0.5	<0.5	<0.5	<0.5	---	20.70	0.0	8.67
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.68	0.0	8.69
	02/20/92	<50	1.9	2.1	1.0	4.4	---	21.91	0.0	7.46
	06/15/92	---	---	---	---	---	---	20.56	0.0	8.81
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.75	0.0	8.64
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	19.83	0.0	9.56
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	19.67	0.0	9.72
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.33	0.0	9.06
	12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.73	0.0	8.66
03/10/94	---	---	---	---	---	---	20.69	0.0	8.70	
MW-12 28.43 28.43	06/22/90	<50 ³	<0.5	<0.5	<0.5	<0.5	<1,000	20.45	0.0	7.98
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	20.43	0.0	8.00
	11/13/90	<50	<0.5	<0.5	<0.5	<0.5	---	20.45	0.0	7.98
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.07	0.0	8.36
	08/27/91	56 ²	<0.5	<0.5	<0.5	<0.5	---	20.15	0.0	8.28
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.25	0.0	8.18
	02/20/92	<50	2.5	3.1	0.7	3.0	---	21.37	0.0	7.06
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	19.90	0.0	8.53
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	19.80	0.0	8.63
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	18.75	0.0	9.68
	06/09/93	---	---	---	---	---	---	---	---	---
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	---	---	---	---	---	---	19.63	0.0	8.80
	Suspended									

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-13 28.63 28.62	11/15/91	3,100	68	40	110	270	---	21.07	0.0	7.56
	02/20/92	3,100	120	50	240	400	---	22.17	0.0	6.46
	06/15/92	3,200	35	33	210	300	---	20.67	0.0	7.96
	12/16/92	87,000	1,400	540	2,400	11,000	---	20.34	0.0	8.28
	04/07/93	1,500	72	12	70	160	---	19.41	0.0	9.21
	06/09/93	210	6	2	7	16	---	19.20	0.0	9.42
	09/10/93	73	3	<0.5	2	3	---	---	---	---
	09/27/93	---	---	---	---	---	---	20.35	0.0	8.27
	12/17/93	640	43	12	12	37	---	20.76	0.0	7.86
	03/10/94	540	44	22	10	69	---	20.69	0.0	7.93
MW-14 29.46 29.45	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	20.33	0.0	9.13
	02/20/92	<50	1.3	1.8	1.1	5.2	---	21.41	0.0	8.05
	06/15/92	---	---	---	---	---	---	---	---	---
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	20.66	0.0	8.79
	04/07/93	---	---	---	---	---	---	---	---	---
	06/09/93	---	---	---	---	---	---	---	---	---
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	---	---	---	---	---	---	20.26	0.0	9.19
Suspended										
MW-15 28.04	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	19.74	0.0	8.30
	04/07/93	<50	1.3	<0.5	<0.5	<1.5	---	18.80	0.0	9.24
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	18.60	0.0	9.44
	09/10/93	---	---	---	---	---	---	---	---	---
	09/27/93	<50	2	<0.5	<0.5	<0.5	---	19.93	0.0	8.11
	12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	20.32	0.0	7.72
	03/10/94	<50	<0.5	<0.5	<0.5	<0.5	---	20.29	0.0	7.75

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-16 28.32	12/16/92	---	---	---	---	---	---	19.58	0.0	8.74
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/07/93	<50	<0.5	6.8	<0.5	<0.5	---	18.41	0.0	9.91
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	18.25	0.0	10.07
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	09/27/93	---	---	---	---	---	---	20.16	0.0	8.16
	12/17/93	---	---	---	---	---	---	---	---	---
	03/10/94	<50	<0.5	<0.5	<0.5	<0.5	---	20.55	0.0	7.77
Rinsate	12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	03/10/94	<50	<0.5	0.8	<0.5	0.6	---	---	---	---
TBLB	11/03/88	---	<1.0	<1.0	<1.0	<1.0	---	---	---	---
	02/10/89	<50	<0.1	<0.1	<0.1	<0.2	---	---	---	---
	04/24/89	<50	<0.5	<0.5	<1.0	<1.0	---	---	---	---
	07/28/89	<50	<0.1	<0.1	<0.1	<0.2	---	---	---	---
	10/30/89	<500	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	01/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	04/18/90	<50	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	06/22/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	---	---	---	---
	11/13/90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	05/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	08/27/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	11/15/91	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	02/20/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	06/15/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	12/16/92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	04/07/93	<50	<0.5	<0.5	<0.5	<1.5	---	---	---	---
	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	09/10/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
	09/27/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---
12/17/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	
03/10/94	<50	<0.5	<0.5	0.6	<0.5	0.6	---	---	---	

NOTES FOR TABLE 1
CHEVRON SERVICE STATION No. 9-6991
1633 HARRISON STREET, OAKLAND, CALIFORNIA

Concentrations in parts per billion.

All elevations are presented as feet above mean sea level.

TPH-G = Total petroleum hydrocarbons-as-gasoline

TOG = Total oil and grease

DTW = Depth to groundwater

SPT = Separate-phase hydrocarbon thickness

WTE = Water-table elevation

TB-LB = Trip blank/Lab blank

--- = Not applicable, not sampled, not measured

(D) = Duplicate analysis

* = Gasoline range concentration reported. The chromatogram indicates only a single peak in the gasoline range.

1 = Analyzed for total fuel hydrocarbons

2 = Laboratory reported that peaks did not match typical gasoline pattern.

3 = Fuel characterized as gasoline

4 = Acetone and 2-butanone were detected at 5 ppb and 160 ppb, respectively.

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID	Date	Carbon Tet	Chloro-form	PCE	TCE	1,2,-DCE	t-1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other* HVOCs
MW-1	11/03/88	18.0	7.0	<1.0	<1.0	---	<1.0	---	<1.0	<1.0	---	---	---
	02/10/89	17.0	6.0	<0.2	<0.2	---	<0.2	<0.2	<0.2	<0.2	---	---	---
	04/24/89	16.0	6.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	20.0	6.4	<0.1	<0.1	---	<0.1	<0.1	0.3	<0.1	---	---	---
	10/30/89	11.0	4.9	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	01/09/90	24.0	7.2	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	04/18/90	23.0	5.5	<0.5	<0.5	<0.5	---	---	1.4	<0.5	<0.5	<0.5	---
	08/09/90	32.0	11.0	0.7	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	24	7	60.7	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	15	5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	18	4.2	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	21	7.9	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	24	7.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	10	3.2	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-2	11/03/88	3.0	2.0	34.0	3.0	---	10.0	---	<1.0	<1.0	---	---	---
	02/10/89	1.4	1.0	17.2	<0.2	---	<0.2	6.3	<0.2	<0.2	---	---	---
	04/24/89	2.0	2.0	38.0	3.0	9.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	3.7	2.0	46.0	2.6	---	<0.2	<0.2	<0.2	<0.2	---	---	---
	10/30/89	1.4	2.6	53.0	1.1	14.0	---	---	<0.5	<0.5	---	---	---
	01/09/90	3.6	3.9	78.0	5.3	16.0	---	---	<0.5	<0.5	---	---	---
	04/18/90	1.5	2.7	130.0	3.9	19.0	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	2.1	2.1	74.0	6.1	15.0	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	<0.5	2	40	4	---	<0.5	10	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	2	2	56	6	---	<0.5	15	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	1.1	0.9	46	3.9	---	---	8.0	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	0.6	1.1	58	3.1	---	<0.5	6.3	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	11	<2.5	62	3.1	---	<2.5	4.3	<2.5	<2.5	<2.5	<2.5	ND
	06/15/92	<0.5	1.2	45	3.1	---	<0.5	4.8	<0.5	<0.5	<0.5	<0.5	ND

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID	Date	Carbon Tet	Chloroform	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other ^a HVOCs
MW-3	11/03/88	8.0	6.0	84.0	3.0	---	5.0	---	<1.0	<1.0	---	---	---
	02/10/89	5.8	4.0	53.0	1.9	---	<0.2	9.0	<0.2	<0.2	---	---	---
	04/24/89	7.0	6.0	110.0	3.0	11.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	8.6	5.0	49.0	2.1	---	<0.2	11.0	<0.2	<0.1	---	---	---
	10/30/89	5.6	5.3	62.0	0.7	8.2	---	---	<0.5	<0.5	---	---	---
	01/09/90	8.6	6.1	81.0	73.8	8.7	---	---	<0.5	<0.5	---	---	---
	04/18/90	7.6	5.8	120.0	2.4	11.0	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	11.0	6.7	81.0	5.1	11.0	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	7	5	43	4	---	<0.5	9	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	6	4	46	3	---	<0.5	8	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	5.5	3.8	43	2.6	---	---	8.1	<0.5	<0.5	<0.5	<0.5	c,d,e,f
	11/15/91	6.3	5.0	67	3.4	---	0.8	7.4	0.9	<0.5	<0.5	<0.5	ND
	02/20/92	2.8	4.0	96	3.0	---	<2.5	6.1	<2.5	<2.5	<2.5	<0.5	ND
	06/15/92	5.0	3.9	86	2.9	---	<0.5	7.5	<0.5	<0.5	<0.5	<0.5	ND
MW-4	04/24/89	35.0	11.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	32.0	9.3	<0.1	<0.1	---	<0.1	<0.1	<0.1	<0.1	---	---	---
	10/30/89	32.0	8.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	01/09/90	36.0	9.8	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	04/18/90	41.0	9.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	38.0	11.0	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	40	11	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	35	10	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	28	6.1	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	23	9.1	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	400	140	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
06/15/92	38	11	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND	

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID	Date	Carbon Tet	Chloroform	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other ^a HVOCs
MW-5	04/24/89	4.0	5.0	4.0	<1.0	2.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	5.6	4.0	5.3	0.3	---	0.2	2.3	0.5	<0.2	---	---	---
	10/30/89	2.9	2.0	2.7	<0.5	0.86	---	---	<0.5	<0.5	---	---	---
	01/09/90	8.2	4.6	7.8	0.6	3.1	---	---	<0.5	<0.5	---	---	---
	04/18/90	6.3	2.8	2.6	<0.5	1.7	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	11.0	4.8	6.0	<0.5	2.3	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	7	3	5	<0.5	---	<0.5	1	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	4	2	3	<0.5	---	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	3.3	1.1	2.3	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/15/91	5.7	2.8	5.5	<0.5	---	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	4.0	2.0	3.9	<0.5	---	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	4.0	2.0	5.0	<0.5	---	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	ND
MW-6	04/24/89	13.0	7.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	9.6	4.0	<0.2	<0.2	---	<0.2	<0.2	0.5	0.6	---	---	---
	10/30/89	8.2	3.6	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	01/09/90	10.0	4.2	<0.5	<0.5	<0.5	---	---	<0.5	1.8	---	---	---
	04/18/90	11.0	3.8	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	20.0	6.6	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	15	5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	11	4	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	8.0	2.2	2.4	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	13	5.4	<0.5	<0.5	---	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	ND
	02/20/92	11	4.0	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	9.6	4.2	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID	Date	Carbon Tet	Chloroform	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other ² HVOCs
MW-7	04/24/89	3.0	9.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	<2.0	<10.0	<2.0	<2.0	---	<2.0	<2.0	<10.0	6.0	---	---	---
	07/28/89 ^b	<5.0	<20.0	<5.0	<5.0	---	<5.0	<0.5	<5.0	<5.0	---	---	---
	10/30/89	<1.0	3.9	<1.0	<1.0	<1.0	---	---	<1.0	6.4	---	---	---
	10/30/89 ^b	<1.0	3.1	<1.0	<1.0	<1.0	---	---	<1.0	6.2	---	---	---
	01/09/90	<0.5	3.0	<0.5	<0.5	<0.5	---	---	<0.5	8.4	---	---	---
	04/18/90	<0.5	3.2	<0.5	<0.5	<0.5	---	---	<0.5	7.7	0.6	0.6	---
	08/09/90	3.3	7.7	<0.5	<0.5	<0.5	---	---	<0.5	8.4	<0.5	1.8	---
	11/13/90	0.6	3	<0.5	<0.5	---	<0.5	<0.5	<0.5	4	<0.5	<0.5	---
	05/15/91	2	2	<0.5	<0.5	---	<0.5	<0.5	<0.5	3	<0.5	<0.5	ND
	08/27/91	0.7	2.8	<0.5	<0.5	---	---	<0.5	<0.5	2.7	<0.5	<0.5	ND
	11/15/91	0.8	2.7	<0.5	<0.5	---	<0.5	<0.5	<0.5	3.1	<0.5	0.8	ND
	02/20/92	2.2	1.9	<0.5	<0.5	---	<0.5	<0.5	<0.5	3.3	<0.5	<0.5	ND
	06/15/92	1.1	1.8	<0.5	<0.5	---	<0.5	<0.5	<0.5	4.5	<0.5	<0.5	ND
MW-8	04/24/89	2.0	3.0	6.0	<1.0	4.0	---	---	<1.0	<1.0	---	---	---
	04/24/89 ^b	2.0	2.0	6.0	<1.0	3.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	2.3	2.0	5.6	<0.2	---	<0.2	3.8	<0.2	<0.2	---	---	---
	10/30/89	2.5	2.6	8.0	<0.5	5.5	---	---	<0.5	<0.5	---	---	---
	01/09/90	4.9	3.9	19.0	0.9	6.6	---	---	<0.5	<0.5	---	---	---
	04/18/90	3.8	2.8	17.0	0.6	5.7	---	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	5.3	4.4	27.0	1.2	9.2	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	3	2	21	0.7	---	<0.5	6	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	2	2	30	0.9	---	<0.5	6	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	1.4	1.1	32	1.0	---	---	4.7	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	1.5	1.9	50	<0.5	---	<0.5	5.8	<0.5	<0.5	2.0	<0.5	ND
	02/20/92	1.3	2.3	68	2.4	---	<0.5	7.6	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	0.7	1.9	46	1.6	---	<0.5	5.6	<0.5	---	<0.5	<0.5	ND

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID	Date	Carbon Tet	Chloroform	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other ^a HVOCs
MW-9	06/22/90	<0.5	<0.5	<0.5	<0.5	---	<0.5	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	0.71	<0.5	<0.5	---
	11/13/90	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	1	<0.5	<0.5	---
	05/15/91	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	ND
	08/27/91	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	ND
	02/20/92	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-10	06/22/90	9.6	8.9	<0.5	<0.5	---	<0.5	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	11.0	7.8	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	5	4	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	5	4	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	6.9	3.4	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	2.7	3.3	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	3.3	3.4	3.0	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	4.5	2.9	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-11	06/22/90	4.6	6.5	73	1.3	---	<0.5	8.9	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	8.1	6.8	84	2.0	4.6	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	<0.5	<0.5	39	<0.5	---	<0.5	2	5	<0.5	<0.5	<0.5	---
	05/15/91	1	3	7	0.5	---	<0.5	2	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	4.1	3.3	73	1.0	---	---	2.4	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	3.3	3.6	64	0.9	---	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	<2.5	<2.5	62	<2.5	---	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	ND
	06/15/92	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID	Date	Carbon Tet	Chloroform	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other ^a HVOCs
MW-12	06/22/90	6.0	7.3	7.4	<0.5	---	<0.5	13	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	8.0	7.0	6.7	<0.5	5.8	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	<0.5	<0.5	9	<0.5	---	<0.5	3	3	<0.5	<0.5	<0.5	---
	05/15/91	4	4	10	<0.5	---	<0.5	3	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	3.1	2.6	10	<0.5	---	---	2.3	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	1.9	3.5	8.9	<0.5	---	<0.5	5.9	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	3.3	3.4	3.7	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	2.2	3.7	13	<0.5	---	<0.5	4.5	<0.5	<0.5	<0.5	<0.5	ND
MW-13	11/15/91	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
MW-14	11/15/91	<0.5	5.5	33	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	02/20/92	<0.5	4.3	38	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	06/15/92	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS FOR HALOGENATED VOLATILE ORGANICS
Chevron Service Station No. 9-0020
1633 Harrison Street, Oakland, California

Well ID	Date	Carbon Tet	Chloroform	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other ^a HVOCs
Trip	11/03/88	<1.0	<1.0	<1.0	<1.0	---	<1.0	---	<1.0	<1.0	---	---	---
Blank	02/10/89	<0.1	<0.5	<0.1	<0.1	---	<0.1	<0.1	<0.1	<0.1	---	---	---
	04/24/89	<1.0	<1.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	07/28/89	<0.1	<0.5	<0.1	<0.5	<0.1	---	<0.1	<0.1	<0.1	---	---	---
	10/30/89	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	01/09/90	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	04/18/90	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/22/90	<0.5	<0.5	<0.5	<0.5	---	<0.5	---	<0.5	<0.5	<0.5	<0.5	---
	08/09/90	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	<0.5	0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/15/91	---	---	---	---	---	---	---	---	---	---	---	---
	08/27/91	---	---	---	---	---	---	---	---	---	---	---	---
	11/15/91	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	---	ND
	02/20/92	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	---	ND
	06/15/92	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND

Carbon Tet = Carbon Tetrachloride
PCE = Tetrachloroethene
TCE = Trichloroethene
1,2-DCE = 1,2-Dichloroethene
t-1,2-DCE = trans-1,2-Dichloroethene
c-1,2-DCE = cis-1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
1,2-DCA = 1,2-Dichloroethane
1,2-DCP = 1,2-Dichloropropane
MC = Methylene chloride (dichloromethane)

Other HVOCs = Other halogenated volatile organic compounds
--- = Not applicable, not analyzed, not sampled
ND = Not detected above method detection limit
a = The tabulated analytical results for ground water prior to May 15, 1991 do not specify whether other HVOCs were detected
b = Duplicate analyses
c = Trichlorofluoromethane was detected at 1.4 ppb
d = 1,1-Dichloroethene was detected at 1.3 ppb
e = 1,1-Dichloroethane was detected at 0.5 ppb
f = Chlorobenzene was detected at 0.7 ppb
g = 1,1-Dichloroethane was detected at 0.6 ppb

ATTACHMENT 3

Field Data Sheets

Project Name: Chevron - Harrison
 Site Address: 1633 Harrison st. Oakland
 Project Number: 020104081.0610

Date: 3/10/94
 Page 2 of 10
 Project Manager: Tim Watchers

Well ID: MW-3
 Well Diameter: 4

DTW Measurements:
 Initial: _____ Calc Well Volume: _____ gal
 Recharge: _____ Well Volume: 21 gal

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

Instruments Used
 YSI:
 Hydac: _____
 Omega: _____
 Other: _____

Time	Temp	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
	<input checked="" type="checkbox"/> C _____ F					
9:40	18.3	0.43	6.48	2		Cloudy, No odor ↓
9:46	18.6	0.43	6.53	6		
9:49	17.8	0.43	6.52	10		
9:53	17.9	0.42	6.50	15		
9:57	17.8	0.40	6.51	21		

Project Name: Chevron - Harrison
 Site Address: 1633 Harrison st. Oakland
 Project Number: 020104081.0610

Date: 3/10/94
 Page 3 of 10
 Project Manager: Tim Watchers

Well ID: MW-16
 Well Diameter: 2

DTW Measurements:
 Initial: _____ Calc Well Volume: _____ gal
 Recharge: _____ Well Volume: 3 gal

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

Instruments Used
 YSI: _____ Other: _____
 Hydac: _____
 Omega: _____

Time	Temp	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
	<input checked="" type="checkbox"/> C _____ F					
10:22	18.2	0.42 0.42	6.50	0		cloudy Brown, ^{WB} odor
10:23	18.5	0.52	6.57	1		↓
10:24	18.5	0.50	6.58	2		
10:25	18.3	0.52	6.56	3		

Project Name: Chevron - Harrison

Date: 3/10/94

Site Address: 1633 Harrison st. Oakland

Page 7 of 10

Project Number: 020104081.0610

Project Manager: Tim Watchers

Well ID: MW-13

DTW Measurements:

Well Diameter: 2

Initial: _____ Calc Well Volume: _____ gal

Recharge: _____ Well Volume: 4 gal

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

Instruments Used
 YSI: X _____ Other: _____
 Hydac: _____
 Omega: _____

Time	Temp <u>X</u> C F	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
10:48	19.0	0.80	6.28	0		cloudy, no odor
10:51	19.3	0.79	6.29	1		slight odor
10:55	19.1	0.79	6.31	2		↓
10:59	19.0	0.78	6.30	3		
11:03	19.0	0.78	6.30	4		

ATTACHMENT 4

Laboratory Report



Northwest Region

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

Client Number: 020104081
Consultant Project Number: 020104081.0610
Facility Number: 9-0020
Project ID: 1633 Harrison St.
Oakland
Work Order Number: C4-03-0234

March 21, 1994

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

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 03/11/94.

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 California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

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

Sincerely,
GTEL Environmental Laboratories, Inc.

A handwritten signature in cursive script, appearing to read 'Edun P. Shah' or similar, written over the printed name.

Rashmi Shah
Laboratory Director

Client Number: 020104081
 Consultant Project Number: 020104081.0610
 Facility Number: 9-0020
 Project ID: 1633 Harrison St.
 Oakland
 Work Order Number: C4-03-0234

ANALYTICAL RESULTS
Aromatic Volatile Organics and
Total Petroleum Hydrocarbons as Gasoline in Water
EPA Methods 5030, 8020, and Modified 8015^a

GTEL Sample Number		01	02	03	05
Client Identification		TB-LB	RBMW-1	MW1	MW3
Date Sampled		03/10/94	03/10/94	03/10/94	03/10/94
Date Analyzed		03/16/94	03/13/94	03/13/94	03/13/94
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	<0.5	<0.5
Toluene	0.5	0.6	0.8	<0.5	<0.5
Ethylbenzene	0.5	<0.5	<0.5	<0.5	<0.5
Xylene, total	0.5	0.6	0.6	<0.5	1.1
TPH as Gasoline	50	<50	<50	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		97.5	98.6	97.7	97.4

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020104081
 Consultant Project Number: 020104081.0610
 Facility Number: 9-0020
 Project ID: 1633 Harrison St.
 Oakland
 Work Order Number: C4-03-0234

ANALYTICAL RESULTS

Aromatic Volatile Organics and

Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015^a

GTEL Sample Number		07	09	11	13
Client Identification		MW16	MW15	MW10	MW2
Date Sampled		03/10/94	03/10/94	03/10/94	03/10/94
Date Analyzed		03/13/94	03/13/94	03/13/94	03/13/94
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	<0.5	<0.5
Toluene	0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	<0.5	<0.5	<0.5	<0.5
Xylene, total	0.5	<0.5	<0.5	<0.5	<0.5
TPH as Gasoline	50	<50	<50	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		97.0	101	99.7	101

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020104081
 Consultant Project Number: 020104081.0610
 Facility Number: 9-0020
 Project ID: 1633 Harrison St.
 Oakland
 Work Order Number: C4-03-0234

ANALYTICAL RESULTS
Aromatic Volatile Organics and
Total Petroleum Hydrocarbons as Gasoline in Water
EPA Methods 5030, 8020, and Modified 8015^a

GTEL Sample Number		15	17	G031394	
Client Identification		MW13	MW9	METHOD BLANK	
Date Sampled		03/10/94	03/10/94	-	
Date Analyzed		03/13/94	03/14/94	03/13/94	
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	44	8.0	<0.5	
Toluene	0.5	22	29	<0.5	
Ethylbenzene	0.5	10	120	<0.5	
Xylene, total	0.5	69	170	<0.5	
TPH as Gasoline	50	540	3300	<50	
Detection Limit Multiplier		1	1	1	
BFB surrogate, % recovery		86.7	93.4	93.0	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: 020104081
 Consultant Project Number: 020104081.0610
 Facility Number: 9-0020
 Project ID: 1633 Harrison St.
 Oakland
 Work Order Number: C4-03-0234

QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
Modified EPA 8020:							
Benzene	C4030197-01	20.0	ug/L	104	110	5.6	57.3 - 138
Toluene	C4030197-01	20.0	ug/L	113	118	4.3	63.0 - 134
Ethylbenzene	C4030197-01	20.0	ug/L	114	121	5.9	59.3 - 137
Xylene, total	C4030197-01	60.0	ug/L	125	128	2.3	59.3 - 144

