



**Chevron**

April 13, 1994

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

**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

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

Dear Ms. Eberle:

Enclosed is the Groundwater Monitoring and Sampling Activities report dated January 28, 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-16 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-12, and MW-14 were not sampled.

Benzene was detected in monitor wells MW-9 and MW-13 at concentrations of 92 and 43 ppb, respectively. Depth to ground water was measured at approximately 20 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. Chevron will continue to monitor and sample 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

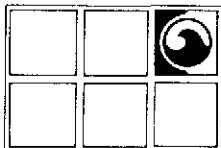
Enclosure

cc: Mr. Rich Hiett, RWQCB - Bay Area  
Ms. B.C. Owen

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

File: 9-0020 QM2

4 APR 15 PM 2:15  
HAZMAT  
ALCO



# GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

January 28, 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 attached quarterly groundwater monitoring and sampling data collected on December 17, 1993. 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 on December 17, 1993. Monitoring wells MW-5, MW-6, MW-8, MW-12, and MW-14 were not included in the monitoring and sampling programs as per the Alameda County Health Care Services Agency letter dated July 14, 1993. Separate-phase hydrocarbons were not detected in the monitoring wells. Monitoring well MW-7 was not gauged or sampled because of a pump in the well. Access to monitoring well MW-16 was blocked by a vehicle after gauging. A potentiometric surface map (Figure 1) and a summary of groundwater monitoring data collected (Table 1) are presented in Attachments 1 and 2, respectively. After the DTW was measured, monitoring wells MW-1, MW-2, MW-3, MW-4, MW-9, MW-10, MW-11, MW-13, and MW-15 were purged and sampled on December 17, 1993. Field data sheets are presented in Attachment 3. The groundwater samples collected were analyzed for benzene, toluene, ethylbenzene, and 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

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

Tim Watchers  
Tim Watchers  
Project Manager

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

PR maz

*Groundwater Monitoring and Sampling Activities*  
Chevron Service Station No. 9-0020, 1633 Harrison St., Oakland, CA

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January 28, 1994

**ATTACHMENT 1**

**Figure**

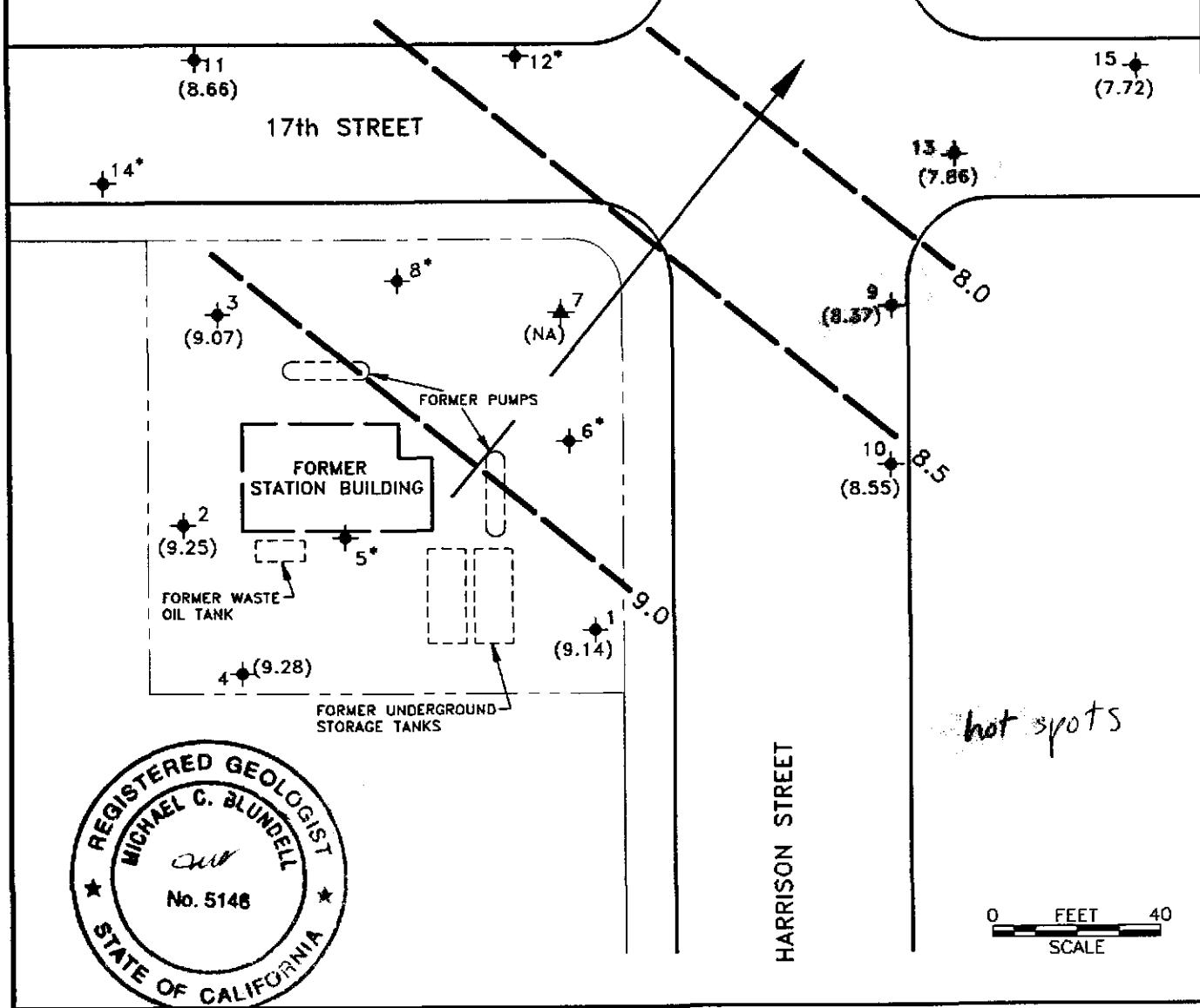
4081R014.010



GROUNDWATER  
TECHNOLOGY, INC.

## LEGEND

- ◆ MONITORING WELL
- ◆ EXTRATION WELL
- ( ) POTENIOMETRIC SURFACE ELEVATION
- POTENIOMETRIC SURFACE CONTOUR
- ESTIMATED GROUNDWATER FLOW DIRECTION
- (NA) NOT AVAILABLE
- SUSPENDED FROM THE MONITORING AND SAMPLING PROGRAM PER ACHCSA (7/14/93)



GROUNDWATER  
TECHNOLOGY

4057 PORT CHICAGO HWY.  
CONCORD, CA 94520  
(510) 671-2387

POTENIOMETRIC SURFACE MAP  
(12/17/93)

CLIENT:	LOCATION:	REV. NO.:	DATE:
CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-0020	1633 HARRISON STREET OAKLAND, CALIFORNIA	0	1/19/94
PM <i>[Signature]</i>	PE/RG <i>[Signature]</i>	DESIGNED TW	DETAILED CY
ACAD FILE: PSM194	PROJECT NO.: 020204084	FIGURE: 1	

*Groundwater Monitoring and Sampling Activities*  
**Chevron Service Station No. 9-0020, 1633 Harrison St., Oakland, CA**

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**January 28, 1994**

**ATTACHMENT 2**

**Tables**

4081R014,010



**GROUNDWATER  
TECHNOLOGY, INC.**

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

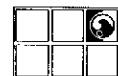
Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
MW-1	11/03/88	<1,000 <sup>1</sup>	<1.0	<1.0	<1.0	<1.0	--	20.40	0.0	9.42
	02/02/89	--	--	--	--	--	--	20.71	0.0	9.11
29.82	02/10/89	<100	<0.2	<0.2	<0.2	<0.4	--	--	--	--
	04/23/89	--	--	--	--	--	--	20.34	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 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	--	20.79	0.0	9.03
	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
29.82	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

**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-2 30.59	11/03/88	<1,000 <sup>1</sup>	<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 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	--	21.15	0.0	9.44
	08/27/91	97 <sup>2</sup>	<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
30.56	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

**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-3 30.09	11/03/88	<1,000 <sup>1</sup>	<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 <sup>2</sup>	<0.3	<0.3	<0.3	<0.6	—	21.18	0.0	8.91
	11/13/90	51 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	—	21.15	0.0	8.94
	05/15/91	85 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	—	20.91	0.0	9.18
	08/27/91	91 <sup>2</sup>	<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 <sup>2</sup>	<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 <sup>5</sup>	<0.5	<0.5	<0.5	<0.5	—	21.01	0.0	9.07



**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)
31.17	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	—	—	—
	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

**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-5 30.28	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
	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
	12/17/93	—	—	—	—	—	—	—	—	—

**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 29.46	04/23/89	--	--	--	--	--	--	20.05	0.0	9.41
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	<3	--	--	--
	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
29.45	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
	12/17/93	--	--	--	--	--	--	--	--	--

**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 <sup>3</sup>	100	260	160	1,300	3 <sup>4</sup>	—	—	—
29.01	07/28/89	7,000 <sup>3</sup>	230	90	70	440	<3,000	19.94	0.0	9.07
(D)	07/28/89	6,000 <sup>3</sup>	280	180	58	430	—	—	—	—
	10/30/89	10,000 <sup>3</sup>	570	55	160	400	—	19.97	0.0	9.04
(D)	10/30/89	9,900 <sup>3</sup>	520	82	180	410	—	—	—	—
	01/09/90	3,400 <sup>3</sup>	290	72	9	200	—	20.15	0.0	8.86
	04/18/90	6,800 <sup>3</sup>	350	140	110	400	—	20.37	0.0	8.64
	06/22/90	—	—	—	—	—	—	20.40	0.0	8.61
	08/09/90	11,000 <sup>3</sup>	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	—	—	—	—	—	—	—	—	—

*Remed. equipment in well.*



**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 29.57	04/23/89	—	—	—	—	—	—	20.14	0.0	9.43
	04/24/89	<50	<0.5	<1.0	<1.0	<1.0	3,000	—	—	—
	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
	06/22/90	—	—	—	—	—	—	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 <sup>2</sup>	<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
	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
	12/17/93	—	—	—	—	—	—	—	—	—

**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)
28.67	06/22/90	5,700 <sup>3</sup>	47	31	280	530	<1,000	20.80	0.0	7.87
	08/09/90	8,000 <sup>3</sup>	<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
28.68	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 <sup>5</sup>	4,600	92	65	180	300	--	20.31	0.0	8.37
28.60	06/22/90	<50 <sup>3</sup>	<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
28.62	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

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

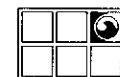
Well ID/ Elevation	Date	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	TOG	DTW (ft)	SPT (ft)	WTE (ft)
29.37	06/22/90	<50 <sup>3</sup>	<0.5	<0.5	<0.5	<0.5	<1,000	21.03	0.0	8.34
	08/09/90	<50	<0.3	<0.3	<0.3	<0.6	—	21.02	0.0	8.35
	11/13/90	76	0.6	1	0.9	4	—	20.93	0.0	8.44
	05/15/91	78 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	—	20.61	0.0	8.76
	08/27/91	110 <sup>2</sup>	<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
29.39	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
28.43	MW-12	<50 <sup>3</sup>	<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 <sup>2</sup>	<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
	12/17/93	—	—	—	—	—	—	—	—	—

**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
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
	12/17/93	--	--	--	--	--	--	--	--	--
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
	12/18/93	<50	<0.5	<0.5	<0.5	<0.5	--	20.32	0.0	7.72
	12/16/92	--	--	--	--	--	--	--	--	--
MW-16 28.32	12/21/92	<50	<0.5	<0.5	<0.5	<0.5	--	19.58	0.0	8.74
	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	--	--	--	--	--	--	--	--	--

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car parked over it.  
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GROUNDWATER  
TECHNOLOGY

**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	TG	DTW (ft)	SPT (ft)	WTE (ft)
TB/LB	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	—	—	—	—
RB	12/17/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—	—

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
RB	=	Rinsate 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.
5	=	Uncategorized compound is not included in the gasoline hydrocarbon concentration.

**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 <sup>a</sup> 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	<0.5
	05/15/91	15	5	<0.5	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	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	<0.5
	05/15/91	2	2	56	6	—	<0.5	15	<0.5	<0.5	<0.5	<0.5	<0.5
	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	<0.5
	02/20/92	11	<2.5	62	3.1	—	<2.5	4.3	<2.5	<2.5	<2.5	<2.5	<2.5
	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	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 <sup>a</sup> 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	--	--	--
	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 Tef	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 <sup>a</sup> 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	<0.5
	08/09/90	11.0	4.8	6.0	<0.5	2.3	--	--	<0.5	<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	<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	<0.5
	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	--
	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	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 <sup>a</sup> 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 <sup>b</sup>	<5.0	<20.0	<5.0	<5.0	--	<5.0	<0.5	<5.0	<5.0	--	--	--
	<1.0	3.9	<1.0	<1.0	<1.0	--	--	--	<1.0	6.4	--	--	--
	10/30/89	<1.0	3.1	<1.0	<1.0	<1.0	--	--	<1.0	6.2	--	--	--
	10/30/89 <sup>b</sup>	<0.5	3.0	<0.5	<0.5	<0.5	--	--	<0.5	8.4	--	--	--
	<0.5	3.2	<0.5	<0.5	<0.5	--	--	--	<0.5	7.7	0.6	0.6	--
	01/09/90	3.3	7.7	<0.5	<0.5	<0.5	--	--	<0.5	8.4	<0.5	1.8	--
	04/18/90	0.6	3	<0.5	<0.5	--	<0.5	<0.5	<0.5	4	<0.5	<0.5	--
	08/09/90	2	2	<0.5	<0.5	--	<0.5	<0.5	<0.5	3	<0.5	<0.5	ND
	11/13/90	0.7	2.8	<0.5	<0.5	--	--	--	<0.5	2.7	<0.5	<0.5	ND
	05/15/91	0.8	2.7	<0.5	<0.5	--	<0.5	<0.5	<0.5	3.1	<0.5	0.8	ND
	08/27/91	2.2	1.9	<0.5	<0.5	--	<0.5	<0.5	<0.5	3.3	<0.5	<0.5	ND
	11/15/91	1.1	1.8	<0.5	<0.5	--	<0.5	<0.5	<0.5	4.5	<0.5	<0.5	ND
	02/20/92												
	06/15/92												
MW-8	04/24/89	2.0	3.0	6.0	<1.0	4.0	--	--	<1.0	<1.0	--	--	--
	04/24/89 <sup>b</sup>	2.0	2.0	6.0	<1.0	3.0	--	--	<1.0	<1.0	--	--	--
	2.3	2.0	5.6	<0.2	--	<0.2	3.8	<0.2	<0.2	--	--	--	--
	07/28/89	2.5	2.6	8.0	<0.5	5.5	--	--	<0.5	<0.5	--	--	--
	10/30/89	4.9	3.9	19.0	0.9	6.6	--	--	<0.5	<0.5	--	--	--
	01/09/90	3.8	2.8	17.0	0.6	5.7	--	--	<0.5	<0.5	<0.5	<0.5	--
	04/18/90	5.3	4.4	27.0	1.2	9.2	--	--	<0.5	<0.5	<0.5	<0.5	--
	08/09/90	3	2	21	0.7	--	<0.5	6	<0.5	<0.5	<0.5	<0.5	--
	11/13/90	2	2	30	0.9	--	<0.5	6	<0.5	<0.5	<0.5	<0.5	ND
	05/15/91	1.4	1.1	32	1.0	--	--	4.7	<0.5	<0.5	<0.5	<0.5	ND
	08/27/91	1.5	1.9	50	<0.5	--	<0.5	5.8	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	1.3	2.3	68	2.4	--	<0.5	7.6	<0.5	<0.5	2.0	<0.5	ND
	02/20/92	0.7	1.9	46	1.6	--	<0.5	5.6	<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.	Chloro-form	PCE	TCE	1,2-DCE	1,1,2-DCE	c-1,2-DCE	1,1,1-TCA	1,2-DCA	1,2-DCP	MC	Other <sup>a</sup> 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 <sup>a</sup> 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	g
	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	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 <sup>a</sup> HVOCS
Trip Blank	11/03/88	<1.0	<1.0	<1.0	<1.0	--	<1.0	--	<1.0	<1.0	--	--	--
	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	<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

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

*Groundwater Monitoring and Sampling Activities*  
Chevron Service Station No. 9-0020, 1633 Harrison St., Oakland, CA

January 28, 1994

**ATTACHMENT 3**

**Field Data Sheets**

4081R014.010





Project Name: Chvr. Harrison

Date: 12-16-93

Project Number: 020204081.0610

Page 1 of 1

**Site Address:** 1633 Harrison Oakland

Project Manager: Jim Watchers

Jason D. Stinar

Well ID: m4

m w - 2

Well Dia

40

28.20

## DTW Measurements

Initial 121.31 ft<sup>3</sup> Calc Well Volume

349

Reheat ft. Well Volume =

1374-1ga

6.89 x .653

### **Instruments Used**

YSI 3650 pH/C/mmbo, OMEGA Cond:

**HYDAC pH/F/umbo DRT-15C TURBID**

OMEGA pH/C Other

Purged Method	Pump Depth	ft.
Peristaltic	Hand Bailed	
Gear Drive	Air Lift	
<input checked="" type="checkbox"/> Submersible	Other	

Pumpkin @ 1242

G-Pm@1.2

Dump Set @ 2650

Project Name: Chu Harrison

Date: 12-16-93

Project Number: 020204081.0610

Page 1 of 1

**Site Address:** 1633 Harrison Oakland

Project Manager: Tom Watchers

Jason D Stinar

Well ID mw-3

Well Dia 4.0"

DTW Measurements  
Initial 21.01 ft Calc Well Volume = 21.15 gal  
Recha 10.80 ft Well Volume = 7.05 gal  
 $10.80 \times 2.653$

Purged Method	Pump Depth	
Peristaltic		Hand Bailed
Gear Drive		Air Lift
<input checked="" type="checkbox"/> Submersible		Other

Instruments Used  
YSI 3650 pH/C/mmbo OMEGA Cond:  
HYDAC pH/F/umbo DRT-15C TURBID  
OMEGA pH/C Other

Pump on @ 1148

GPM @ 2.3

Pump set @ 30.00

Project Name: Chv. Harrison

Project Number: 020204081.0610

**Site Address:** 1633 Harrison Oakland

Date: 12-16-93

Page 1 of 1

Project Manager: Tim Watchers

Well ID Mu-4

Well Dia 4.0"

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

## DTW Measurements

Initial 21.89 ft Calc Well Volume = 22.6 gal  
Recha ft Well Volume = 7.52 gal  
 $11.51 \times 653$

11.51 x .653

### **Instruments Used**

YSI 3650 pH/C/mmbo OMEGA Cond.  
HYDAC pH/F/umbo DRT-15C TURBID  
OMEGA pH/C Other

Jason S. Stine

Project Name: Chvr Harrison

Date: 12-16-93

Project Number: 020204081.0610

Page 1 of 5

Site Address: 1633 Harrison Oakland

Project Manager: Jim Watchers

Wall ID

mu-7

## DTW Measurements

Initiat

#### Well Volume =

Well Dia

4.0"

Recha

Volume 2

local

gal

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

Instruments Used  
YSI 3650 pH/C/mmbo OMEGA Cond:  
HYDAC pH/F/umbo DRT-15C TURBID  
OMEGA pH/C Other

**Project Name:** Chv. Harrison

Project Number: 020204081.0610

**Site Address:** 1633 Harrison Oakland  
Clayton G.

Date: 12-16-93

Page \_\_\_\_\_ of \_\_\_\_\_

Project Manager: Jim Watchers

Well ID mw 9

## DTW Measurements

Initial 20.3 ft<sup>3</sup> Calc Well Volume -

• 10 •

Well Dia

24.2°

**Recharge** \_\_\_\_\_ ft      **Well Volume** \_\_\_\_\_

3861143

03 gal

Purged Method	Pump Depth	
Peristaltic	X	Hand Bailed
Gear Drive		Air Lift
Submersible		Other

Instruments Used  
✓ YSI 3650 pH/C/mmho OMEGA Sond:  
HYDAC pH/F/mmho DRT-15C TURBID  
OMEGA pH/C Other:

Project Name: Chv. Harrison

Project Number: 020204081.0610

**Site Address:** 1633 Harrison Oakland

Clayton G.

Well ID MW-10

Well Dia 2

Purged Method	Pump Depth	23.40
Peristaltic	X	ft
Gear Drive	Hand Bailed	
Submersible	Air Lift	
	Other	

## **DTW Measurements**

Initial 20.0 ft Calc Well Volume =

### Recharge Well Volume

3.33 x .163

### Instruments Used

YSI 3650 pH/C/mmbo OMEGA Cond;  
HYDAC pH/F/mmbo DRT-15C TURBID  
OMEGA pH/C Other

Project Name: Chv. Harrison

Project Number: 020204081.0610

**Site Address:** 1633 Harrison Oakland

Clayton Gonzales

Well ID MW-11

Well Dia 2.0"

## DTW Measurements

Initial 20.73 ft Calc Well Volume =

Recha  ft Well Volume

230

~~147-4 gal~~

Purged Method	Pump Depth	
Peristaltic	<input checked="" type="checkbox"/>	Hand Bailed
Gear Drive	<input type="checkbox"/>	Air Lift
Submersible	<input type="checkbox"/>	Other

4.57 x .163

### **Instruments Used**

✓ Instruments USB

Chap. 11

Second:  
G. TUBB

Instruments Used  
✓ YSI 3650 pH/C/mmho OMEGA Cond:  
HYDAC pH F/umho DRT-15C TURBID  
OMEGA pH C Other

Project Name: Chv. Harrison  
 Project Number: 020204081.0610  
 Site Address: 1633 Harrison Oakland

Date: 12-16-93  
 Page 1 of 1  
 Project Manager: Tim Watchers

Well ID MW-13

Well Dia 2.0" 27.90'

Purged Method	Pump Depth	ft
Peristaltic	✓ Hand Bailed	
Gear Drive	Air Lift	
Submersible	Other	

#### DTW Measurements

Initial 20.76 ft Calc Well Volume 3.49 gal  
 Recha ft Well Volume 1.16 gal

7.14 x .163

Instruments Used	
YSI 3650 pH/C/mmb	OMEGA Cond.
HYDAC pH/F/umbo	DRT-15C TURBID
OMEGA pH/C	Other

TIME	TEMP C F	Conductivity	pH	PURGE VOLUME gallons	TURBIDITY	COMMENTS
1335	17.8 63.6	7.16	7.75	1.5	N/A	Gray ODOR
1337	18.6	731	7.73	2.5	N/A	Gray, Darker ODOR
1343	17.3	740	7.74	3.5	N/A	Gray/Darker ODOR

Project Name: Chv. Harrison

Project Number: 020204081.0610

**Site Address:** 1633 Harrison Oakland

Date: 12-16-93

Page 1 of 1

Project Manager: Jim Watchers

Well ID: miw-16

Well Dia

## DTW Measurements

Initial \_\_\_\_\_ ft Calc Well Volume \_\_\_\_\_

Recha        ft Well Volume

equal

gal

Purged Method	Pump Depth	
Peristaltic		Hand Bailed
Gear Drive		Air Lift
Submersible		Other

Instruments Used  
✓ YSI 3650 pH/C/mmbo OMEGA Cond:  
HYDAC pH/F/mmbo DRT-15C TURBID  
OMEGA pH/C Other

Car Parked over well

Project Name: Chvr-Harrison

Project Number: 020204081.0610

**Site Address:** 1633 Harrison Oakland  
Clayton G.

Date: 12-16-93

Page \_\_\_\_\_ of \_\_\_\_\_

Project Manager: Jim Watchers

Well ID 11W-15

Well Dia 20"

26.29

2628

## Purged Method

## Peristaltic

## **Gear Drive**

### Submersible

#### **Pump Depth**

Hand Ball

## Hand Balled

-Arth-

Other

### DTW Measurements

Initial 20:32 ft Calc Well Volume

### **Recharge**

$$5.70 \times 16.3 = 92$$

### **Instruments Used**

YSI 3650 pH/C/mmbd - OMEGA Cond:

HYDAC pH F/umbo DRT-15C TURBID

OMEGA pH/C

*Groundwater Monitoring and Sampling Activities*  
Chevron Service Station No. 9-0020, 1633 Harrison St., Oakland, CA

January 28, 1994

**ATTACHMENT 4**

**Laboratory Report**

4081R014.010



GROUNDWATER  
TECHNOLOGY, INC.



Client Number: 020204084  
Consultant Project Number: 020204084  
Facility Number: 9-0020  
Project ID: 1633 Harrison Street  
Oakland  
Work Order Number: C3-12-0349

**Northwest Region**

4080-C Pike Lane  
Concord, CA 94520  
(510) 685-7852  
(800) 544-3422 *from inside California*  
(800) 423-7143 *from outside California*  
(510) 825-0720 (FAX)

January 5, 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 12/20/93.

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.

*Bill Smrda*  
*for*  
Rashmi Shah  
Laboratory Director

Client Number: 020204084  
 Consultant Project Number: 020204084  
 Facility Number: 9-0020  
 Project ID: 1633 Harrison Street  
 Oakland  
 Work Order Number: C3-12-0349

**Table 1**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
Total Petroleum Hydrocarbons as Gasoline in Water**

**EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>**

GTEL Sample Number	01	02	03	05
Client Identification	TBLB	RBMW4	MW4	MW1
Date Sampled	12/17/93	12/17/93	12/17/93	12/17/93
Date Analyzed	12/29/93	12/29/93	12/29/93	12/29/93
Analyte	Detection Limit, ug/L	Concentration, ug/L		
Benzene	0.5	<0.5	<0.5	<0.5
Toluene	0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5	<0.5	<0.5	<0.5
Xylene, total	0.5	<0.5	<0.5	<0.5
TPH as Gasoline	50	<50	<50	<50
Detection Limit Multiplier		1	1	1
BFB surrogate, % recovery		99.3	98.3	98.6
				98.4

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 Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.

Client Number: 020204084  
 Consultant Project Number: 020204084  
 Facility Number: 9-0020  
 Project ID: 1633 Harrison Street  
 Oakland  
 Work Order Number: C3-12-0349

### Table 1 (Continued)

#### ANALYTICAL RESULTS

#### Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		07 <sup>b</sup>	09 <sup>b</sup>	11	13
Client Identification		MW3	MW11	MW15	MW10
Date Sampled		12/17/93	12/17/93	12/17/93	12/17/93
Date Analyzed		12/29/93	12/29/93	12/29/93	12/29/93
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		98.0	98.4	98.9	99.2

- 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 Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.
- b. Uncategorized compound is not included in the gasoline hydrocarbon concentration.

Client Number: 020204084  
 Consultant Project Number: 020204084  
 Facility Number: 9-0020  
 Project ID: 1633 Harrison Street  
 Oakland  
 Work Order Number: C3-12-0349

**Table 1 (Continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
Total Petroleum Hydrocarbons as Gasoline in Water**

EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		15	17	19	Q122893
Client Identification		MW2	MW13	MW9	METHOD BLANK
Date Sampled		12/17/93	12/17/93	12/17/93	--
Date Analyzed		12/29/93	12/29/93	12/29/93	12/28/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	43	92	<0.5
Toluene	0.5	<0.5	12	85	<0.5
Ethylbenzene	0.5	<0.5	12	180	<0.5
Xylene, total	0.5	<0.5	37	300	<0.5
TPH as Gasoline	50	<50	640	4600	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		98.4	87.1	104	96.0

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 Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.

Client Number: 020204084  
Consultant Project Number: 020204084  
Facility Number: 9-0020  
Project ID: 1633 Harrison Street  
Oakland  
Work Order Number: C3-12-0349

## QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
<b>Modified EPA 8020:</b>							
Benzene	C3120335-03	20	ug/L	100	104	3.92	55 - 129
Toluene	C3120335-03	20	ug/L	99.5	103	3.45	72 - 149
Ethylbenzene	C3120335-03	20	ug/L	97.0	101	4.04	75 - 138
Xylene, total	C3120335-03	60	ug/L	101	106	4.85	74 - 147

Yes No

Fax copy of Lab Report and COC to Chevron Contact:

## Chain-of-Custody-Reco

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number	9-0020	Chevron Contact (Name)	
	Facility Address	1633 Harrison St. Oakland	(Phone)	
	Consultant Project Number	020204US4.0610	Laboratory Name	GTI
	Consultant Name	Mayndwater Technology	Laboratory Release Number	
	Address	4057 Port Chicago Hwy. Concord	Samples Collected by (Name)	Clayton Gonzales/Jason Stine
	Project Contact (Name)	Jim Winkler's	Collection Date	12-17-93
(Phone)	671-2387	Signature	Clayton Gonzales	

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water	A = Air C = Charcoal	Type G = Composite C = Discrete D = Grab	Time	Sample Preservation	Lead (Yes or No)	Analyses To Be Performed							Remarks
									STEX + TPH GS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8240)	Purgeable Organics (8270)	Extractable Organics (8270)	Metals Cd/Cu/Pb/Zn/NI (ICP or AA)
✓TBLB	01	21	W				HCL	Y	X							
✓RBMW4	02	1	S	10:33					X							
✓MW4	03	3				10:33			X							
RB MW1	04	1				11:35										X
✓MW1	05	3				11:40			X							
RB MW3	06	1				11:59										X
✓MW3	07	3				11:59			X							
RB MW11	08	1				11:40										X
✓MW11	09	3				11:45			X							
RB MW15	10	1				12:40										X
✓MW15	11	3				12:45			X							
RB MW10	12	1				1:10										X
✓MW10	13	3				1:15			X							C3120349
																N Box T Box

Relinquished By (Signature)	Organization	Date/Time 16/10	Received By (Signature)	Organization	Date/Time 16/10	Turn Around Time (Circle Choice)
Jason Stine	GTI	12/17/93	D.M. Shenna	GTI	12/18/93	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time 12/17/93	Received By (Signature)	Organization	Date/Time 12/18/93	48 Hrs.
Z.T. Henner	GTI	12/20/93	J.L. Stine	GTI	12/20/93	5 Days
Relinquished By (Signature)	Organization	Date/Time 11/20	Received For Laboratory By (Signature)	Organization	Date/Time 14/10	10 Days
						As Contracted

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

# Chain-of-Custody-Reco

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-0020</u> Facility Address <u>1633 Harrison St. R.R. #1</u> Consultant Project Number <u>020204084.0610</u> Consultant Name <u>Groundwater Technology</u> Address <u>4057 Port Chicago Hwy. Concord</u> Project Contact (Name) <u>Jim Watchers</u> (Phone) <u>671-2387</u> (Fax Number) <u></u>									<input type="checkbox"/> Yes Chevron Contact (Name) _____ (Phone) _____ Laboratory Name <u>GTel</u> Laboratory Release Number _____ Samples Collected by (Name) <u>Clayton Gonzales/Jason Stinson</u> Collection Date <u>12-17-93</u> Signature <u>Clayton Gonzales</u>										
	Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water	Air G = Gaseous	Time	Sample Preservation	Lead (Yes or No)	Analyses To Be Performed										NOTE: Do NOT BILL TB-LB SAMPLE (S60, IN/AC) OW/ICP AT 3°C Remarks	
Grab G									Composite C	Discrete D	Type G = Grab C = Composite D = Discrete	STEX + TPH GAS (S020 + S015)	TPH Diesel (S015)	Oil and Grease (S520)	Purgeable Halocarbons (S010)	Purgeable Aromatics (S0220)	Purgeable Organics (S240)	Extractable Organics (S270)		Metals Cd,Cu,Pb,Zn,Ni (ICP or AX)
RBMW2	14	1	W	G	12:50	HCL	Y												X	
MW2	15	3			12:56			X												
RBmw13	16	1			1:45															X
MW13	17	3			1:45			X												
RBmw9	18	1			1:40															X
MW9	19	3			1:45			X												

C3110349

N RX TBX

Relinquished By (Signature) <i>James Stinson</i>	Organization <u>GTI</u>	Date/Time <u>12-17-93 16:00</u>	Received By (Signature) <i>K.M. Henner</i>	Organization <u>GTI</u>	Date/Time <u>12/17/93 16:15</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature) <i>B.M. Henner</i>	Organization <u>GTI</u>	Date/Time <u>12/20/93 11:20am</u>	Received By (Signature) <i>J.E. - 1/20am</i>	Organization <u>GTel</u>	Date/Time <u>12/21/93 14:00</u>	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	