Chevron

Chevron Products Company
6001 Bollinger Canyon Rd, Bldg L
PO Box 5004
San Ramon, CA 94583-0804

Site Assessment & Remediation
Phone (510) 842-9500
Fax (510) 842-8370

January 10, 1997

Mr. Ravi Arulananthum
RWQCB-Bay Region
2101 Webster St. Suite 500
Oakland, California 94612

Re: Former Chevron Asphalt Plant 1001067 (206265)
Powell & Landregan Street, Emeryville, California

Dear Mr. Arulananthum,

Please find attached the third quarter 1996 semi-annual groundwater sampling and monitoring report dated November 14th, 1996. This report was prepared by Gettler-Ryan and provides the results of the sampling event which took place on October 10th, 1996.

The groundwater samples collected were analyzed for the presence of TPHG and BTEX constituents. The results obtained during this sampling event were consistent with historical data seen from previous sampling events at this site.

As of January 1st, 1997 I now over see the monitoring and sampling activities associated with this site. If you have any questions or comments regarding this site please call. I can be reached by phone at (510) 842-9449 or by fax at (510) 842-8370.

Sincerely,

Tammy L Hodge
Groundwater Coordinator
Site Assessment and Remediation

cc: [redacted] Alameda County Health Agency
1131 Habor Bay Parkway, Ste.250, Alameda CA 94502
* Chevron file 206265 (1001067)

GETTLER-RYAN INC.

November 14, 1996 Job #5161.80

Ms. Tammy Hodge
Chevron Products Company
P.O. Box 5004
San Ramon, CA 94583

Re: Semi-Annual Groundwater Monitoring & Sampling Report
Former Chevron Asphalt Plant and Terminal #1001067
Powell @ Landregan Street
Emeryville, California

Dear Ms. Hodge:

This report documents the semi-annual groundwater sampling event performed by Gettler-Ryan Inc. (G-R). On October 10, 1996, field personnel were on-site to monitor and sample six wells (MW-2A, MW-7, MW-10, MW-15, MW-17, and MW-19A) at the Former Chevron Asphalt Plant and Terminal located at Powell at Landregan Street in Emeryville, California. Wells MW-1, MW-3, MW-8, MW-9, MW-11, MW-12, MW-13 MW-16, and MW-18 were either not located or inaccessible.

Static groundwater levels were measured on October 10, 1996. All wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any of the wells. Static water level data and groundwater elevations are presented in Table 1. A potentiometric map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets for this event are also attached. The samples were analyzed by NEI/GTEL Environmental Laboratories, Inc. Analytical results are presented in Tables 1 and 2. The chain of custody document and laboratory analytical reports are enclosed.

Thank you for allowing Gettler-Ryan Inc. to provide environmental services to Chevron. Please call if you have any questions or comments regarding this report.

Sincerely,

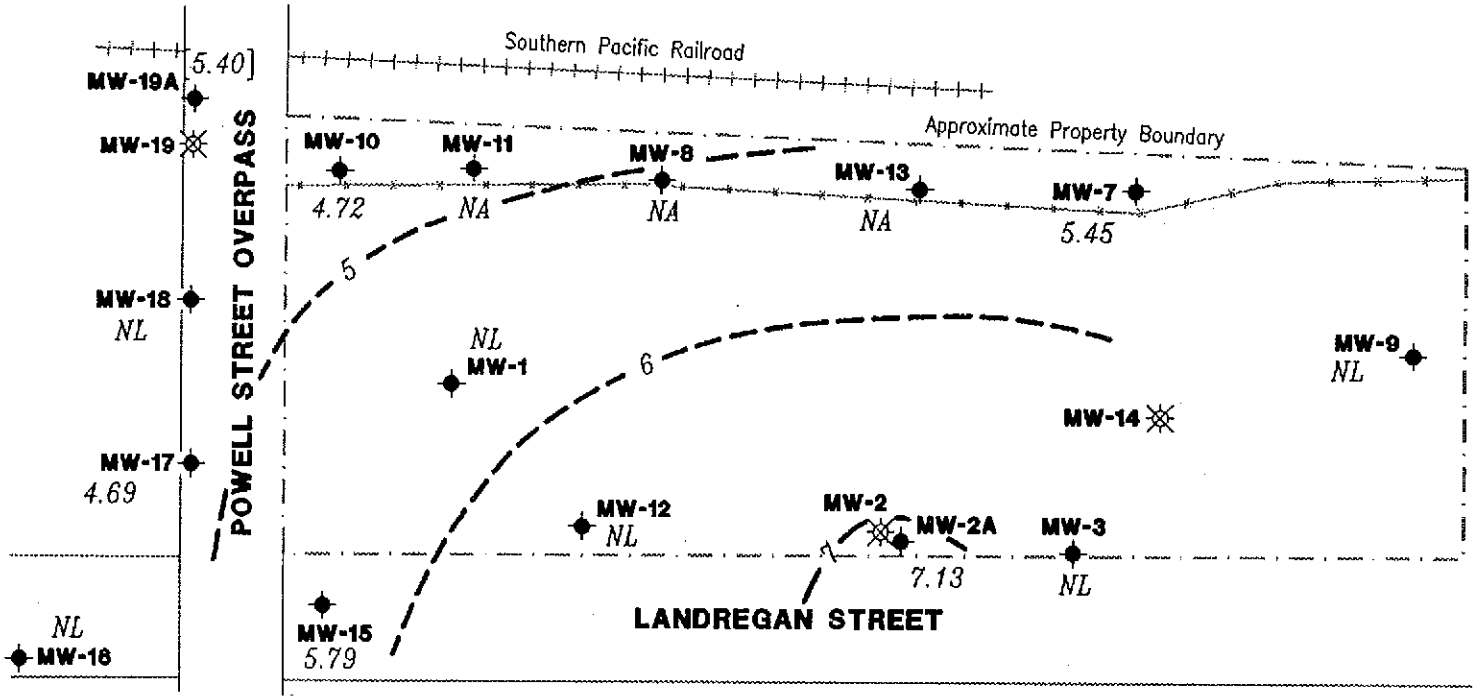
Deanna L. Harding
Project Coordinator

Penny L. Silzer
Senior Geologist, R.G. No. 5523

REGISTERED GEOLOGIST
Penny L. Silzer
No. 5523
STATE OF CALIFORNIA

DLH/PLS/dlh
5161.QML

Figure 1: Potentiometric Map
Table 1: Water Level Data and Groundwater Analytical Results
Table 2: Analytical Results for Groundwater - Halogenated Volatile Organic Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



EXPLANATION:

- Groundwater monitoring well
- Abandoned groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 — Groundwater elevation contour, dashed where inferred.
- NL — Not located
- NA — Inaccessible

N

0 100

Scale in Feet

Gettler - Ryan Inc.

6747 Sierra Ct., Suite J
Dublin, CA 94568
(510) 551-7555

POTENTIOMETRIC MAP
Former Chevron Asphalt Plant
and Terminal No. 1001067
Emeryville, California

FIGURE
1

JOB NUMBER
5161

REVIEWED BY

DATE
October 10, 1996

REVISED DATE

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<------ppb------>					
MW-1											
10.67	4/26/85	—	—	—	—	—	99	—	—	6.0	—
	9/11/87	—	—	—	—	—	63	—	—	—	—
	7/7/88	—	—	—	—	<100	55	—	—	—	—
	4/13/89	3.72	6.95	—	—	—	—	—	—	—	—
	4/14/89	—	—	—	8260	<5,000	34	<5.0	<5.0	<10	—
	7/31/89	5.72	4.95	0	8260	7,000	57	1.2	<0.2	1.6	—
	12/8/89	4.80	5.87	0	8015/8020	—	26	0.4	0.9	2.0	—
	3/21/90	4.74	5.93	0	8015/8020	3,500	120	9.0	3.0	3.0	—
	6/19/90	4.75	5.92	0	8015/8020	2,700	100	<0.3	<0.3	7.0	—
	9/20/90	5.07	5.60	—	—	—	—	—	—	—	—
	9/21/90	—	—	—	8015/8020	2,200	120	2.0	2.0	0.79	—
	12/28/90	4.91	5.76	0	8015/8020	720	44	2.0	<0.5	9.0	—
	5/10/91	5.30	5.37	0	8015/8020	530	47	2.0	0.5	8.0	—
	8/8/91	5.85	4.82	0	8015/8020	1,400	37	8.3	3.7	12	—
	11/27/91	5.13	5.54	0	8015/8020	840	16	7.1	4.5	11	—
	1/29/92	4.82	5.85	0	8015/8020	350	18	9.3	3.7	7.7	—
	3/26/92	4.32	6.35	0	8015/8020	420[11]	19	2.2	1.2	4.0	—
	7/23/92	5.42	5.25	0	8015/8020	4,000[12]	50	82	40	160	—
	10/28/92	5.56	5.11	0	8015/8020	980	36	6.7	3.0	10	—
	5/4/93	6.30	4.37	0	8015/8020	650	9.4	2.4	1.2	4.5	—
	1/5/94[10]	—	—	—	—	—	—	—	—	—	—
MW-2/											
13.78	4/26/85	—	—	—	—	—	<10	—	—	—	—
	9/11/87	—	—	—	—	—	—	—	—	—	—
	7/7/88	—	—	—	—	<100	<5.0	—	—	—	—
	4/13/89	2.62	11.16	—	—	—	—	—	—	—	—
	4/14/89*	—	—	—	8260	<100	<0.2	<0.2	<0.2	<0.4	—
	7/31/89	4.63	9.15	0	8260	<100	<0.2	<1.0	<0.2	<0.4	—
	12/8/89	5.98	7.80	0	8015/8020	—	<0.3	<0.3	<0.3	<0.6	—
	3/21/90	5.85	7.93	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	—
	6/19/90	5.95	7.83	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	—
	9/20/90	6.86	6.92	—	—	—	—	—	—	—	—
	9/21/90	—	—	—	8015/8020	<50	<1.5	<1.5	<1.5	<4.5	—
	12/28/90	6.34	7.44	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	5/10/91	5.96	7.82	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	8/8/91	7.66	6.12	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	11/27/91	8.04	5.74	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	1/29/92	6.01	7.77	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-2	3/26/92	6.10	7.68	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
(cont)	7/23/92	7.39	6.39	0	8015/8020	<50	<0.5	<0.5	<0.5	0.8	---
	10/28/92	7.51	6.27	0	8015/8020	55	1.3	6.9	1.1	5.1	---
	5/4/93[8]	---	---	---	---	---	---	---	---	---	---
	1/5/94[10]	---	---	---	---	---	---	---	---	---	---
	10/24/94	Dry	---	---	---	---	---	---	---	---	---
	4/19/95	2.51	11.28[14]	0.01	---	---	---	---	---	---	---
	11/6/95	Abandoned		---	---	---	---	---	---	---	---
MW-2A											
12.45	11/6/95	4.51	7.94	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	4.10	8.35	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/96	**5.32**	**7.13**	**0**	**8015/8020**	**60[17]**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**
MW-3/											
11.73	4/26/85	---	---	---	---	---	<10	---	---	---	---
	9/11/87	---	---	---	---	---	<0.5	---	---	---	---
	7/7/88	---	---	---	---	<100	<5.0	---	---	---	---
	4/13/89	2.34	9.39	---	---	---	---	---	---	---	---
	4/14/89*	---	---	---	8260	<100	<0.2	<0.2	<0.2	<0.4	---
	7/31/89	4.79	6.94	0	8260	<100	<0.2	<1.0	<0.2	<0.4	---
	12/8/89	3.03	8.70	0	8015/8020	---	<0.3	<0.3	<0.3	<0.6	---
	3/21/90	2.55	9.18	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	2.76	8.97	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	4.43	7.30	---	---	---	---	---	---	---	---
	9/21/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	3.67	8.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	2.83	8.90	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	5.09	6.64	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	5.37	6.36	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	3.46	8.27	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	3/26/92	2.10	9.63	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	4.60	7.13	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/28/92	5.07	6.66	0	8015/8020	92	1.8	12	2.0	10	---
	5/4/93[8]	---	---	---	---	---	---	---	---	---	---
	1/5/94[10]	---	---	---	---	---	---	---	---	---	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-4	4/26/85	---	---	---	---	3,100	<10	---	---	---	---
	9/11/87	---	---	---	---	---	<0.5	---	---	---	---
	7/7/88	---	---	---	---	<100	<5.0	---	---	---	---
	4/13/89[3]	2.12	---	---	---	---	---	---	---	---	---
	4/14/89[4]*	---	---	---	8260	380[13]	<0.5	<1.0	<1.0	<1.0	---
MW-5	4/26/85	---	---	---	---	1,600	<100	---	---	---	---
	9/11/87	---	---	---	---	---	<10	---	---	---	---
	7/7/88	---	---	---	---	<100	<5.0	---	---	---	---
	4/13/89[3]	2.79	---	---	---	---	---	---	---	---	---
	4/14/89[4]*	---	---	---	8260	4,300[13]	<0.5	<1.0	<1.0	<1.0	---
MW-6	4/26/85	---	---	---	---	580	<100	---	---	---	---
	9/11/87	---	---	---	---	---	<10	---	---	---	---
	7/7/88	---	---	---	---	8,000	<5.0	---	---	---	---
	4/13/89[3]	1.90	---	---	---	---	---	---	---	---	---
	4/14/89[4]*	---	---	---	8260	3,300[13]	<0.5	<1.0	<1.0	<1.0	---
MW-7/ 10.47	4/26/85	---	---	---	---	700	ND	---	---	---	---
	9/11/87	---	---	---	---	---	<10	---	---	---	---
	7/7/88	---	---	---	---	17,000	<5.0	---	---	---	---
	4/13/89	1.90	8.57	---	---	---	---	---	---	---	---
	4/14/89*	---	---	---	8260	<50	<0.5	<1.0	<1.0	<1.0	---
	7/31/89	4.24	6.23	---	8260	160[13]	<0.1	<0.5	<0.1	<0.2	---
	7/31/89	---	---	---	8260	100[13]	<0.1	<0.5	<0.1	<0.2	---
	12/8/89	2.65	7.82	0	8015/8020	---	<0.3	<0.3	<0.3	<0.6	---
	3/21/90	2.76	7.71	0	8015/8020	<50	<0.3	<0.3	<0.3	0.6	---
	6/19/90	3.24	7.23	0	8015/8020	<50	<0.3	<0.3	<0.3	0.6	---
	9/20/90	4.57	5.90	---	---	---	---	---	---	---	---
	9/21/90	---	---	---	8015/8020	<50	1.5	<0.3	<0.3	<0.6	---
	12/28/90	3.12	7.35	0	8015/8020	<50	0.7	<0.5	<0.5	0.7	---
	5/10/91	3.53	6.94	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	4.64	5.83	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	3.66	6.81	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	3.24	7.23	0	8015/8020	<50	<0.5	<0.5	<0.5	0.9	---
	3/26/92	2.61	7.86	0	8015/8020	<50	<0.5	<0.5	<0.5	0.9	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<——— ppb ——— >					
MW-7	7/23/92	4.19	6.28	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
(cont)	10/28/92	4.39	6.08	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/4/93[9]	---	---	---	---	---	---	---	---	---	---
	1/5/94[10]	---	---	---	---	---	---	---	---	---	---
	5/13/94	4.41	6.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/24/94	5.03	5.44	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/19/95	4.53	5.94	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/6/95	5.11	5.36	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	4.40	6.07	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/96	5.02	5.45	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
MW-8/											
10.46	4/26/85	---	---	---	---	---	ND	---	---	---	---
	9/11/87	---	---	---	---	---	<10	---	---	---	---
	7/7/88	---	---	---	---	20,000	<5.0	---	---	---	---
	4/13/89	2.80	7.66	---	---	---	---	---	---	---	---
	4/14/89*	---	---	---	8260	<50	<0.5	<1.0	<1.0	<1.0	<3,000
	7/31/89	5.70	4.76	0	8260	<50	<0.1	<0.5	<0.1	<0.2	---
	12/8/89	4.13	6.33	0	8015/8020	---	<0.3	<0.3	<0.3	<0.6	---
	3/21/90	4.07	6.39	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	4.25	6.21	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	4.99	5.47	---	---	---	---	---	---	---	---
	9/21/90	---	---	---	8015/8020	<50	6.0	<0.3	<0.3	<0.6	---
	12/28/90	4.39	6.07	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	4.13	6.33	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	5.53	4.93	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	4.59	5.87	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	5.30	5.16	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	3/26/92	3.59	6.87	0	8015/8020	<50	<0.5	<0.5	<0.5	0.7	---
	7/23/92	5.06	5.40	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/28/92[7]	---	---	---	---	---	---	---	---	---	---
	5/4/93[8]	---	---	---	---	---	---	---	---	---	---
	1/5/94[8]	---	---	---	---	---	---	---	---	---	---
	5/13/94	5.59	4.87	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/24/94[7]	---	---	---	---	---	---	---	---	---	---
	4/19/95[4]	---	---	---	---	---	---	---	---	---	---
	11/6/95	Inaccessible		---	---	---	---	---	---	---	---
	4/26/96	Inaccessible		---	---	---	---	---	---	---	---
	10/10/96	Inaccessible		---	---	---	---	---	---	---	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-9	4/26/85	---	---	---	---	---	---	---	---	---	---
	9/11/87	---	---	---	---	---	---	---	---	---	---
	7/7/88	---	---	---	---	400	---	---	---	---	---
	5/10/91[3]	---	---	---	---	---	---	---	---	---	---
MW-10/ 10.82	7/7/88	---	---	---	---	---	<5.0	---	---	---	---
	4/14/89*	---	---	---	8260	<50	<0.5	<1.0	<1.0	<1.0	---
	7/31/89	---	---	---	8260	<50	<0.1	<0.5	<0.1	<0.2	---
	12/8/89	---	---	---	8015/8020	---	<0.3	<0.3	<0.3	<0.6	---
	3/21/90	4.60	6.22	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	4.89	5.93	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	5.77	5.05	---	---	---	---	---	---	---	---
	9/21/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	4.99	5.83	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	5.80	5.02	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	5.86	4.96	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	5.39	5.43	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	5.44	5.38	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	3/26/92	4.96	5.86	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	5.80	5.02	0	8015/8020	<50	<0.5	1.8	0.5	1.9	---
	10/28/92	6.06	4.76	0	8015/8020	<50	0.6	0.7	<0.5	1.2	---
	5/4/93[8]	---	---	---	---	---	---	---	---	---	---
	1/5/94	5.92	4.90	0	8015/8020	<50	<0.5	<0.5	<0.5	0.6	---
	5/13/94	5.09	5.73	0	8015/8020	140	<0.5	<0.5	<0.5	1.3	---
	10/24/94	6.24	4.58	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/19/95	5.26	5.56	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/6/95	6.25	4.57	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	Inaccessible		---	---	---	---	---	---	---	---
	10/10/96	**6.10**	**4.72**	**0**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**0.6**	***34/ND*[16]**
MW-11/ 11.38	7/7/88	---	---	---	---	---	<5.0	---	---	---	---
	4/14/89	---	---	---	8260	<50	<0.5	<1.0	<1.0	<1.0	<3,000
	7/31/89	---	---	---	8260	<100	<0.2	<0.2	<0.2	<0.2	---
	12/8/89	---	---	---	8015/8020	---	<0.3	<0.3	<0.3	<0.6	---
	3/21/90	4.82	6.56	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	5.14	6.24	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	6.11	5.27	---	---	---	---	---	---	---	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-11	9/21/90	—	—	—	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	—
(cont)	12/28/90	5.16	6.22	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	5/10/91	7.83	3.55	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	8/8/91	6.32	5.06	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	11/27/91	5.67	5.71	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	1/29/92	5.83	5.55	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	3/26/92	4.09	7.29	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	7/23/92	6.19	5.19	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	10/28/92	6.51	4.87	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	5/4/93[8]	—	—	—	—	—	—	—	—	—	—
	1/5/94[8]	—	—	—	—	—	—	—	—	—	—
	5/13/94	5.67	5.71	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	10/24/94	6.79	4.59	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	4/19/95	5.69	5.69	0	8015/8020	58[15]	0.6	<0.5	<0.5	0.5	—
	11/6/95	Inaccessible		—	—	—	—	—	—	—	—
	4/26/96	Inaccessible		—	—	—	—	—	—	—	—
	10/10/96	Inaccessible		—	—	—	—	—	—	—	—
MW-12/											
13.03	7/7/88	—	—	—	—	<100	<5.0	—	—	—	—
	4/14/89*	—	—	—	8260	<50	<0.5	<1.0	<1.0	<1.0	—
	7/31/89	—	—	—	8260	<100	<0.1	<0.5	<0.1	<0.2	—
	12/8/89	—	—	—	8015/8020	—	<0.3	<0.3	<0.3	<0.6	—
	3/21/90	6.76	6.27	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.3	—
	6/19/90	6.62	6.41	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.3	—
	9/20/90	5.00	8.03	—	—	—	—	—	—	—	—
	9/21/90	—	—	—	8015/8020	<50	<0.3	<0.3	<0.3	<0.3	—
	12/28/90	6.62	6.41	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	5/10/91	6.48	6.55	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	8/8/91	8.01	5.02	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	11/27/91	7.95	5.08	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	1/29/92	7.68	5.35	0	8015/8020	<50	<0.5	<0.5	<0.5	1.0	—
	3/26/92	6.60	6.43	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	—
	7/23/92[6]	—	—	—	—	—	—	—	—	—	—
MW-13/											
11.15	3/21/90	4.08	7.07	0	8015/8020	480	<0.3	<0.3	1.0	5.0	—
	6/19/90	4.34	6.81	0	8015/8020	180	<0.3	<0.3	0.8	3.0	—
	9/20/90	5.31	5.84	0	8015/8020	150	<0.3	<0.3	<0.3	0.54	—

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-13	12/28/90	4.79	6.36	0	8015/8020	160	<0.5	<0.5	<0.5	1.0	---
(cont)	5/10/91	4.20	6.95	0	8015/8020	110	<0.5	<0.5	<0.5	2.0	---
	8/8/91	5.13	6.02	0	8015/8020	220[4]	<0.5	<0.5	<0.5	1.8	---
	11/27/91	4.72	6.43	0	8015/8020	70	<0.5	<0.5	<0.5	1.2	---
	1/29/92	4.69	6.46	0	8015/8020	150	<0.5	<0.5	3.1	7.1	---
	3/26/92	4.04	7.11	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	5.12	6.03	0	8015/8020	190	<0.5	<0.5	<0.5	2.1	---
	10/28/92	5.30	5.85	0	8015/8020	190	<0.5	<0.5	<0.5	2.0	---
	5/4/93[8]	---	---	---	---	---	---	---	---	---	---
	1/5/94[8]	---	---	---	---	---	---	---	---	---	---
	5/13/94	5.28	5.87	0	8015/8020	220	<0.5	1.2	<0.5	1.7	---
	10/24/94	6.04	5.11	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/19/95	5.37	5.78	0	8015/8020	140[15]	<0.5	<0.5	<0.5	1.2	---
	11/6/95	6.13	5.02	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	5.22	5.93	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/96	Inaccessible		---	---	---	---	---	---	---	---
MW-14/											
9.78	3/21/90	0.91	8.87	0	8015/8020	170	<0.3	<0.3	<0.4	2.0	---
	6/19/90	1.03	8.75	0	8015/8020	77	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	2.53	7.25	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	1.61	8.17	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	1.22	8.56	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	2.45	7.33	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	2.59	7.19	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	1.10	8.68	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	3/26/92	0.74	9.04	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	2.30	7.48	0	8015/8020	<50	0.6	<0.5	<0.5	0.8	---
	10/28/92	2.76	7.02	0	8015/8020	56	0.7	4.0	0.8	3.8	---
	5/4/93[9]	---	---	---	---	---	---	---	---	---	---
MW-15/											
11.01	3/21/90	4.72	6.29	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	4.78	6.23	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	4.98	6.03	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	4.84	6.17	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	4.58	6.43	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	5.03	5.98	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	5.88	5.13	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<——————————ppb——————————>					
MW-15	1/29/92	4.82	6.19	0	8015/8020	<50	1.9	2.6	0.8	2.6	---
(cont)	3/26/92	4.35	6.66	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	5.04	5.97	0	8015/8020	<50	<0.5	<0.5	<0.5	0.5	---
	10/28/92	5.17	5.84	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/4/93[8]	---	---	---	---	---	---	---	---	---	---
	1/5/94[10]	---	---	---	---	---	---	---	---	---	---
	5/13/94	4.50	6.51	0	8015/8020	110	<0.5	0.7	<0.5	2.0	---
	10/24/94	5.17	5.84	0	8015/8020	<50	2.3	1.1	<0.5	<0.5	---
	4/19/95	4.77	6.24	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/6/95	5.28	5.73	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	4.60	6.41	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/96	**5.22**	**5.79**	**0**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**
MW-16/											
11.11	3/21/90	5.84	5.27	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	5.90	5.21	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	6.36	4.75	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	5.98	5.13	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	5.89	5.22	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	6.28	4.83	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	5.62	5.49	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	5.88	5.23	0	8015/8020	65	3.6	6.2	1.9	6.6	---
	3/26/92	5.56	5.55	0	8015/8020	270[3]	21	27	9.5	41	---
	7/23/92	6.29	4.82	0	8015/8020	<50	<0.5	<0.5	<0.5	0.7	---
	10/28/92	6.29	4.82	0	8015/8020	<50	0.9	1.4	<0.5	1.1	---
	5/4/93	5.75	5.36	0	8015/8020	51	<0.5	1.0	0.6	1.7	---
	1/5/94[10]	---	---	---	---	---	---	---	---	---	---
MW-17/											
10.41	3/21/90	5.61	4.80	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	6.02	4.39	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	5.73	4.68	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	5.65	4.76	0	8015/8020	<50	<0.5	<0.5	<0.5	0.8	---
	8/8/91	5.94	4.47	0	8015/8020	82	1.9	2.5	0.9	5.4	---
	11/27/91	6.00	4.41	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	5.61	4.80	0	8015/8020	<50	<0.5	0.9	<0.5	0.5	---
	3/26/92	5.31	5.10	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	5.97	4.44	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-17	10/28/92	5.96	4.45	0	8015/8020	78	1.0	7.1	1.4	6.5	---
(cont)	5/4/93	7.53	2.88	0	8015/8020	60	0.8	1.7	1.1	3.0	---
	1/5/94	5.50	4.91	0	8015/8020	<50	<0.5	0.7	<0.5	<0.5	---
	5/13/94	5.17	5.24	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/24/94	6.08	4.33	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/19/95	5.48	4.93	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/6/95	6.00	4.41	0	8015/8020	<50	<0.5	<0.5	<0.5	<5.0	---
	4/26/96	5.45	4.96	0	8015/8020	<50	<0.5	<0.5	<0.5	<5.0	---
	10/10/96	**5.72**	**4.69**	**0**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**
MW-18/											
9.80	3/21/90	5.15	4.65	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	5.19	4.61	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	5.54	4.26	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	5.26	4.54	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	5.18	4.62	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	5.45	4.35	0	8015/8020	52	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	5.24	4.56	0	8015/8020	<50	0.6	1.5	0.6	2.1	---
	1/29/92	5.12	4.68	0	8015/8020	67	3.7	5.2	1.5	5.0	---
	3/26/92	4.84	4.96	0	8015/8020	80[5]	<0.5	<0.5	<0.5	0.8	---
	7/23/92	5.49	4.31	0	8015/8020	50[5]	1.3	2.1	0.5	3.0	---
	10/28/92	5.47	4.33	0	8015/8020	54	<0.5	1.3	<0.5	1.1	---
	5/4/93	5.07	4.73	0	8015/8020	<50	<0.5	<0.5	<0.5	<1.5	---
	1/5/94	5.05	4.75	0	8015/8020	<50	<0.5	0.5	<0.5	0.6	---
	5/13/94	4.76	5.04	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/24/94	5.65	4.15	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/19/95	5.10	4.70	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/6/95	5.57	4.23	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	5.07	4.73	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/96[10]	---	---	---	---	---	---	---	---	---	---
MW-19/											
8.45	3/21/90	5.00	3.45	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	5.06	3.39	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/20/90	5.25	3.20	0	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	5.07	3.38	0	8015/8020	66	<0.5	<0.5	<0.5	<0.5	---
	5/10/91	5.02	3.43	0	8015/8020	60[4]	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	5.17	3.28	0	8015/8020	58	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	5.06	3.39	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[3]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-19	1/29/92	4.93	3.52	0	8015/8020	<50	1.7	2.6	0.7	2.1	---
(cont)	3/26/92	4.79	3.66	0	8015/8020	80[5]	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	5.22	3.23	0	8015/8020	70[5]	0.6	0.5	<0.5	1.5	---
	10/28/92	5.16	3.29	0	8015/8020	170	4.3	28	5.1	24	---
	5/4/93	4.93	3.52	0	8015/8020	120	2.0	4.7	2.8	8.1	---
	1/5/94	4.91	3.54	0	8015/8020	<50	2.0	1.4	1.7	2.5	---
	5/13/94	4.18	4.27	0	8015/8020	<50	<0.5	0.9	<0.5	<0.5	---
	10/24/94	4.85	3.60	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/19/95	4.20	4.25	0	8015/8020	270[15]	<0.5	<0.5	<0.5	<0.5	---
	11/6/95		Abandoned	---	---	---	---	---	---	---	---
MW-19A											
9.96	11/6/95	4.85	5.11	0	8015/8020	420	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	4.18	5.78	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/96	**4.56**	**5.40**	**0**	**8015/8020**	**610[17]**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**21**
Trip Blank	4/14/89	---	---	---	8260	<50	<0.5	<1.0	<1.0	<1.0	---
AA	7/31/89	---	---	---	8260	<50	<0.1	<0.5	<0.5	<0.2	---
	12/8/89	---	---	---	8015/8020	---	<0.3	<0.3	<0.3	<0.6	---
	3/21/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	3/26/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	6/19/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	9/21/90	---	---	---	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---
	12/28/90	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.6	---
	5/10/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	3/26/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
TB-LB	7/23/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/28/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/4/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5	---
	1/5/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/13/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/24/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	4/19/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/6/95	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/26/96	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/96	**---**	**---**	**---**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID/ TOC (ft)[1]	Date	DTW (ft)	GWE[1] (msl)	Product Thickness[2] (ft)	Analytical Method	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
Bailer Blank											
BB	5/10/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	8/8/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	11/27/91	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	1/29/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	3/26/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	7/23/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	10/28/92	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/4/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5	---
	1/5/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	5/13/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

EXPLANATION:

TOC = Top of casing elevation
(ft) = feet
DTW = Depth to water
GWE = Groundwater elevation
msl = Measurements referenced relative to mean sea level
TPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-tertiary-butyl ether
O&G = Oil and Grease
ppb = Parts per billion
ppm = Parts per million
--- = Not available/not applicable

ANALYTICAL METHODS:

EPA Method 8260 for TPH(G) & BTEX
EPA Method 8015/8030 for TPH(G)
EPA Method 8020 for BTEX *& MTBE

NOTES:

Water level elevation data and laboratory analytical results prior to April 19, 1995, were compiled from the quarterly groundwater monitoring reports prepared for Chevron by Sierra Environmental Services.

* Sample was analyzed for O&G (EPA Method 8260) and was <3,000 ppm.

NOTES (continued):

1 Top of casing elevations shown prior to 3/21/90 were surveyed to an arbitrary datum point set at 100 feet. The GWEs shown for dates prior to 3/21/90 were corrected using new TOC elevations which were surveyed to a USGS benchmark (relative to mean sea level) in April 1990.
2 Product thickness measurements on and after May 10, 1991 were made using an MMC flexi-dip interface probe. Product thickness information prior to May 10, 1991 was not available for inclusion in this report.
3 Well construction details for this well is not available for inclusion in this report.
4 Monitoring well was destroyed during soil excavation in 1989.
5 Well MW-9 was not measured after 5/10/91 because it could not be located. Previous water level data was not available for inclusion in this report.
6 Well MW-12 could not be located after building demolition.
7 Well was obstructed.
8 Monitoring well obstructed due to on-site construction activities.
9 Monitoring well abandoned on March 10, 1993 by Soils Exploration Services of Benicia, California.
10 Well covered with asphalt during construction activities.
11 Does not match a typical gasoline pattern.
12 Gasoline range concentration reported. Chromatogram shows only a single peak in the gasoline range.
13 TPH was reported as Diesel #2.
14 GWE was corrected for the presence of separate-phase hydrocarbons using: GWE = [(TOC-DTW) + (Prod Thickness)(0.8)]. 0.8 is the assumed specific gravity of separate-phase hydrocarbons.
15 Laboratory report indicates that hydrocarbons were found in the range of gasoline, but do not resemble a gasoline fingerprint.
16 MTBE by EPA Methos 8240B was not detected at a detection limit of 5.0 ppb.
17 Laboratory report indicates hydrocarbons in the gasoline range to not match the gasoline standard pattern.

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Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<----------ppb---------->										
MW-1	4/14/89	CCAS	8010	<5.0	---	19	720	<5.0	<5.0	11	<5.0	<20	340	ND[1]
	7/31/89	CCAS	8010	6.8	---	54	2,600	2.7	7.2	57	<0.2	<1.0	760	ND[2]
	12/8/89	GTEL	8010	4.3	2,700	---	---	1.7	1.4	59	<0.5	<0.5	520	---
	3/21/90	GTEL	8010	7.1	7,000	---	---	2.1	1.1	130	<0.5	<0.5	1,100	---
	6/19/90	GTEL	8010	12	6,100	---	---	3.1	<0.5	81	<0.5	<0.5	1,200	---
	9/21/90	GTEL	8010	1.8	2,400	---	---	2.2	1.7	60	<0.5	<0.5	1,100	ND[3]
	12/28/90	SAL	8010	2.0	---	28	1,500	1.0	0.6	15	<0.5	<0.5	510	ND[4]
	5/10/91	SAL	8010	10	---	69	5,500	2.0	<0.5	280	<0.5	<0.5	1,800	ND[5]
	8/8/91	SAL	8010	2.9	---	45	2,300	1.5	<0.5	110	<0.5	<0.5	<1.0	ND[6]
	11/27/91	SPA	8010	<25	---	<25	5,900	<25	<25	<25	<25	<25	540	ND[20]
	1/29/92	SPA	8010	<25	---	26	1,900	<25	<25	<25	<25	<25	320	ND[20]
	3/26/92	SPA	8010	<50	---	<50	1,500	<50	<50	<50	<50	<50	260	ND[21]
	7/23/92	SPA	8010	<50	---	<50	2,300	<50	<50	<50	<50	<50	170	ND[21]
	10/28/92	SPA	8010	4.2	---	30	1,600	3.6	<0.5	16	<0.5	<0.5	810	ND
	5/4/93	SPA	8010	1.0	---	16	670	0.5	<0.5	9.2	<0.5	<0.5	110	ND[18]
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94[27]	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	4/14/89	CCAS	8010	<0.2	<0.2	---	---	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	---
	7/31/89	CCAS	8010	<0.2	<0.2	---	---	<0.4	0.5	<0.2	<0.2	<1.0	<0.2	---
	12/8/89	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	3/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	9/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	5/4/93[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94[28]	---	---	---	---	---	---	---	---	---	---	---	---	---
	10/24/94[30]	---	---	---	---	---	---	---	---	---	---	---	---	---
	11/6/95	Abandoned	---	---	---	---	---	---	---	---	---	---	---	---
MW-2A	11/6/95	GTEL	8010	<1.0	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
	4/26/96	GTEL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND[36]
	10/10/96	**GTEL**	**8010**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.8**	**ND**

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<———				ppb						———>
MW-3	4/14/89	CCAS	8010	<0.2	<0.2	---	---	<0.2	<0.2	<0.2	<0.2	<1.0	<0.2	---
	7/31/89	CCAS	8010	<0.2	<0.2	---	---	<0.4	0.5	<0.2	<0.2	<1.0	<0.2	---
	12/8/89	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	3/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	9/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	—
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	5/4/93[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94[27]	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-4	4/14/89[7]	CCAS	8010	<1.0	<1.0	---	---	2.0	<1.0	<1.0	<1.0	<2.0	<1.0	---
MW-5	4/14/89[7]	CCAS	8010	<1.0	<1.0	---	---	2.0	<1.0	<1.0	<1.0	<2.0	<1.0	---
MW-6	4/14/89[7]	CCAS	8010	<1.0	<1.0	---	---	2.0	<1.0	<1.0	<1.0	<2.0	<1.0	---
MW-7	4/14/89	CCAS	8010	<1.0	<1.0	---	---	1.0	1.0	<1.0	<1.0	<2.0	<1.0	---
	7/31/89	CCAS	8010	<0.1	0.3	---	---	0.3	4.5	<0.1	<0.1	<0.5	<0.1	ND[8]
(D)	7/31/89	GTEL	8010	<0.1	0.4	---	---	0.2	2.6	<0.1	<0.1	<0.5	<0.1	ND[8]
	12/8/89	GTEL	8010	<0.2	<0.5	---	—	<0.5	0.67	<0.5	<0.5	<0.5	<1.0	—
	3/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	1.4	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	0.67	<0.5	<0.5	<0.5	<1.0	---
	9/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	—	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<1.0	—
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<----------				ppb						---------->
MW-7	5/4/93[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
(cont)	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[29]
	10/24/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[29]
	4/19/95	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	11/6/95	GTEL	8010	<1.0	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
	4/26/96	GTEL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND[36]
	10/10/96	GTEL	8010	**<0.5**	---	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	ND
MW-8	4/14/89	CCAS	8010	<1.0	<1.0	---	---	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	---
	7/31/89	CCAS	8010	<0.1	---	0.6	1.9	1.7	1.7	0.4	<0.1	<0.5	1.2	ND
	12/8/89	GTEL	8010	<0.2	0.53	---	---	<0.5	0.84	<0.5	<0.5	<0.5	<1.0	---
	3/21/90	GTEL	8010	<0.2	0.96	---	---	<0.5	0.72	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	0.59	---	---	<0.5	0.67	<0.5	<0.5	<0.5	<1.0	---
	9/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92[23]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/4/93[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[29]
	10/24/94[28]	---	---	---	---	---	---	---	---	---	---	---	---	---
	4/19/95[28]	---	---	---	---	---	---	---	---	---	---	---	---	---
	11/6/95	Inaccessible	---	---	---	---	---	---	---	---	---	---	---	---
	4/26/96	Inaccessible	---	---	---	---	---	---	---	---	---	---	---	---
	10/10/96	Inaccessible	---	---	---	---	---	---	---	---	---	---	---	---
MW-9	5/10/91[9]	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-10	4/14/89	CCAS	8010	<1.0	15	---	---	2.0	<1.0	5.0	<1.0	<2.0	<1.0	---
	7/31/89	CCAS	8010	0.7	---	6.3	27	2.9	<0.1	5.3	<0.1	<0.5	<0.1	ND
	12/8/89	GTEL	8010	<0.2	24	---	---	3.1	<0.5	4.9	<0.5	0.6	<1.0	---
	3/21/90	GTEL	8010	0.7	30	---	---	2.5	<0.5	3.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	0.3	33	---	---	2.6	<0.5	6.3	<0.5	<0.5	<1.0	---

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<----------				ppb						---------->
MW-10	9/21/90	GTEL	8010	<0.2	32	—	---	5.0	<0.5	5.9	<0.5	<0.5	<1.0	---
(cont)	12/28/90	SAL	8010	<0.5	---	6.0	19	2.0	<0.5	5.0	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	0.6	---	7.0	24	2.0	<0.5	6.0	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	7.0	33	3.1	<0.5	6.2	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	6.8	100	<0.5	<0.5	8.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	9.1	30	2.8	<0.5	7.4	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	0.7	---	9.2	29	2.5	<0.5	6.8	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	6.1	21	1.5	<0.5	4.7	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	4.3	16	2.1	<0.5	4.1	<0.5	<0.5	<1.0	ND
	5/4/93[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/5/94	SPA	8010	<0.5	---	1.3	5.2	0.5	1.0	0.8	<0.5	<0.5	<1.0	ND[18]
	5/13/94	SPA	8010	<0.5	---	12	31	2.7	<0.5	4.8	<0.5	<0.5	<0.5	ND[29]
	10/24/94[33]	SPA	8010	<10	---	13	44	<10	<10	<10	<10	<10	<10	ND[31,33]
	4/19/95	SPA	8010	0.7	---	14	36	<0.5	<0.5	9.2	<0.5	<0.5	<0.5	ND[18]
	11/6/95	GTEL	8010	1.0	---	19	41	1.4	<1.0	14	<1.0	<1.0	<1.0	ND
	4/26/96	Inaccessible	---	---	---	---	---	---	---	---	---	---	---	---
	10/10/96	**GTEL**	**8010**	**0.7**	**---**	**17**	**38**	**0.8**	**<0.5**	**14**	**<0.5**	**<0.5**	**<0.8**	**ND**
MW-11	4/14/89	CCAS	8010	<1.0	120	---	---	<1.0	<1.0	4.0	<1.0	<2.0	10	---
	7/31/89	CCAS	8010	0.9	---	40	110	2.2	1.4	2.9	<0.2	<0.2	<0.2	ND
	12/8/89	GTEL	8010	0.5	120	---	---	2.1	1.2	4.1	<0.5	<0.5	2.4	---
	3/21/90	GTEL	8010	1.3	150	---	---	1.2	1.7	3.5	<0.5	<0.5	4.3	ND[10]
	6/19/90	GTEL	8010	0.068	140	---	---	1.3	<0.5	5.0	<0.5	<0.5	1.0	---
	9/21/90	GTEL	8010	<0.2	100	---	---	1.1	<0.5	3.8	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	---	23	43	0.9	0.7	3.0	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	0.9	---	44	110	0.5	<0.5	5.0	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	29	77	0.9	<0.5	2.4	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	34	240	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<5.0	---	33	91	<5.0	<5.0	<5.0	<5.0	<5.0	<10	ND
	3/26/92	SPA	8010	<2.5	---	21	51	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	ND
	7/23/92	SPA	8010	<0.5	---	18	46	0.6	<0.5	1.4	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	0.5	---	36	80	<0.5	<0.5	4.6	<0.5	<0.5	<1.0	ND
	5/4/93[24]	—	---	---	---	—	---	---	---	---	---	---	---	—
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94	SPA	8010	<0.5	---	62	82	<0.5	<0.5	7.9	<0.5	<0.5	1.7	ND[29]
	10/24/94[33]	SPA	8010	<10	---	28	75	<10	<10	<10	<10	<10	<10	ND[31,33]
	4/19/95	SPA	8010	<0.5	---	18	39	<0.5	<0.5	6.5	<0.5	1.0	<0.5	ND[34]
	11/6/95	Inaccessible	---	---	---	—	—	---	---	---	---	---	---	---

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<---ppb--->										
MW-11 (cont)	4/26/96	Inaccessible	---	---	---	---	---	---	---	---	---	---	---	---
	10/10/96	Inaccessible	---	---	---	---	---	---	---	---	---	---	---	---
MW-12	4/14/89	CCAS	8010	<1.0	1.0	---	---	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	---
	7/31/89	CCAS	8010	<0.1	1.7	---	---	<0.1	<0.1	0.8	<0.1	<0.5	<0.1	ND
	12/8/89	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	3/21/90	GTEL	8010	<0.2	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	9/21/90	GTEL	8010	<0.2	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92[22]	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-13	3/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	9/20/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND[11]
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	5/4/93[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[29]
	10/24/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[29]
	4/19/95	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	11/6/95	GTEL	8010	<1.0	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
	4/26/96	GTEL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND[36]
	10/10/96	Inaccessible	---	---	---	---	---	---	---	---	---	---	---	---
MW-14	3/21/90	GTEL	8010	<2.0	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<2.0	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<--------				ppb						-------->
MW-14	9/20/90	GTEL	8010	<2.0	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
(cont)	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	5/4/93[23]	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-15	3/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	9/20/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND[32]
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	5/4/93[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[29]
	10/24/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	3.1	<0.5	3.8	<0.5	ND[29]
	4/19/95	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	11/6/95	GTEL	8010	<1.0	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
	4/26/96	GTEL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.8	ND[36]
	10/10/96	**GTEL**	**8010**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.8**	**ND**
MW-16	3/21/90	GTEL	8010	<0.2	0.8	---	---	<0.5	<0.5	27	8.0	2.0	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	35	7.0	2.0	<1.0	---
	9/20/90	GTEL	8010	<0.2	0.9	---	---	<0.5	<0.5	49	15	4.1	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	29	18	4.0	<1.0	ND[13]
	5/10/91	SAL	8010	<0.5	---	<0.5	0.5	<0.5	<0.5	32	10	4.0	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	35	13	1.9	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	1.3	<0.5	<0.5	47	12	1.8	<1.0	ND[15]
	1/29/92	SPA	8010	<0.5	---	<0.5	0.9	<0.5	<0.5	31	11	1.8	<1.0	ND

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<———				ppb						———>
MW-16	3/26/92	SPA	8010	<0.8	---	<0.8	<0.8	<0.8	<0.8	24	8.5	1.7	<1.7	ND[19]
(cont)	7/23/92	SPA	8010	<0.5	---	<0.5	0.9	<0.5	<0.5	37	12	1.0	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	1.7	<0.5	<0.5	39	14	1.1	<1.0	ND
	5/4/93	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	32	10	1.1	<1	ND[18]
	1/5/94[24]	---	---	---	---	---	---	---	---	---	---	---	---	---
	5/13/94[27]	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-17	3/21/90	GTEL	8010	<0.2	5.2	---	---	0.7	1.3	32	11	1.1	<1.0	---
	6/19/90	GTEL	8010	<0.2	3.1	---	---	<0.5	1.0	38	13	1.2	<1.0	---
	9/20/90	GTEL	8010	<0.2	2.4	---	---	<0.5	1.4	44	16	2.8	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	2.0	<0.5	0.6	34	15	2.0	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	3.0	<0.5	0.6	37	14	1.0	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	2.5	<0.5	<0.5	69	15	0.9	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	13	<0.5	<0.5	59	14	2.4	<1.0	ND
	1/29/92	SPA	8010	<0.5	---	<0.5	2.9	<0.5	0.8	35	15	1.1	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	1.5	<0.5	0.7	41	12	0.6	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	1.1	<0.5	<0.5	31	14	0.8	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	1.6	<0.5	<0.5	42	11	0.8	<1.0	ND
	5/4/93	SPA	8010	<0.5	---	<0.5	1.1	<0.5	<0.5	26	12	0.6	<1.0	ND[18]
	1/5/94	SPA	8010	<0.5	---	<0.5	1.1	<0.5	<0.5	25	13	0.8	<1.0	ND[18]
	5/13/94	SPA	8010	<0.5	---	<0.5	1.0	<0.5	0.6	23	13	<0.5	<0.5	ND[29]
	10/24/94	SPA	8010	<0.5	---	<0.5	1.4	<0.5	<0.5	26	13	<0.5	<0.5	ND[29]
	4/19/95	SPA	8010	<0.5	---	<0.5	0.9	<0.5	1.1	21	12	1.2	<0.5	ND[18]
	11/6/95	GTEL	8010	<1.0	---	<1.0	1.1	<1.0	<1.0	29	13	<1.0	<1.0	ND
	4/26/96	GTEL	8010	<0.5	---	<0.5	0.8	<0.5	1.2	24	11	0.6	<0.8	ND[36]
	10/10/96	**GTEL**	**8010**	**<0.5**	**—**	**<0.5**	**1.5**	**<0.5**	**0.9**	**31**	**15**	**0.6**	**<0.8**	**ND**
MW-18	3/21/90	GTEL	8010	<0.2	1.7	---	---	<0.5	2.4	33	20	0.9	<1.0	---
	6/19/90	GTEL	8010	<0.2	2.7	---	---	<0.5	0.9	63	20	0.73	<1.0	---
	9/20/90	GTEL	8010	<0.2	3.3	---	---	<0.5	1.6	76	25	1.7	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	2.0	<0.5	0.8	44	21	1.0	<1.0	---
	5/10/91	SAL	8010	<0.5	---	<0.5	2.0	<0.5	0.7	47	20	2.0	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	2.0	<0.5	0.7	32	25	1.0	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	3.6	<0.5	0.5	60	18	1.5	<1.0	ND
	1/29/92	SPA	8010	<5.0	---	<5.0	<5.0	<5.0	<5.0	67	17	<5.0	<10	ND
	3/26/92	SPA	8010	<1.2	---	<1.2	6.4	<1.2	<1.2	130	19	1.7	<2.5	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	3.0	<0.5	0.5	67	19	0.8	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	1.1	<0.5	<0.5	52	14	0.8	<1.0	ND
	5/4/93	SPA	8010	<0.5	---	<0.5	1.9	<0.5	0.7	48	18	2.5	<1.0	ND[26]

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<———				ppb						———>
MW-18	1/5/94	SPA	8010	<0.5	---	<0.5	4.0	<0.5	0.8	94	17	1.0	<1.0	ND[18]
(cont)	5/13/94	SPA	8010	<0.5	---	<0.5	0.8	<0.5	0.8	16	15	0.8	<0.5	ND[29]
	10/27/94	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	22	15	1.2	<0.5	ND[29]
	4/19/95	SPA	8010	<0.5	---	<0.5	2.2	<0.5	1.3	46	14	1.1	<0.5	ND[35]
	11/6/95	GTEL	8010	<1.0	---	<1.0	1.8	<1.0	1.2	45	18	<1.0	<1.0	ND
	4/26/96	GTEL	8010	<0.5	---	0.9	2.8	<0.5	3.0	31	17	0.6	<0.8	ND[36]
	10/10/96[27]	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-19	3/21/90	GTEL	8010	<0.2	10	---	---	<0.5	2.5	41	53	3.2	<1.0	---
	6/19/90	GTEL	8010	<0.2	13	---	---	<0.5	1.5	46	47	2.8	<1.0	---
	9/20/90	GTEL	8010	<0.2	5.8	---	---	<0.5	2.5	39	32	3.1	<1.0	---
	12/28/90	SAL	8010	<0.5	---	0.8	22	<0.5	1.0	40	44	3.0	<1.0	---
	5/10/91	SAL	8010	<0.5	---	2.0	12	<0.5	1.0	47	47	3.0	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	1.1	4.8	<0.5	1.1	41	35	2.8	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	1.9	29	<0.5	0.9	59	31	2.7	<1.0	ND
	1/29/92	SPA	8010	<5.0	---	<5.0	8.9	<5.0	<5.0	51	44	3.0	<10	ND
	3/26/92	SPA	8010	<1.2	---	1.7	23	<1.2	1.5	68	130	1.4	<2.5	ND[17]
	7/23/92	SPA	8010	1.1	---	1.4	5.6	<0.5	1.0	61	38	3.3	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	0.9	5.3	<0.5	1.1	46	24	2.2	<1.0	ND
	5/4/93	SPA	8010	<0.5	---	2.5	8.7	0.5	1.1	69	32	3.9	<1.0	ND[18]
	1/5/94	SPA	8010	<0.5	---	1.7	1.7	<0.5	16	49	46	<0.5	<1.0	ND[18]
	5/13/94	SPA	8010	<0.5	---	1.8	22	<0.5	0.7	40	58	<0.5	<0.5	ND[29]
	10/24/94[33]	SPA	8010	<50	---	110	54	<50	<50	98	300	<50	<50	ND[32,33]
	4/19/95	SPA	8010	<0.5	---	<0.5	65	<0.5	<0.5	130	670	<0.5	<0.5	ND[18]
	11/6/95	Abandoned	---	---	---	---	---	---	---	---	---	---	---	---
MW-19A	11/6/95	GTEL	8010	1.0	---	<1.0	110	<1.0	<1.0	160	1,500	<1.0	<1.0	ND
	4/26/96	GTEL	8010	<5.0	---	<5.0	140	<5.0	<5.0	200	990	<5.0	<8.0	ND[37]
	10/10/96	**GTEL**	**8010**	**<10**	---	**<10**	**110**	**<10**	**<10**	**150**	**1,500**	**<10**	**<16**	**ND**
Trip Blank														
AA	4/14/89	CCAS	8010	<1.0	<0.5	---	---	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	---
	7/31/89	CCAS	8010	<0.1	<0.5	---	---	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	---
	12/8/89	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	3/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	3/26/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	6/19/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	9/21/90	GTEL	8010	<0.2	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---
	12/28/90	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	---

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

Well ID	Date Sampled	Analytical Lab	Analytical Method	1,1-DCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	1,1-DCA	1,1,1-TCA	TCE	PCE	CF	VC	Other HVOCs
				<---					ppb					--->
Trip Blank (cont)	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND[14]
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND[16]
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	5/4/93	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	ND[18]
	11/6/95	GTEL	8010	<1.0	---	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
Bailer Blank BB	5/10/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	8/8/91	SAL	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	11/27/91	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND[16]
	1/29/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	3/26/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	7/23/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[18]
	10/28/92	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	ND
	5/4/93	SPA	8010	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	ND[18]

Table 2. Analytical Results for Groundwater - Halogenated Volatile Organic Compounds - Former Chevron Asphalt Plant & Terminal #1001067, Emeryville, California (continued)

EXPLANATION:

1,1-DCE = 1,1-Dichloroethene
1,2-DCE = 1,2-Dichloroethene
t-1,2-DCE = trans-1,2-Dichloroethene
c-1,2-DCE = cis-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
1,1,1-TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
PCE = Tetrachloroethene
CF = Chloroform
VC = Vinyl Chloride
Other HVOCs = Other Halogenated Volatile Organic Compounds
ppb = Parts per billion
--- = Not analyzed/not applicable
ND = Not detected at detection limits of 0.5 to 1 ppb
D = Duplicate analysis

ANALYTICAL METHOD:

VOC = EPA Method 8010 for Volatile Organic Compounds

ANALYTICAL LABORATORIES:

CCAS = Coast to Coast Analytical Services of San Luis Obispo, California
GTEL = Groundwater Technologies Environmental Laboratory of Concord, California
SAL = Superior Analytical Laboratory of Martinez and San Francisco, California
SPA = Superior Precision Analytical, Inc. of Martinez and San Francisco, California

NOTES:

Analytical results prior to April 19, 1995, were compiled from the quarterly groundwater monitoring reports prepared for Chevron by Sierra Environmental Services.

1 6 ppb 1,2-dichloropropane detected; other HVOCs not detected.
2 0.6 ppb 1,2-dichloroethane detected; other HVOCs not detected.
3 63 ppb chloromethane and 0.6 ppb methylene chloride detected; other HVOCs not detected; sample contained 1,250 ppb total dissolved solids.

NOTES: (continued)

4 0.9 ppb trans-1,3-dichloropropane detected; other HVOCs not detected; sample contained 810 ppb total dissolved solids.
5 0.9 ppb trichlorofluoromethane and 1 ppb trans-1,3-dichloropropane detected; other HVOCs not detected.
6 11 ppb trans-1,3-dichloropropane detected; other HVOCs not detected.
7 Monitoring well was destroyed during excavation in 1989.
8 0.1 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.
9 Well MW-9 was not sampled after 5/10/91 because it could not be located. Previous analytic data were not available for inclusion in this report.
10 1.8 ppb 1,2-dichloroethane detected; other HVOCs not detected
11 3 ppb 1,1,2,2-tetrachloroethane detected; other HVOCs not detected.
12 0.9 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.
13 0.5 ppb 1,2-dichloroethane detected; other HVOCs not detected.
14 3.1 ppb 1,2-dichlorobenzene detected; other HVOCs not detected.
15 0.9 ppb 1,2-dichloroethane detected; other HVOCs not detected.
16 Trace concentrations of trihalomethane compounds detected in bailer blank.
17 1,1,2,2-Tetrachloroethane detected at 1.8 ppb; other HVOCs not detected at detection limits of 1.2 to 2.5 ppb.
18 Other HVOCs not detected at detection limit of 0.5 ppb.
19 Other HVOCs not detected at detection limits ranging from 0.8 to 1.7 ppb.
20 Other HVOCs not detected at detection limits of 25 ppb.
21 Other HVOCs not detected at detection limits of 50 ppb.
22 Well MW-12 could not be located after building demolition.
23 Well MW-8 was obstructed, therefore ground water samples could not be taken.
24 Monitoring well obstructed due to on-site construction activities.
25 Monitoring well abandoned on March 10, 1993 by Soils Expoloration Services of Benicia, California.
26 Dichloromethane detected at 6.2 ppb; other HVOCs not detected at detection limits of 0.5 ppb.
27 Well paved over as a result of on-site construction activities.
28 Well obstructed.
29 Other HVOCs not detected at detection limits of 0.5 to 1.0 ppb.
30 Well was dry.
31 Other HVOCs not detected at detection limits of 10 to 20 ppb.
32 Other HVOCs not detected at detection limits of 50 to 100 ppb.
33 Detection limits raised due to sample dilution.
34 Chloromethane was detected at 2.4 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.
35 Chloromethane was detected at 0.6 ppb. Other HVOCs not detected at detection limits of 0.5 ppb.
36 Other HVOC's not detected at detection limits of 0.5 to 5.0.
37 Other HVOC's not detected at detection limits of to 5.0 to 50.

5161voc.tqm

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using Chevron-designated disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron USA Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-1 | Well Condition:

Well Location Description:

Well Diameter: in | Hydrocarbon Thickness:

Total Depth: ft

Depth to Liquid: ft

Volume Factor (VF)			
2" = 0.17	6" = 1.50	12" = 5.80	
3" = 0.38			
4" = 0.66			

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume ____ gal.

Purge Equipment: | Sampling Equipment: D. Bailer

Did well dewater: | If yes, Time: | Volume:

Starting Time: | Purging Flow Rate: gpm.

Sampling Time:

Time	pH	Conductivity	Temperature	Volume
	Unable to locate well			
	Used metal detector			

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40 ml	Y	HCl	GTEL	Gas BTEX & MTBE

Comments: Per B. Cochran's request of 7/2/96 - Tried to locate missing wells with metal detector.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-2A | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness: 0

Total Depth: 12.0 ft

Depth to Liquid: 5.32 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

3 # of casing Volume: 6.68 x 1.7 x(VF) 1.1 #Estimated purge Volume: 3.3 gal.

Purge Equipment: Bailer | Sampling Equipment: D. Bailer

Did well dewater: NO | If yes, Time: ___ | Volume:

Starting Time: 1210 | Purging Flow Rate: — gpm.

Sampling Time: 1219

Time	pH	Conductivity	Temperature	Volume
1213	6.79	1344	22.8	1.1 gal
1216	6.84	1375	23.1	2.2 "
1219	6.90	1389	22.5	3.3 "

Weather Conditions: Sunny

Water Color: clear | Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-2A	6x40ml	Y	HCl	GTEL	Gas BTEX + MTBE 8015

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-3 | Well Condition:

Well Location Description:

Well Diameter: in | Hydrocarbon Thickness:

Total Depth: ft

Depth to Liquid: ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume ____ gal.

Purge Equipment: | Sampling Equipment: D. Bailer

Did well dewater: | If yes, Time: | Volume:

Starting Time: | Purging Flow Rate: gpm.

Sampling Time:

Time	pH	Conductivity	Temperature	Volume
	Unable to locate well			
	Used metal detector			

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40 ml	Y	HCl	GTEL	Gas BTEX 8015

Comments: * Per B. Cochrans request of 7/2/96 tried to locate missing wells with metal detector.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-7 | Well Condition: OK

Well Location Description:

Well Diameter: 3 in | Hydrocarbon Thickness: 0

Total Depth: 14.0 ft

Depth to Liquid: 5.02 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

3 # of casing Volume: 8.98 x .38 x(VF) 3.4 #Estimated purge Volume: 10.2 gal.

Purge Equipment: Bailer | Sampling Equipment: D. Bailer

Did well dewater: Yes | If yes, Time: 9:07 | Volume: 5 gal

Starting Time: 9:02 | Purging Flow Rate: — gpm.

Sampling Time: 1238

Time	pH	Conductivity	Temperature	Volume
9:05	6.94	694	21.7	3.4 gal
9:07	6.80	689	21.8	5.0
1238	6.98	685	21.4	6.0

Weather Conditions: sunny

Water Color: clear | Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-7	6x40 ml	Y	HCl	GTEL	Gas BTEX MTBE 8010

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-8 | Well Condition:

Well Location Description:

Well Diameter: in | Hydrocarbon Thickness:

Total Depth: ft

Depth to Liquid: ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume: ____ gal.

Purge Equipment: | Sampling Equipment: D. Bailer

Did well dewater: | If yes, Time: | Volume:

Starting Time: | Purging Flow Rate: gpm.

Sampling Time:

Time	pH	Conductivity	Temperature	Volume
Not sampled due to storage container on top of well				

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40ml	Y	HCl	GTEL	Gas, BTEX "INTACT

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-9 | Well Condition:

Well Location Description:

Well Diameter: in | Hydrocarbon Thickness:

Total Depth: ft

Depth to Liquid: ft

Volume Factor (VF)			
2" = 0.17	6" = 1.50	12" = 5.80	
3" = 0.38			
4" = 0.66			

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume ____ gal.

Purge Equipment: | Sampling Equipment: D. Bailer

Did well dewater: | If yes, Time: | Volume:

Starting Time: | Purging Flow Rate: gpm.

Sampling Time:

Time	pH	Conductivity	Temperature	Volume
	Unable	to locate	well.	
	used	metal	detector	

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40 ml	Y	HCl	GTEL	Gas BTEX & MTBE

Comments: *Per Bob Cochran's request of 7/2/96 tried to locate missing wells with metal detector.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-10 | Well Condition: OK

Well Location Description:

Well Diameter: 4 in | Hydrocarbon Thickness: —

Total Depth: 20.0 ft

Depth to Liquid: 6.10 ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: 13.90 x .66 x(VF) 9.2 #Estimated purge Volume: 27.5 gal.

Purge Equipment: Stack Pump | Sampling Equipment: D. Bailer

Did well dewater: NO | If yes, Time: — | Volume:

Starting Time: 9:30 | Purging Flow Rate: 1.9 gpm.

Sampling Time: 9:50

Time	pH	Conductivity	Temperature	Volume
9:35	6.96	756	18.1	9.5 gal
9:40	6.98	747	17.8	19.0
9:45	6.99	748	17.2	28.5
9:50	6.99	747	17.1	29.5

Weather Conditions: sunny

Water Color: clear | Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-10	6x40 ml	Y	HCl	GTEL	Gas BTEX & MTBE 8010

Comments: Replaced & installed new locking cap (4")

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-11 | Well Condition:

Well Location Description:

Well Diameter: ____ in | Hydrocarbon Thickness:

Total Depth: ____ ft

Depth to Liquid: ____ ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66	6" = 1.50	12" = 5.80

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume: ____ gal.

Purge Equipment: ____ Sampling Equipment: D. Bailer

Did well dewater: ____ If yes, Time: ____ Volume: ____

Starting Time: ____ Purging Flow Rate: ____ gpm.

Sampling Time: ____

Time	pH	Conductivity	Temperature	Volume
	Not sampled due to concrete dividers on top of well			

Weather Conditions:

Water Color: ____ Odor: ____

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40 ml	Y	HCl	GTEL	Ga. BTEX & MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-12 | Well Condition:

Well Location Description:

Well Diameter: ____ in | Hydrocarbon Thickness:

Total Depth: ____ ft

Depth to Liquid: ____ ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume ____ gal.

Purge Equipment: ____ | Sampling Equipment: D. Bailer

Did well dewater: ____ | If yes, Time ____ | Volume ____

Starting Time: ____ | Purging Flow Rate: ____ gpm.

Sampling Time: ____

Time	pH	Conductivity	Temperature	Volume
	Unable to locate well			
	Used metal detector			

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40ml	Y	HCl	GTEL	Ga BTEX MTBE

Comments: * Per R. Cochrans request of 7/7/96, tried to locate missing wells w/metal detector.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-13 | Well Condition:

Well Location Description:

Well Diameter: in | Hydrocarbon Thickness:

Total Depth: ft

Depth to Liquid: ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume: ____ gal.

Purge Equipment: | Sampling Equipment: D. Bailer

Did well dewater: | If yes, Time: ____ Volume:

Starting Time: | Purging Flow Rate: gpm.

Sampling Time:

Time	pH	Conductivity	Temperature	Volume
Not available due to bis				
pite of bedrock on top of well				
in 30 yards of bedrock for RR tracks.				

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40 ml	Y	HCl	GTEL	Gas BTEX MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-15 | Well Condition: OK

Well Location Description:

Well Diameter: 4 in | Hydrocarbon Thickness: 0

Total Depth: 7.0 ft

Depth to Liquid: 5.22 ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: 1.78 x .66 x(VF) 1.2 #Estimated purge Volume: 7.6 gal.

Purge Equipment: Bailer | Sampling Equipment: D. Bailer

Did well dewater: Yes | If yes, Time: 1007 Volume: 1.2 gal

Starting Time: 10:05 | Purging Flow Rate: — gpm.

Sampling Time: 1245

Time	pH	Conductivity	Temperature	Volume
10:07	6.90	442	19.2	1.2 gal
12:45	6.93	455	20.1	2.4 gal

Weather Conditions: Sunny

Water Color: Clear | Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-15	6x40ml	Y	HCl	GTEL	Gas BTEX & MTBE 8010

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-16 | Well Condition:

Well Location Description:

Well Diameter: in | Hydrocarbon Thickness:

Total Depth: ft

Depth to Liquid: ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume: ____ gal.

Purge Equipment: | Sampling Equipment: D. Bailer

Did well dewater: | If yes, Time: | Volume:

Starting Time: | Purging Flow Rate: gpm.

Sampling Time:

Time	pH	Conductivity	Temperature	Volume

The metal detector shows some metal spots around the area where MW-16 should be but a jackhammer is needed in order to break the asphalt area. The well area is ~ 7' from the curve and the spot is in the street.

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40 ml	Y	HCl	GTEL	Gas BTEX MTBE

Comments: ~~X~~ Per B Cochrans request of 7/2/96 tried to locate missing wells w/ metal detector - may have idoated MW-16.

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-17 | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness: ⊘

Total Depth: 12.0 ft

Depth to Liquid: 5.72 ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: 6.28 x .17 x(VF) 1.1 #Estimated purge Volume: 3.3 gal.

Purge Equipment: Bailer | Sampling Equipment: D. Bailer

Did well dewater: NO | If yes, Time: ___ | Volume:

Starting Time: 1027 | Purging Flow Rate: ___ gpm.

Sampling Time: 1036

Time	pH	Conductivity	Temperature	Volume
1030	6.51	411	18.2	1.1
1033	6.44	422	18.0	2.2
1036	6.40	429	17.8	3.3

Weather Conditions: Sunny

Water Color: light brown | Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-17	8x40ml	X	HCl	GTEL	Ga. BTEX MTBE 8010

Comments: Lid needs to be replaced - bolts are broken

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-18 | Well Condition:

Well Location Description:

Well Diameter: in | Hydrocarbon Thickness:

Total Depth: ft

Depth to Liquid: ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: ____ x ____ x(VF) ____ #Estimated purge Volume ____ gal.

Purge Equipment: | Sampling Equipment: D. Bailer

Did well dewater: | If yes, Time: | Volume:

Starting Time: | Purging Flow Rate: gpm.

Sampling Time:

Time	pH	Conductivity	Temperature	Volume
	Not sampled - buried under asphalt - Area has been graded with new asphalt.			

Weather Conditions:

Water Color: | Odor:

Sediment Description:

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-	3x40ml	Y	HCl	GTEL	Gas BTEX & MTBE

Comments:

WELL SAMPLING FIELD DATA SHEET

SAMPLER: G. Sanchez | DATE: 10-10-96

ADDRESS: Powell @ Landregan | JOB #: 5161.85

CITY: Emeryville | SS#: 1001067

Well ID: MW-19A | Well Condition: OK

Well Location Description:

Well Diameter: 2 in | Hydrocarbon Thickness: 0

Total Depth: 15.0 ft

Depth to Liquid: 4.56 ft

Volume Factor (VF)			
	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38		
	4" = 0.66		

3 # of casing Volume: 10.44 x .17 x(VF) 1.8 #Estimated purge Volume: 5-4 gal.

Purge Equipment: Stack Pump | Sampling Equipment: D. Bailer

Did well dewater: no | If yes, Time: | Volume:

Starting Time: 1102 | Purging Flow Rate: 1.8 gpm.

Sampling Time: 1110

Time	pH	Conductivity	Temperature	Volume
1103	6.64	466	17.9	1.8 gal
1104	6.79	432	18.2	3.6
1105	6.82	431	18.2	5.4
1110	6.82	431	18.3	6.3

Weather Conditions: sunny

Water Color: Clear | Odor: none

Sediment Description: none

LABORATORY INFORMATION

Sample ID	Container	Refrig	Preservative Type	Lab	Analysis
MW-19A	6x40ml	Y	HCl	GTEL	Gas BTEX & MTBE 8010

Comments:

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

Chain-of-Custody-Record

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

Chevron Facility Number: 100067
Facility Address: Powell @ Landregan • Emeryville
Consultant Project Number: 5761.85
Consultant Name: Gettler-Ryan
Address: 6747 Sierra Ct, Ste J, Dublin 94568
Project Contact (Name): Deanna Harding
(Phone): 510 551-7555 (Fax Number): 510 551-7888

Chevron Contact (Name): Bob Cochran
(Phone): (510) 842-9655
Laboratory Name: GTEL
Laboratory Release Number: 347940
Samples Collected by (Name): Guadalupe Sanchez
Collection Date: 10-10-96
Signature: Guadalupe S.

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE** (8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	Remarks
TB-LB	01	2	W	G	—	HCl	Yes	X								DO NOT BILL TB-LB ANALYSIS
MW-7	02	6			1238						X					**Confirm MTBE (highest hit from 8020) by EPA 8260
MW-10	03				9:50											
MW-15	04				1245											
MW-17	05				1036											
MW-19A	06				1110											
MW-2A	07	↓	↓	↓	1219	↓	↓	↓			↓					

WG00852

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Guadalupe S.	G/R	10-10-96 1630	D. Harding	G-R	10/11/96
D. Harding	G-R	10/11/96 1310	John Weber	NEI/GTEL	10/11/96 1310
John Weber	NEI/GTEL	10/11/96 16:30	Received For Laboratory By (Signature)		Date/Time
			Teresa Le 110712717C		10/12/96 0830

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

No seals
1°C

COC-3.DWG/03 91/mCH

NEI/GTEL
ENVIRONMENTAL LABORATORIES, INC.

Midwest Region
4211 May Avenue
Wichita, KS 67209
(316) 945-2624
(800) 633-7936
(316) 945-0506 (FAX)

October 24, 1996

Deanna Harding
GETTLER-RYAN
6747 Sierra Ct.
Suite J
Dublin, CA 94568

RE: GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

Dear Deanna Harding:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 10/12/96.

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. This report is to be reproduced only in full.

NEI/GTEL is certified by the California Department of Health Service under Certification Number 1845.

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

Sincerely,
GTEL Environmental Laboratories, Inc.

T.R. Loucks project coordinator for

Terry R. Loucks
Laboratory Director

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

Method: EPA 8020A
Matrix: Aqueous

GTEL Sample Number	W6100252-01	W6100252-02	W6100252-03	W6100252-04
Client ID	TB-LB	MW-7	MW-10	MW-15
Date Sampled		10/10/96	10/10/96	10/10/96
Date Analyzed	10/19/96	10/19/96	10/19/96	10/19/96
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
MTBE	5.0	ug/L	< 5.0	< 5.0	34.	< 5.0
Benzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes (total)	0.5	ug/L	< 0.5	< 0.5	0.6	< 0.5
BTEX (total)	--	ug/L	--	--	0.6	--
TPH as Gasoline	50	ug/L	< 50	< 50	< 50	< 50

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. Analyte list modified to include additional compounds. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

Method: EPA 8020A
Matrix: Aqueous

GTEL Sample Number		W6100252-05	W6100252-06	W6100252-07	--
Client ID		MW-17	MW-19A	MW-2A	--
Date Sampled		10/10/96	10/10/96	10/10/96	--
Date Analyzed		10/19/96	10/19/96	10/19/96	--
Dilution Factor		1.00	1.00	1.00	--
Analyte	Reporting Limit / Units	Concentration:			
MTBE	5.0 ug/L	< 5.0	21.	< 5.0	--
Benzene	0.5 ug/L	< 0.5	< 0.5	< 0.5	--
Toluene	0.5 ug/L	< 0.5	< 0.5	< 0.5	--
Ethylbenzene	0.5 ug/L	< 0.5	< 0.5	< 0.5	--
Xylenes (total)	0.5 ug/L	< 0.5	< 0.5	< 0.5	--
BTEX (total)	-- ug/L	--	--	--	--
TPH as Gasoline	50 ug/L	< 50	610	60	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. Analyte list modified to include additional compounds. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

W6100252-06:

Hydrocarbons in the gasoline range do not match the gasoline standard pattern.

W6100252-07:

Hydrocarbons in the gasoline range do not match the gasoline standard pattern.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organic
Project ID (number): 5161.85 Method: EPA 8020/
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueou

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A		Acceptability Limits:	43-136%
101896GC4-1	CV101896204	Calibration Verifi	88.7
101896GC4-3	BW1018964	Method Blank Water	76.8
101896GC4-6	MS10024601	Matrix Spike	79.9
101896GC4-7	DP10024602	Duplicate	84.3
--	10025201	TB-LB	72.5
--	10025202	MW-7	71.4
--	10025203	MW-10	80.1
--	10025204	MW-15	76.1
--	10025205	MW-17	77.7
--	10025206	MW-19A	72.3
--	10025207	MW-2A	73.7

Notes:
*: Indicates values outside of acceptability limits. See Nonconformance Summary.

Project ID (Number): 5161.85
Project ID (Name): Chevron SS #1001067
Powell & Landgren
Emeryville, CA
Work Order Number: W6-10-0252
Date Reported: 10-22-96

METHOD BLANK REPORT

Volatile Organics in Water
EPA Method 8020A

Date of Analysis: 18-OCT-96 QC Batch No: 101896GC4-3

Analyte	Concentration, ug/L
MTBE	<5.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
Xylene (total)	<0.5
TPH as Gasoline	<50

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organic
Project ID (number): 5161.85 Method: EPA 8020
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueou

Calibration Verification Sample Summary

Analyte		Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:ug/L	QC Batch:101896GC4-1			
Benzene		20.0	21.8	109.	77-123%
Toluene		20.0	23.6	118.	77.5-122.5%
Ethylbenzene		20.0	24.3	122.	63-137%
Xylenes (Total)		60.0	65.5	109.	85-115%
TPH as Gasoline		500.	485.	97.0	80-120%

Notes:
QC check source: Supelco #LA12389

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8020A
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Duplicate Sample Results

Analyte	Original Concentration	Duplicate Concentration	RPD, %	Acceptability Limits, %
EPA 8020A Units: ug/L	QC Batch: 101896GC4-7	GTEL Sample ID: W6100246-02		Client ID: Batch QC
MTBE	< 10.0	< 10.0	NA	20
Benzene	7.31	7.14	2.35	23.9
Toluene	< 1.00	< 1.00	NA	27.2
Ethylbenzene	< 1.00	< 1.00	NA	21.6
Xylenes (Total)	12.9	12.5	3.15	22.0
TPH as Gasoline	594.	547.	8.24	20

Notes:

NA - The concentration of the analyte is less than the reporting limit.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organic
Project ID (number): 5161.85 Method: EPA 8020
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueou

Matrix Spike(MS) Results

GTEL Sample ID:W6100246-01 MS ID:MS10024601
Analysis Date: 19-OCT-96 19-OCT-96

Units: ug/L Analyte	Sample Conc.	Spike Added	MS Conc.	MS % Rec.	Acceptability Limits %Rec.
Benzene	< 0.5 (0.230)	20.0	18.9	93.4	67-110
Toluene	< 0.5 (0.240)	20.0	20.8	103.	68-115
Ethylbenzene	< 0.5 (0.300)	20.0	20.8	103.	65-120
Xylenes (Total)	1.0 (1.05)	60.0	67.1	110.	62-119

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organic
Project ID (number): 5161.85 Method: EPA 802C
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueou

Conformance/Non-Conformance Summary

(X = Requirements Met * = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

Method: EPA 8240B
Matrix: Aqueous

GTEL Sample Number	W6100252-08	--	--	--
Client ID	MW-10	--	--	--
Date Sampled	10/10/96	--	--	--
Date Analyzed	10/22/96	--	--	--
Dilution Factor	1.00	--	--	--

Analyte	Reporting Limit	Units	Concentration:			
MTBE	5.0	ug/L	< 5.0	--	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8240B:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8240B
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Surrogate Results

QC Batch No.	Reference	Sample ID	DCA-D4	TOL-D8	4-BFB
Method: EPA 8240B		Acceptability Limits:	76-114%	88-110%	86-115%
102296HP3-1	LW102296HP3	Laboratory Control	105.	100.	106.
102296HP3-2	LWD102296HP3	LCS Water Duplicat	108.	100.	110.
102296HP3-5	BW102296HP3	Method Blank Water	107.	99.8	114.
--	10025208	MW-10	114.	99.7	113.

Notes:
*: Indicates values outside of acceptability limits. See Nonconformance Summary.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8240B
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Method Blank Results

QC Batch No: 102296HP3-5
Date Analyzed: 22-OCT-96

Analyte	Method: EPA 8240B Concentration: ug/L
Chloromethane	< 10.0
Bromomethane	< 10.0
Vinyl chloride	< 10.0
Chloroethane	< 10.0
Methylene chloride	< 5.00
Acetone	< 20.0
Carbon disulfide	< 5.00
1,1-Dichloroethene	< 5.00
1,1-Dichloroethane	< 5.00
cis-1,2-Dichloroethene	< 5.00
trans-1,2-Dichloroethene	< 5.00
Chloroform	< 5.00
1,2-Dichloroethane	< 5.00
2-Butanone	< 20.0
1,1,1-Trichloroethane	< 5.00
Carbon tetrachloride	< 5.00
Vinyl acetate	< 20.0
Bromodichloromethane	< 5.00
1,2-Dichloropropane	< 5.00
cis-1,3-Dichloropropene	< 5.00
Trichloroethene	< 5.00
Dibromochloromethane	< 5.00
1,1,2-Trichloroethane	< 5.00
Benzene	< 5.00
2-Chloroethyl vinyl ether	< 10.0
trans-1,3-Dichloropropene	< 5.00
Bromoform	< 5.00
4-Methyl-2-pentanone	< 20.0
2-Hexanone	< 20.0
Tetrachloroethene	< 5.00
1,1,2,2-Tetrachloroethane	< 5.00
Toluene	< 5.00
Chlorobenzene	< 5.00
Ethylbenzene	< 5.00
Styrene	< 5.00
Xylenes (Total)	< 5.00
1,2-Dichlorobenzene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
MTBE	< 5.00

Notes:

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8240B
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Laboratory Control Sample (LCS) and Laboratory Control Duplicate Results

Analyte	Spike Amount	LCS Concentration	LCS Recovery, %	LCS Duplicate Concentration	LCS Duplicate Recovery, %	RPD, %	Acceptability Limits RPD, %	Acceptability Limits Recovery, %
EPA 8240B Units: ug/L		QC Batch:102296HP3-2						
1,1-Dichloroethene	50.0	44.5	89.0	44.7	89.4	0.448	14	61-145%
Trichloroethene	50.0	49.3	98.6	50.3	101.	2.40	14	71-120%
Benzene	50.0	53.2	106.	54.2	108.	1.87	11	76-127%
Toluene	50.0	52.6	105.	54.0	108.	2.82	13	76-125%
Chlorobenzene	50.0	51.6	103.	53.5	107.	3.81	13	75-130%

Notes:

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8240B
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Conformance/Non-Conformance Summary

(X = Requirements Met * = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	--	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	--	--	--
Blank Contamination	X	--	--

Comments:

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organ
Project ID (number): 5161.85 Method: EPA 80
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aque

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A		Acceptability Limits:	43-136%
101896GC4-1	CV101896204	Calibration Verifi	88.7
101896GC4-3	BW1018964	Method Blank Water	76.8
101896GC4-6	MS10024601	Matrix Spike	79.9
101896GC4-7	DP10024602	Duplicate	84.3
--	10025201	TB-LB	72.5
--	10025202	MW-7	71.4
--	10025203	MW-10	80.1
--	10025204	MW-15	76.1
--	10025205	MW-17	77.7
--	10025206	MW-19A	72.3
--	10025207	MW-2A	73.7

Notes:
*: Indicates values outside of acceptability limits. See Nonconformance Summary.

Project ID (Number): 5161.85
Project ID (Name): Chevron SS #1001067
Powell & Landgren
Emeryville, CA
Work Order Number: W6-10-0252
Date Reported: 10-22-96

METHOD BLANK REPORT

Volatile Organics in Water
EPA Method 8020A

Date of Analysis: 18-OCT-96 QC Batch No: 101896GC4-3

Analyte	Concentration, ug/L
MTBE	<5.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
Xylene (total)	<0.5
TPH as Gasoline	<50

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Orga
Project ID (number): 5161.85 Method: EPA 8
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqu

Calibration Verification Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A Units:ug/L	QC Batch:101896GC4-1			
Benzene	20.0	21.8	109.	77-123%
Toluene	20.0	23.6	118.	77.5-122.5%
Ethylbenzene	20.0	24.3	122.	63-137%
Xylenes (Total)	60.0	65.5	109.	85-115%
TPH as Gasoline	500	485.	97.0	80-120%

Notes:
QC check source: Supelco #LA12389

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organ
Project ID (number): 5161.85 Method: EPA 80
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aque

Duplicate Sample Results

Analyte	Original Concentration	Duplicate Concentration	RPD, %	Acceptability Limits, %
EPA 8020A Units: ug/L	QC Batch: 101896GC4-7	GTEL Sample ID: W6100246-02		Client ID: Batch QC
MTBE	< 10.0	< 10.0	NA	20
Benzene	7.31	7.14	2.35	23.9
Toluene	< 1.00	< 1.00	NA	27.2
Ethylbenzene	< 1.00	< 1.00	NA	21.6
Xylenes (Total)	12.9	12.5	3.15	22.0
TPH as Gasoline	594.	547.	8.24	20

Notes:

NA - The concentration of the analyte is less than the reporting limit.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Orga
Project ID (number): 5161.85 Method: EPA 8
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqu

Matrix Spike(MS) Results

GTEL Sample ID:W6100246-01 MS ID:MS10024601
Analysis Date: 19-OCT-96 19-OCT-96

Units: ug/L Analyte	Sample Conc.	Spike Added	MS Conc.	MS % Rec.	Acceptability Limits %Rec.
Benzene	< 0.5 (0.230)	20.0	18.9	93.4	67-110
Toluene	< 0.5 (0.240)	20.0	20.8	103.	68-115
Ethylbenzene	< 0.5 (0.300)	20.0	20.8	103.	65-120
Xylenes (Total)	1.0 (1.05)	60.0	67.1	110.	62-119

Notes:
Values in parentheses in the sample concentration column are used for % recovery calculations.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Orgar
Project ID (number): 5161.85 Method: EPA 8C
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aque

Conformance/Non-Conformance Summary

(X = Requirements Met * = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

Method: EPA 8010B
Matrix: Aqueous

GTEL Sample Number	W6100252-02	W6100252-03	W6100252-04	W6100252-05
Client ID	MW-7	MW-10	MW-15	MW-17
Date Sampled	10/10/96	10/10/96	10/10/96	10/10/96
Date Analyzed	10/15/96	10/15/96	10/15/96	10/15/96
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
Dichlorodifluoromethane	5.0	ug/L	< 5.0	< 5.0	< 5.0	< 5.0
Chloromethane	2.0	ug/L	< 2.0	< 2.0	< 2.0	< 2.0
Vinyl chloride	0.8	ug/L	< 0.8	< 0.8	< 0.8	< 0.8
Bromomethane	1.2	ug/L	< 1.2	< 1.2	< 1.2	< 1.2
Chloroethane	0.8	ug/L	< 0.8	< 0.8	< 0.8	< 0.8
Trichlorofluoromethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethene	0.5	ug/L	< 0.5	0.7	< 0.5	< 0.5
Methylene chloride	0.8	ug/L	< 0.8	< 0.8	< 0.8	< 0.8
trans-1,2-Dichloroethene	0.5	ug/L	< 0.5	17.	< 0.5	< 0.5
1,1-Dichloroethane	0.5	ug/L	< 0.5	0.8	< 0.5	< 0.5
cis-1,2-Dichloroethene	0.5	ug/L	< 0.5	38.	< 0.5	1.5
Chloroform	0.5	ug/L	< 0.5	< 0.5	< 0.5	0.6
1,1,1-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	0.9
Carbon tetrachloride	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	ug/L	< 0.5	14.	< 0.5	31.
1,2-Dichloropropane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
2-Chloroethylvinyl ether	1.0	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	ug/L	< 0.5	< 0.5	< 0.5	15.
Dibromochloromethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	1.2	ug/L	< 1.2	< 1.2	< 1.2	< 1.2
1,1,2,2-Tetrachloroethane	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	0.8	ug/L	< 0.8	< 0.8	< 0.8	< 0.8
1,4-Dichlorobenzene	0.8	ug/L	< 0.8	< 0.8	< 0.8	< 0.8
1,2-Dichlorobenzene	0.8	ug/L	< 0.8	< 0.8	< 0.8	< 0.8

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8010B:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

ANALYTICAL RESULTS
Volatile Organics

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

Method: EPA 8010B
Matrix: Aqueous

GTEL Sample Number	W6100252-06	W6100252-07	--	--
Client ID	MW-19A	MW-2A	--	--
Date Sampled	10/10/96	10/10/96	--	--
Date Analyzed	10/15/96	10/15/96	--	--
Dilution Factor	20.0	1.00	--	--

Analyte	Reporting Limit	Units	Concentration:			
Dichlorodifluoromethane	5.0	ug/L	< 100	< 5.0	--	--
Chloromethane	2.0	ug/L	< 40.	< 2.0	--	--
Vinyl chloride	0.8	ug/L	< 16.	< 0.8	--	--
Bromomethane	1.2	ug/L	< 24.	< 1.2	--	--
Chloroethane	0.8	ug/L	< 16.	< 0.8	--	--
Trichlorofluoromethane	0.5	ug/L	< 10.	< 0.5	--	--
1,1-Dichloroethene	0.5	ug/L	< 10.	< 0.5	--	--
Methylene chloride	0.8	ug/L	< 16.	< 0.8	--	--
trans-1,2-Dichloroethene	0.5	ug/L	< 10.	< 0.5	--	--
1,1-Dichloroethane	0.5	ug/L	< 10.	< 0.5	--	--
cis-1,2-Dichloroethene	0.5	ug/L	110	< 0.5	--	--
Chloroform	0.5	ug/L	< 10.	< 0.5	--	--
1,1,1-Trichloroethane	0.5	ug/L	< 10.	< 0.5	--	--
Carbon tetrachloride	0.5	ug/L	< 10.	< 0.5	--	--
1,2-Dichloroethane	0.5	ug/L	< 10.	< 0.5	--	--
Trichloroethene	0.5	ug/L	150	< 0.5	--	--
1,2-Dichloropropane	0.5	ug/L	< 10.	< 0.5	--	--
Bromodichloromethane	0.5	ug/L	< 10.	< 0.5	--	--
2-Chloroethylvinyl ether	1.0	ug/L	< 20.	< 1.0	--	--
cis-1,3-Dichloropropene	0.5	ug/L	< 10.	< 0.5	--	--
trans-1,3-Dichloropropene	0.5	ug/L	< 10.	< 0.5	--	--
1,1,2-Trichloroethane	0.5	ug/L	< 10.	< 0.5	--	--
Tetrachloroethene	0.5	ug/L	1500	< 0.5	--	--
Dibromochloromethane	0.5	ug/L	< 10.	< 0.5	--	--
Chlorobenzene	0.5	ug/L	< 10.	< 0.5	--	--
Bromoform	1.2	ug/L	< 24.	< 1.2	--	--
1,1,2,2-Tetrachloroethane	0.5	ug/L	< 10.	< 0.5	--	--
1,3-Dichlorobenzene	0.8	ug/L	< 16.	< 0.8	--	--
1,4-Dichlorobenzene	0.8	ug/L	< 16	< 0.8	--	--
1,2-Dichlorobenzene	0.8	ug/L	< 16.	< 0.8	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8010B:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8010B
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Conformance/Non-Conformance Summary

(X = Requirements Met * = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	*	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8010B
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Surrogate Results

QC Batch No.	Reference	Sample ID	BFB ELCD	BFB PID
Method: EPA 8010B		Acceptability Limits:	52.8-144%	77.3-129%
101496GC15-1	CV1014962015	Calibration Verifi	91.5	105
101496GC15-2	BW10149615	Method Blank Water	101.	104.
101496GC15-4	DP10018203	Duplicate	103.	103.
101496GC15-5	MS10018301	Matrix Spike	107.	102.
101496GC15-6	LW1014962015	Laboratory Control	109.	104
--	10025202	MW-7	101.	102.
--	10025203	MW-10	103.	103.
--	10025204	MW-15	101.	102.
--	10025205	MW-17	101.	102.
--	10025206	MW-19A	100.	102.
--	10025207	MW-2A	103	103

Notes:
*: Indicates values outside of acceptability limits. See Nonconformance Summary.

GTEL Client ID: GTR01CHV08 QUALITY CONTROL RESULTS
Login Number: W6100252 Volatile Organics
Project ID (number): 5161.85 Method: EPA 8010B
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA Matrix: Aqueous

Method Blank Results

QC Batch No: 101496GC15-2
Date Analyzed: 14-OCT-96

Analyte	Method: EPA 8010B Concentration: ug/L
Dichlorodifluoromethane	< 5.00
Chloromethane	< 2.00
Vinyl chloride	< 1.00
Bromomethane	< 2.00
Chloroethane	< 1.00
Trichlorofluoromethane	< 1.00
1,1-Dichloroethene	< 1.00
Methylene chloride	< 1.00
trans-1,2-Dichloroethene	< 1.00
1,1-Dichloroethane	< 1.00
cis-1,2-Dichloroethene	< 1.00
Chloroform	< 1.00
1,1,1-Trichloroethane	< 1.00
Carbon tetrachloride	< 1.00
1,2-Dichloroethane	< 1.00
Trichloroethene	< 1.00
1,2-Dichloropropane	< 1.00
Bromodichloromethane	< 1.00
2-Chloroethyl vinyl ether	< 1.00
cis-1,3-Dichloropropene	< 1.00
trans-1,3-Dichloropropene	< 1.00
1,1,2-Trichloroethane	< 1.00
Tetrachloroethene	< 1.00
Dibromochloromethane	< 1.00
Chlorobenzene	< 1.00
Bromoform	< 2.00
1,1,2,2-Tetrachloroethane	< 1.00
1,3-Dichlorobenzene	< 1.00
1,4-Dichlorobenzene	< 1.00
1,2-Dichlorobenzene	< 1.00

Notes:

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8010B
Matrix: Aqueous

Calibration Verification Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8010B Units:ug/L	QC Batch:101496GC15-1			
Dichlorodifluoromethane	20.0	28.3	142.	40-160%
Chloromethane	20.0	22.1	111.	59.5-140.5%
Vinyl chloride	20.0	20.5	103.	68.5-131.5%
Bromomethane	20.0	23.0	115.	58.5-141.5%
Chloroethane	20.0	21.1	106.	77-123%
Trichlorofluoromethane	20.0	21.3	107.	66.5-133.5%
1,1-Dichloroethene	20.0	19.9	99.5	63-137%
Methylene chloride	20.0	19.2	96.0	77.5-122.5%
trans-1,2-Dichloroethene	20.0	19.4	97.0	64-136%
1,1-Dichloroethane	20.0	20.0	100.	71.5-116%
cis-1,2-Dichloroethene	20.0	20.2	101.	64-116%
Chloroform	20.0	18.9	94.5	75-125%
1,1,1-Trichloroethane	20.0	20.4	102.	71-129%
Carbon tetrachloride	20.0	20.2	101.	68.5-131.5%
1,2-Dichloroethane	20.0	21.8	109.	71.5-128.5%
Trichloroethene	20.0	18.8	94.0	77-123%
1,2-Dichloropropane	20.0	20.9	105.	74-126%
Bromodichloromethane	20.0	21.9	110.	76-124%
2-Chloroethyl vinyl ether	20.0	24.6	123.	60-140%
cis-1,3-Dichloropropene	20.0	21.8	109.	64-136%
trans-1,3-Dichloropropene	20.0	23.9	120.	64-136%
1,1,2-Trichloroethane	20.0	23.5	118.	78.5-121.5%
Tetrachloroethene	20.0	19.8	99.0	70-130%
Dibromochloromethane	20.0	24.0	120.	65.5-134.5%
Chlorobenzene	20.0	20.9	105.	72-128%
Bromoform	20.0	23.1	116.	73.5-126.5%
1,1,2,2-Tetrachloroethane	20.0	28.7	144.	49-151%
1,3-Dichlorobenzene	20.0	20.9	105.	49.5-150.5%
1,4-Dichlorobenzene	20.0	21.5	108.	69.5-130.5%
1,2-Dichlorobenzene	20.0	21.8	109.	70-130%

Notes:

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8010B
Matrix: Aqueous

Laboratory Control Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8010B Units:ug/L	QC Batch:101496GC15-6			
Dichlorodifluoromethane	20.0	26.4	132.	40-160%
Chloromethane	20.0	23.8	119.	10-193%
Vinyl chloride	20.0	23.3	117.	28-163%
Bromomethane	20.0	26.7	134.	10-144%
Chloroethane	20.0	23.9	120.	46-137%
Trichlorofluoromethane	20.0	25.2	126.	21-156%
1,1-Dichloroethene	20.0	27.0	135.	28-167%
Methylene chloride	20.0	23.5	118.	25-162%
trans-1,2-Dichloroethene	20.0	23.2	116.	38-155%
1,1-Dichloroethane	20.0	24.3	122.	47-132%
cis-1,2-Dichloroethene	20.0	23.1	116.	38-155%
Chloroform	20.0	22.2	111.	49-133%
1,1,1-Trichloroethane	20.0	25.3	127.	41-138%
Carbon tetrachloride	20.0	25.6	128.	43-143%
1,2-Dichloroethane	20.0	25.4	127.	51-147%
Trichloroethene	20.0	22.9	115.	35-146%
1,2-Dichloropropane	20.0	24.7	124.	44-156%
Bromodichloromethane	20.0	24.0	120.	42-172%
2-Chloroethyl vinyl ether	20.0	26.3	132.	14-186%
cis-1,3-Dichloropropene	20.0	22.3	112.	22-178%
trans-1,3-Dichloropropene	20.0	24.5	123.	22-178%
1,1,2-Trichloroethane	20.0	26.4	132.	39-136%
Tetrachloroethene	20.0	24.4	122.	26-162%
Dibromochloromethane	20.0	25.2	126.	24-191%
Chlorobenzene	20.0	23.8	119.	38-150%
Bromoform	20.0	25.8	129.	13-159%
1,1,2,2-Tetrachloroethane	20.0	33.6	168.	10-184%
1,3-Dichlorobenzene	20.0	24.8	124.	10-187%
1,4-Dichlorobenzene	20.0	24.6	123.	42-143%
1,2-Dichlorobenzene	20.0	26.4	132.	10-208%

Notes:

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8010B
Matrix: Aqueous

Duplicate Sample Results

Analyte	Original Concentration	Duplicate Concentration	RPD, %	Acceptability Limits, %
EPA 8010B Units: ug/L	QC Batch: 101496GC15-4	GTEL Sample ID: W6100182-03		Client ID: Batch QC
Dichlorodifluoromethane	< 100.	< 100.	NA	35.4
Chloromethane	< 40.0	< 40.0	NA	24.2
Vinyl chloride	< 20.0	< 20.0	NA	18.6
Bromomethane	< 40.0	< 40.0	NA	24.8
Chloroethane	< 20.0	< 20.0	NA	14.4
Trichlorofluoromethane	< 20.0	< 20.0	NA	19.6
1,1-Dichloroethene	< 20.0	< 20.0	NA	21.6
Methylene chloride	< 20.0	< 20.0	NA	13.1
trans-1,2-Dichloroethene	< 20.0	< 20.0	NA	20.9
1,1-Dichloroethane	< 20.0	< 20.0	NA	10.5
cis-1,2-Dichloroethene	275	269	2.21	20.9
Chloroform	< 20.0	< 20.0	NA	14.7
1,1,1-Trichloroethane	< 20.0	< 20.0	NA	16
Carbon tetrachloride	< 20.0	< 20.0	NA	18.3
1,2-Dichloroethane	< 20.0	< 20.0	NA	17
Trichloroethene	1160	1050	9.95	13.7
1,2-Dichloropropane	< 20.0	< 20.0	NA	17
Bromodichloromethane	< 20.0	< 20.0	NA	13.1
2-Chloroethyl vinyl ether	< 20.0	< 20.0	NA	27.1
cis-1,3-Dichloropropene	< 20.0	< 20.0	NA	23.8
trans-1,3-Dichloropropene	< 20.0	< 20.0	NA	23.8
1,1,2-Trichloroethane	< 20.0	< 20.0	NA	12.8
Tetrachloroethene	< 20.0	< 20.0	NA	17.7
Dibromochloromethane	< 20.0	< 20.0	NA	20.6
Chlorobenzene	< 20.0	< 20.0	NA	16.4
Bromoform	< 40.0	< 40.0	NA	15.4
1,1,2,2-Tetrachloroethane	< 20.0	< 20.0	NA	30
1,3-Dichlorobenzene	< 20.0	< 20.0	NA	29.7
1,4-Dichlorobenzene	< 20.0	< 20.0	NA	18
1,2-Dichlorobenzene	< 20.0	< 20.0	NA	18

Notes:

NA - The concentration of the analyte is less than the reporting limit.

GTEL Client ID: GTR01CHV08
Login Number: W6100252
Project ID (number): 5161.85
Project ID (name): CHEVRON/1001067/POWELL @ LANDGREN/EMERYVILLE/CA

QUALITY CONTROL RESULTS

Volatile Organics
Method: EPA 8010B
Matrix: Aqueous

Matrix Spike(MS) Results

GTEL Sample ID:W6100183-01
Analysis Date: 14-OCT-96

MS ID:MS10018301
15-OCT-96

Units: ug/L Analyte	Sample Conc.	Spike Added	MS Conc.	MS % Rec.	Acceptability Limits %Rec.
Dichlorodifluoromethane	< 5.0 (0.000)	20.0	28.0	140.	40-160
Chloromethane	< 2.0 (0.000)	20.0	25.7	129.	10-193
Vinyl chloride	< 0.80(0.000)	20.0	23.2	116.	28-163
Bromomethane	< 1.2 (0.000)	20.0	26.4	132.	10-144
Chloroethane	< 0.80(0.000)	20.0	24.6	123.	46-137
Trichlorofluoromethane	< 0.50(0.000)	20.0	25.0	125.	21-156
1,1-Dichloroethene	< 0.50(0.000)	20.0	27.1	136.	28-167
Methylene chloride	< 0.80(0.000)	20.0	23.4	117.	25-162
trans-1,2-Dichloroethene	< 0.50(0.000)	20.0	23.3	117.	38-155
1,1-Dichloroethane	< 0.50(0.000)	20.0	24.1	121.	47-132
cis-1,2-Dichloroethene	< 0.50(0.000)	20.0	22.9	115.	38-155
Chloroform	< 0.50(0.000)	20.0	22.0	110.	49-133
1,1,1-Trichloroethane	< 0.50(0.000)	20.0	25.4	127.	41-138
Carbon tetrachloride	< 0.50(0.000)	20.0	25.4	127.	43-143
1,2-Dichloroethane	< 0.50(0.000)	20.0	25.6	128.	51-147
Trichloroethene	< 0.50(0.000)	20.0	22.6	113.	35-146
1,2-Dichloropropane	< 0.50(0.000)	20.0	24.7	124.	44-156
Bromodichloromethane	< 0.50(0.000)	20.0	24.2	121.	42-172
2-Chloroethyl vinyl ether	< 1.0 (0.000)	20.0	0.00	0.00*	14-186
cis-1,3-Dichloropropene	< 0.50(0.000)	20.0	22.1	111.	22-178
trans-1,3-Dichloropropene	< 0.50(0.000)	20.0	25.2	126.	22-178
1,1,2-Trichloroethane	< 0.50(0.000)	20.0	26.8	134.	39-136
Tetrachloroethene	< 0.50(0.000)	20.0	23.7	119.	26-162
Dibromochloromethane	< 0.50(0.000)	20.0	26.4	132.	24-191
Chlorobenzene	< 0.50(0.000)	20.0	23.9	120.	38-150
Bromoform	< 1.2 (0.000)	20.0	27.2	136.	13-159
1,1,2,2-Tetrachloroethane	< 0.50(0.000)	20.0	35.0	175.	10-184
1,3-Dichlorobenzene	< 0.80(0.000)	20.0	24.5	123.	10-187
1,4-Dichlorobenzene	< 0.80(0.000)	20.0	24.3	122.	42-143
1,2-Dichlorobenzene	< 0.80(0.100)	20.0	26.4	132.	10-208

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.

101496GC15-5: 2-Chloroethylvinyl ether decomposes in the presence of Hydrochloric Acid (used as a preservative).