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

Marketing Department

March 20, 1992

Jennifer Eberle

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

STID 3812

Re: Former Chevron Service Station #9-0020
1633 Harrison, Oakland 94612

*TPH-g in MW-7 5200 ppb

Dear Mr. Smith:

520

Enclosed we are forwarding the Quarterly Ground Water Monitoring Report dated March 13, 1992, prepared by our consultant Sierra Environmental Services for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline, BTEX and volatile organic compounds. Benzene was detected at concentrations ranging from ND to 530 ppb in monitor well MW-7.* Negligible concentrations of VOC's were detected in all the monitor wells with the exception of monitor wells MW-9 and MW-13 which reported non-detectable concentrations. Based on the uneven distribution of solvents and the higher concentrations being detected in the up-gradient and cross-gradient wells, it is surmised that the solvents are emanating from an off-site source. Depth to ground water was measured at approximately 20.5-feet below grade, and the direction of flow fluctuates from the northeast to east.

not true

The phase I soils remediation program has been completed. This program was outlined in the Phase I Corrective Action Work Plan submitted to you on December 18, 1991. This program consisted of excavating a small localized area of hydrocarbon-affected soils in the vicinity of monitor well MW-4. The excavation extended to a depth of approximately 10-feet below grade. A formal report documenting this activity is currently being prepared and will be forwarded to you.

In addition, a soil vapor extraction pilot test has been performed to assess the feasibility and effectiveness of this technology to mitigate the impacted soils in the vicinity of monitor well MW-7. These soils are at a depth of approximately 18-feet below grade and attempting to excavate these would be impractical. The results of the pilot test will be forwarded to you in conjunction with our corrective action plan to mitigate these soils which act as a continued source to ground water impact. We will also further assess the distribution pattern of the solvents from the data collected to date to assist in supporting an off-site solvent source.

At completion of the next scheduled quarterly monitoring event, we will evaluate the data and recommend appropriate next actions with respect to sampling frequency reduction for the monitor wells that historically have reported non-detectable to negligible concentrations of contaminants and are providing overlapping and redundant data.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY

Nancy Vukelich
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB-Bay Area
Ms. Sandra Lindsey, GTI-Concord
Mr. B.C. Owen
File (9-0020Q3)

SIERRA
Environmental Services

March 13, 1992

Nancy Vukelich
Chevron USA
P.O. Box 5004
San Ramon, CA 94583

Re: Former Chevron Service Station #9-0020
1633 Harrison Street
Oakland, California
SES Project #1-199-04

Dear Ms. Vukelich:

This report presents the results of the quarterly ground water sampling at former Chevron Service Station #9-0020, located at 1633 Harrison Street in Oakland, California (Figure 1, Appendix A). Fourteen wells, MW-1 through MW-14, were sampled (Figure 2, Appendix A).

On February 20, 1992, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. **Free-phase hydrocarbons were not present in any of the site wells.** Water level data are shown in Table 1 (Appendix B) and a ground water elevation contour map is included as Figure 2 (Appendix A).

The water samples were collected on February 20, 1992 in accordance with SES Standard Operating Procedure - Ground Water Sampling (Appendix C). All analyses were performed by Superior Precision Analytical, Inc. of Martinez, California. Analytic results for ground water are presented in Table 2 (Appendix B). The chain of custody documents and laboratory analytic reports are included in Appendix D. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Chevron. Please call if you have any questions.

Sincerely,
Sierra Environmental Services

Chris J. Bramer
Environmental Project Manager

Roger Greensfelder
Registered Geologist #003011

REGISTERED GEOLOGIST
R. W. GREENSFELDER
No. 003011
STATE OF CALIFORNIA

CJB/RG/ly
19904QM.MR2

Appendices
A - Figures
B - Tables
C - SES Standard Operating Procedure
D - Chain of Custody Documents and Laboratory Analytic Reports

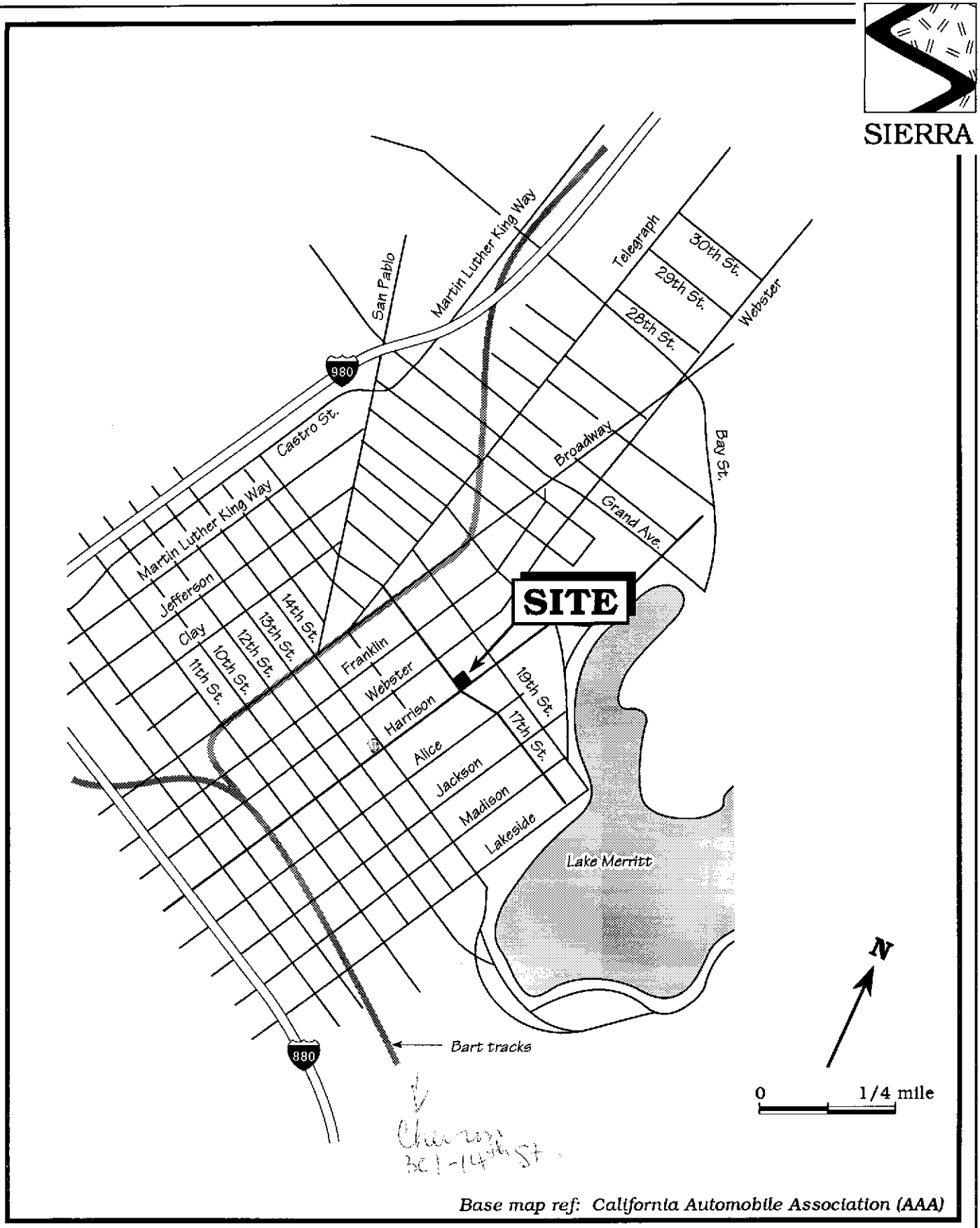

Figure 1. Site Location Map - Chevron Service Station #9-0020, 17th Street and Harrison Street, Oakland, California

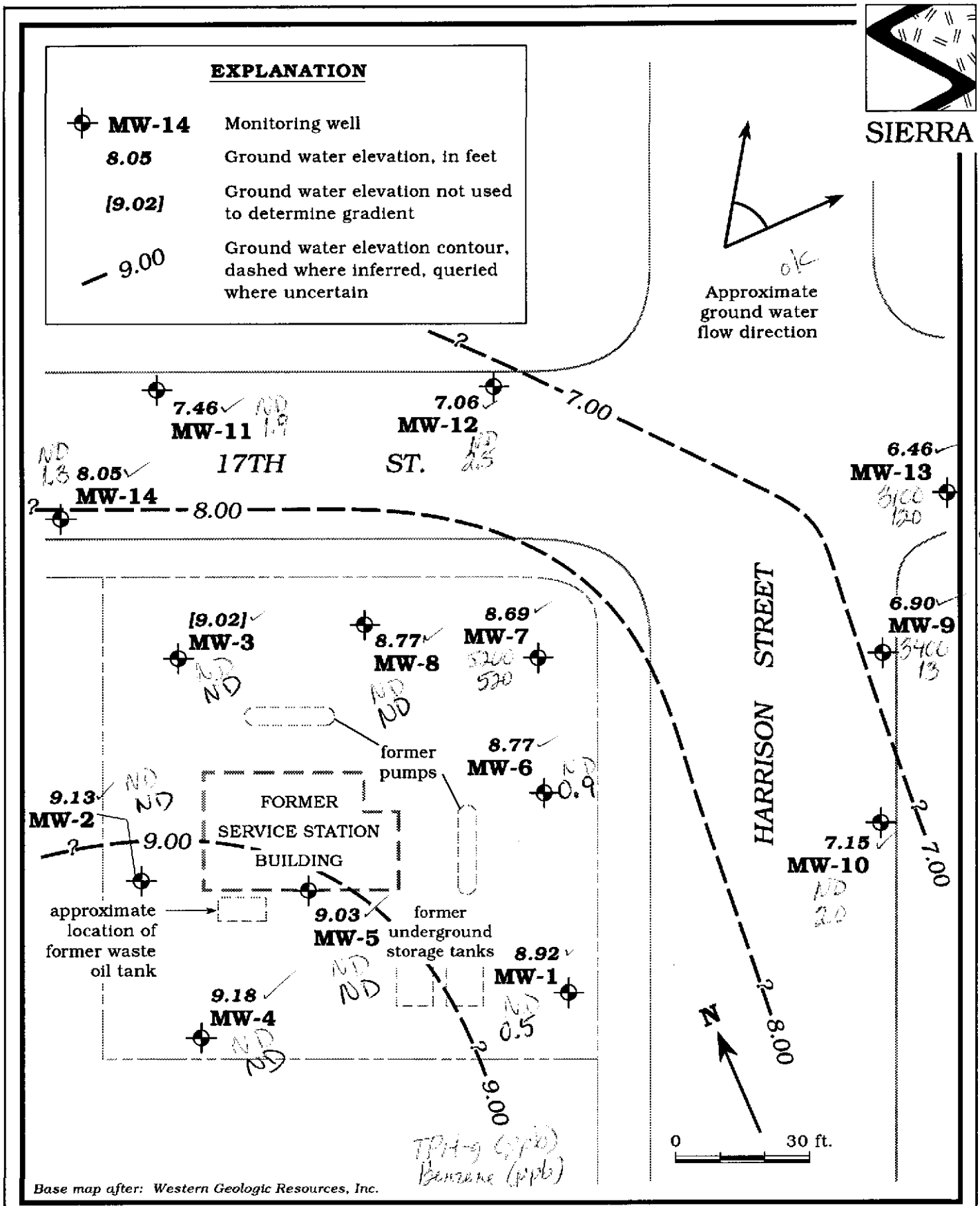

Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map – February 20, 1992
Chevron Service Station #9-0020, 17th Street and Harrison Street, Oakland, California

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------*feet below grade*---------->		
MW-1	11/3/88	20.40	29.82	9.42	---	19 - 29	17 - 29	0 - 17
	2/2/89	20.71		9.11	---			
	4/23/89	20.34		9.48	---			
	7/28/89	20.58		9.24	---			
	10/30/89	20.52		9.30	---			
	1/9/90	20.77		9.05	---			
	4/18/90	20.95		8.87	---			
	6/22/90	21.00		8.82	---			
	8/9/90	20.94		8.88	---			
	11/13/90	20.98		8.84	---			
	5/15/91	20.64		9.18	---			
	8/27/91	20.79		9.03	---			
	11/15/91	20.75		9.07	0			
	2/20/92	**20.90**		**8.92**	**0**			
MW-2	11/3/88	20.89	30.59	9.70	---	21 - 28.5	19.5 - 28.5	0 - 19.5
	2/2/89	21.21		9.38	---			
	4/23/89	20.82		9.77	---			
	7/28/89	21.02		9.57	---			
	10/30/89	20.96		9.63	---			
	1/9/90	21.25		9.34	---			
	4/18/90	21.53		9.06	---			
	6/22/90	21.57		9.02	---			
	8/9/90	21.55		9.04	---			
	11/13/90	21.54		9.05	---			
	5/15/91	21.15		9.44	---			
	8/27/91	21.27		9.32	---			
	11/15/91	21.30		9.29	0			
	2/20/92	**21.43**		**9.13**	**0**			

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------*feet below grade*---------->		
MW-3	11/3/88	20.54	30.09	9.55	---	22 - 32	20 - 32	0 - 20
	2/2/89	20.85		9.24	---			
	4/23/89	20.43		9.66	---			
	7/28/89	20.64		9.45	---			
	10/30/89	20.61		9.48	---			
	1/9/90	20.88		9.21	---			
	4/18/90	21.15		8.94	---			
	6/22/90	21.20		8.89	---			
	8/9/90	21.18		8.91	---			
	11/13/90	21.15		8.94	---			
	5/15/91	20.91		9.18	---			
	8/27/91	20.89		9.20	---			
	11/15/91	21.02		9.07	0			
	2/20/92	**21.07**		**9.02**	**0**			
MW-4	4/23/89	21.33	31.17	9.84	---	19 - 33.5	18.5 - 33.5	0 - 18.5
	7/28/89	21.58		9.59	---			
	10/30/89	21.54		9.63	---			
	1/9/90	21.82		9.35	---			
	4/18/90	22.09		9.08	---			
	6/22/90	22.12		9.05	---			
	8/9/90	22.11		9.06	---			
	11/13/90	22.10		9.07	---			
	5/15/91	21.71		9.46	---			
	8/27/91	21.87		9.30	---			
	11/15/91	21.80		9.37	0			
	2/20/92	**21.99**		**9.18**	**0**			

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------feet below grade---------->		
MW-5	4/23/89	20.62	30.28	9.66	---	22 - 32	21 - 32	0 - 21
	7/28/89	20.86		9.42	---			
	10/30/89	20.82		9.46	---			
	1/9/90	21.07		9.21	---			
	4/18/90	21.35		8.93	---			
	6/22/90	21.38		8.90	---			
	8/9/90	21.36		8.92	---			
	11/13/90	21.35		8.93	---			
	5/15/91	21.29		8.99	---			
	8/27/91	21.11		9.17	---			
	11/15/91	21.18		9.10	0			
	2/20/92	**21.25**		**9.03**	**0**			
MW-6	4/23/89	20.05	29.46	9.41	---	19 - 26	18.5 - 26	0 - 18.5
	7/28/89	20.30		9.16	---			
	10/30/89	20.32		9.14	---			
	1/9/90	20.51		8.95	---			
	4/18/90	20.72		8.74	---			
	6/22/90	20.77		8.69	---			
	8/9/90	20.74		8.72	---			
	11/13/90	20.75		8.71	---			
	5/15/91	20.61		8.85	---			
	8/27/91	20.53		8.93	---			
	11/15/91	20.53		8.93	0			
	2/20/92	**20.69**		**8.77**	**0**			
MW-7	4/23/89	18.99	29.01	10.02	---	18.5 - 27	17.5 - 27	0 - 17.5
	7/28/89	19.94		9.07	---			
	10/30/89	19.97		9.04	---			
	1/9/90	20.15		8.86	---			
	4/18/90	20.37		8.64	---			
	6/22/90	20.40		8.61	---			
	8/9/90	20.38		8.63	---			
	11/13/90	20.41		8.60	---			

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------feet below grade---------->		
MW-7 (cont)	5/15/91	20.47		8.54	---			
	8/27/91	20.14		8.87	---			
	11/15/91	20.22		8.79	0			
	2/20/92	**20.32**		**8.69**	**0**			
MW-8	4/23/89	20.14	29.57	9.43	---	18.5 - 26	17.5 - 26	0 - 17.5
	7/28/89	20.37		9.20	---			
	10/30/89	20.32		9.25	---			
	1/9/90	20.60		8.97	---			
	4/18/90	20.87		8.70	---			
	6/22/90	20.34		9.23	---			
	8/9/90	20.89		8.68	---			
	11/13/90	20.86		8.71	---			
	5/15/91	20.49		9.08	---			
	8/27/91	20.60		8.97	---			
	11/15/91	20.62		8.95	0			
	2/20/92	**20.80**		**8.77**	**0**			
MW-9	6/22/90	20.80	28.67	7.87	---	20 - 25	19.5 - 25	0 - 19.5
	8/9/90	20.74		7.93	---			
	11/13/90	20.78		7.89	---			
	5/15/91	20.48		8.19	---			
	8/27/91	20.55		8.12	---			
	11/15/91	20.57		8.10	0			
	2/20/92	**21.77**		**6.90**	**0**			
MW-10	6/22/90	20.48	28.60	8.12	---	18 - 24	17 - 24	0 - 17
	8/9/90	20.45		8.15	---			
	11/13/90	20.47		8.13	---			
	5/15/91	20.15		8.45	---			
	8/27/91	20.27		8.33	---			
	11/15/91	20.33		8.27	0			
	2/20/92	**21.45**		**7.15**	**0**			

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval
						<----------*feet below grade*---------->		
MW-11	6/22/90	21.03	29.37	8.34	---	19 - 26	18.5 - 26	0 - 18.5
	8/9/90	21.02		8.35	---			
	11/13/90	20.93		8.44	---			
	5/15/91	20.61		8.76	---			
	8/27/91	20.70		8.67	---			
	11/15/91	20.68		8.69	0			
	2/20/92	**21.91**		**7.46**	**0**			
MW-12	6/22/90	20.45	28.43	7.98	---	18.5 - 26	17.5 - 26	0 - 17.5
	8/9/90	20.43		8.00	---			
	11/13/90	20.45		7.98	---			
	5/15/91	20.07		8.36	---			
	8/27/91	20.15		8.28	---			
	11/15/91	20.25		8.18	0			
	2/20/92	**21.37**		**7.06**	**0**			
MW-13	11/15/91	21.07	28.63	7.56	0	18 - 28	17 - 28	16.5 - 17
	2/20/92	**22.17**		**6.46**	**0**			
MW-14	11/15/91	20.33	29.46	9.13	0	17 - 28.5	16 - 27	15.5 - 16 / 27 - 28.5
	2/20/92	**21.41**		**8.05**	**0**			

EXPLANATION:

DTW = Depth to water
TOC = Top of casing elevation
GWE = Ground water elevation
msl = Measurements referenced relative to mean sea level

NOTES:

Top of casing elevations were surveyed relative to mean sea level.

MW-1 through MW-12 well construction details are from boring logs by Western Geologic Resources, Inc., San Rafael, California.

Well construction details for MW-13 and MW-14 are from Pacific Environmental Group.

* Product thickness measurements were made using an MMC flexi-dip interface probe. Product thickness information prior to May 15, 1991 was not available for inclusion in this report.

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Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California

Well ID	Date Sampled	Analytic Method	Analytic Lab	TPPH(G)	B	T	E	X	O&G
				<----------ppb---------->					
MW-1	11/3/88	8015/624	BC	<1,000[1]	<1.0	<1.0	<1.0	<1.0	---
	2/10/89	524.2/8240	CCAS	<100	<0.2	<0.2	<0.2	<0.4	---
	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	<3,000
	7/28/89	8260	CCAS	<50	<0.1	<0.5	<0.2	<0.5	<3,000
	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	110[2]	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**0.5**	**0.6**	**<0.5**	**0.9**	**---**
MW-2	11/3/88	624/8015	BC	<1,000[1]	<1.0	<1.0	<1.0	<1.0	---
	2/10/89	524.2/8240	CCAS	<100	<0.2	<0.2	<0.2	<0.4	---
	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	<3,000
	7/28/89	8260	CCAS	<100	<0.2	<1.0	<0.2	<0.4	<3,000
	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	0.8	<0.5	0.9	---
	5/15/91	8015/8020	SAL	83[2]	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	97[2]	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	0.5	1.5	0.8	3.6	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
MW-3	11/3/88	624/8015	BC	<1,000[1]	<1.0	<1.0	<1.0	<1.0	---
	2/10/89	524.2/8240	CCAS	<100	<0.2	<0.2	<0.2	<0.4	---
	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	<3,000
	7/28/89	8260	CCAS	<100	<0.2	<1.0	<0.2	<0.4	<3,000

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Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Sampled	Analytic Method	Analytic Lab	TPPH(G)	B	T	E	X	O&G
				<--------		*ppb*			-------->
MW-3 (cont)	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	51[2]	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8015/8020	SAL	85[2]	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	91[2]	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	0.7	<0.5	1.3	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**<0.5**	**<0.5**	**<0.5**	**0.9**	**---**
MW-4	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	<3,000
	7/28/89	8260	CCAS	<50	<0.1	<0.5	<0.1	<0.2	<3,000
	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	1	0.5	1	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	97	<0.5	0.9	<0.5	1.9	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
MW-5	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	<3,000
	7/28/89	8260	CCAS	<100	<0.2	<1.0	<0.2	<0.4	<3,000
	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	1	<0.5	1	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	94	3.0	5.0	1.5	5.5	---
	11/15/91	8015/8020	SPA	<50	0.9	1.7	<0.5	2.2	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**

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Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Sampled	Analytic Method	Analytic Lab	TPPH(G)	B	T	E	X	O&G
				<----------ppb---------->					
MW-6	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	<3
	7/28/89	8260	CCAS	<100	<0.2	<1.0	<0.2	<0.4	<3
	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	3	5	0.5	2	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	180	6.1	12	3.8	14	---
	11/15/91	8015/8020	SPA	<50	<0.5	0.6	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**0.9**	**1.1**	**<0.5**	**1.4**	---
MW-7	4/24/89	524.2/8260	CCAS	8,400[3]	100	260	160	1,300	3[4]
	7/28/89	8260	CCAS	7,000[3]	230	90	70	440	<3,000
(D)	7/28/89	8260	CCAS	6,000[3]	280	180	58	430	---
	10/30/89	8015/8020	GTEL	10,000[3]	570	55	160	400	---
(D)	10/30/89	8015/8020	GTEL	9,900[3]	520	82	180	410	---
	1/9/90	8015/8020	GTEL	3,400[3]	290	72	9	200	---
	4/18/90	8015/8020	GTEL	6,800[3]	350	140	110	400	---
	8/9/90	8015/8020	GTEL	11,000[3]	360	130	14	660	---
	11/13/90	8015/8020	SAL	6,500	230	110	97	460	---
	5/15/91	8015/8020	SAL	4,600	180	55	46	300	---
	8/27/91	8015/8020	SPA	7,000	220	53	63	340	---
	11/15/91	8015/8020	SPA	3,300	150	19	4.9	200	---
	2/20/92	**8015/8020**	**SPA**	**5,200**	**520**	**150**	**100**	**380**	---
MW-8	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	3,000
	4/24/89	524.2/8260[5]	CCAS	<50	<0.5	<1.0	<1.0	<1.0	---
	7/28/89	8260	CCAS	<100	<0.2	<1.0	<0.2	<0.4	<3,000
	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---

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Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Sampled	Analytic Method	Analytic Lab	TPPH(G)	B	T	E	X	O&G
				<----------ppb---------->					
MW-8 (cont)	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	0.8	<0.5	2	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	73[2]	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	0.7	<0.5	2.1	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
offsite MW-9	6/22/90	8015/8020	PACE	5,700[3]	47	31	280	530	<1,000
	8/9/90	8015/8020	GTEL	8,000[3]	<0.3	17	210	480	---
	11/13/90	8015/8020	SAL	6,400	<3	20	240	450	---
	5/15/91	8015/8020	SAL	5,700	2	16	190	390	---
	8/27/91	8015/8020	SPA	6,700	<3	31	180	350	---
	11/15/91	8015/8020	SPA	4,000	8.8	26	150	280	---
	2/20/92	**8015/8020**	**SPA**	**3,400**	**13**	**30**	**230**	**460**	**---**
MW-10	6/22/90	8015/8020	PACE	<50[3]	<0.5	<0.5	<0.5	<0.5	<1,000
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	2	0.5	2	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**2.0**	**2.2**	**<0.5**	**2.1**	**---**
MW-11	6/22/90	8015/8020	PACE	<50[3]	<0.5	<0.5	<0.5	<0.5	<1,000
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	76	0.6	1	0.9	4	---
	5/15/91	8015/8020	SAL	78[2]	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	110[2]	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**1.9**	**2.1**	**1.0**	**4.4**	**---**

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Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Sampled	Analytic Method	Analytic Lab	TPPH(G)	B	T	E	X	O&G
				<--------		*ppb*			------->
MW-12	6/22/90	8015/8020	PACE	<50[3]	<0.5	<0.5	<0.5	<0.5	<1,000
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	56[2]	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**2.5**	**3.1**	**0.7**	**3.0**	**---**
MW-13	11/15/91	8015/8020	SPA	3,100	68	40	110	270	---
	2/20/92	**8015/8020**	**SPA**	**3,100**	**120**	**50**	**240**	**400**	**---**
MW-14	11/15/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**1.3**	**1.8**	**1.1**	**5.2**	**---**
MW-AA	11/3/88	624/8015	BC	---	<1.0	<1.0	<1.0	<1.0	---
(Trip Blank)	2/10/89	524.2/8240	CCAS	<50	<0.1	<0.1	<0.1	<0.2	---
	4/24/89	524.2/8260	CCAS	<50	<0.5	<1.0	<1.0	<1.0	---
	7/28/89	8260	CCAS	<50	<0.1	<0.5	<0.1	<0.2	---
	10/30/89	8015/8020	GTEL	<500	<0.3	<0.3	<0.3	<0.6	---
	1/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	4/18/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	6/22/90	8015/8020	PACE	<50	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	8015/8020	GTEL	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
	8/27/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
MW-BB	5/15/91	8015/8020	SAL	<50	<0.5	<0.5	<0.5	<0.5	---
(Bailer Blank)	8/27/91	8015/8020	SPA	51[2]	<0.5	<0.5	<0.5	<0.5	---
	11/15/91	8015/8020	SPA	<50	<0.5	<0.5	<0.5	<0.5	---
	2/20/92	**8015/8020**	**SPA**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**

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Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
O&G = Oil and Grease
ppb = Parts per billion
--- = Not analyzed/Not applicable
(D) = Duplicate analysis

ANALYTIC METHODS:

8015 = EPA Method 8015 for TPPH(G)
624 = EPA Method 624 for BTEX
8020 = EPA Method 8020 for BTEX
524.2/8240 = EPA Method 524.2/8240 for VOCs
8260 = Approved variance for Method 8240 using a capillary column and GC/MS for TPPH(G) and BTEX

ANALYTIC LABORATORIES:

BC = Brown and Caldwell Laboratories of Emeryville, California
CCAS = Coast to Coast Analytical Services of San Luis Obispo, California
GTEL = Groundwater Technology Environmental Laboratories of Concord, California
PACE = Pace Laboratories, Inc. of Novato, California
SAL = Superior Analytical Laboratory of San Francisco, California
SPA = Superior Precision Analytical, Inc. of San Francisco and Martinez, California

NOTES:

Analytic results for ground water prior to May 15, 1991 were compiled from the ground water sampling report for this service station prepared 12/14/90 by Western Geologic Resources, Inc. of San Rafael, California.

[1] Analyzed for total fuel hydrocarbons.
[2] Laboratory reported that peaks did not match typical gasoline pattern.
[3] Fuel characterized as gasoline.
[4] Acetone and 2-butanone were detected at 50 and 160 ppb, respectively.

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Table 3. Analytic Results for Ground Water - Volatile Organic Compounds - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California Prop 65 4.5

Well ID	Date Sampled	Analytic Method	Analytic Lab	Carb Tet	Chloro-form	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	Other HVOCs[1]
		DHS MCL ppb		.5	4.5 (Prop 65)	5	5		10	6		.5			
				<----	----	----	----	----	ppb	----	----	----	----	----	---->
MW-1	11/3/88	624	BC	18.0	7.0	<1.0	<1.0	---	<1.0	---	<1.0	<1.0	---	---	---
	2/10/89	524.2/8240	CCAS	17.0	6.0	<0.2	<0.2	---	<0.2	<0.2	<0.2	<0.2	---	---	---
	4/24/89	524.2/8260	CCAS	16.0	6.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	20.0	6.4	<0.1	<0.1	---	<0.1	<0.1	0.3	<0.1	---	---	---
	10/30/89	601	GTEL[2]	11.0	4.9	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	24.0	7.2	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	4/18/90	601	GTEL[2]	23.0	5.5	<0.5	<0.5	<0.5	---	---	1.4	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	32.0	11.0	0.76	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	24	7	0.7	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	15	5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	18	4.2	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	21	7.9	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**24**	**7.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-2	11/3/88	624	BC	3.0	2.0	34.0	3.0	---	10.0	---	<1.0	<1.0	---	---	---
	2/10/89	524.2/8240	CCAS	1.4	1.0	17.2	<0.2	---	<0.2	6.3	<0.2	<0.2	---	---	---
	4/24/89	524.2/8260	CCAS	2.0	2.0	38.0	3.0	9.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	3.7	2.0	46.0	2.6	---	<0.2	<0.2	<0.2	<0.2	---	---	---
	10/30/89	601	GTEL[2]	1.4	2.6	53.0	1.1	14.0	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	3.6	3.9	78.0	5.3	16.0	---	---	<0.5	<0.5	---	---	---
	4/18/90	601	GTEL[2]	1.5	2.7	130.0	3.9	19.0	---	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	2.1	2.1	74.0	6.1	15.0	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	<0.5	2	40	4	---	<0.5	10	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	2	2	56	6	---	<0.5	15	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	1.1	0.9	46	3.9	---	---	8.0	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	0.6	1.1	58	3.1	---	<0.5	6.3	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**11**	**<2.5**	**62**	**3.1**	**---**	**<2.5**	**4.3**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**ND**
MW-3	11/3/88	624	BC	8.0	6.0	84.0	3.0	---	5.0	---	<1.0	<1.0	---	---	---
	2/10/89	524.2/8240	CCAS	5.8	4.0	53.0	1.9	---	<0.2	9.0	<0.2	<0.2	---	---	---
	4/24/89	524.2/8260	CCAS	7.0	6.0	110.0	3.0	11.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	8.6	5.0	49.0	2.1	---	<0.2	11.0	<0.2	<0.1	---	---	---
	10/30/89	601	GTEL[2]	5.6	5.3	62.0	0.77	8.2	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	8.6	6.1	81.0	3.8	8.7	---	---	<0.5	<0.5	---	---	---
	4/18/90	601	GTEL[2]	7.6	5.8	120.0	2.4	11.0	---	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	11.0	6.7	81.0	5.1	11.0	---	---	<0.5	<0.5	<0.5	<0.5	---

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Table 3. Analytic Results for Ground Water - Volatile Organic Compounds - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Sampled	Analytic Method	Analytic Lab	Carb Tet	Chloro-form	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	Other HVOCs[1]
				<--------					ppb						-------->
MW-3 (cont)	11/13/90	8010	SAL	7	5	43	4	---	<0.5	9	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	6	4	46	3	---	<0.5	8	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	5.5	3.8	43	2.6	---	---	8.1	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	6.3	5.0	67	3.4	---	0.8	7.4	0.9	<0.5	<0.5	<0.5	ND[4,5,6,7]
	2/20/92	**8010**	**SPA***	**2.8**	**4.0**	**96**	**3.0**	**---**	**<2.5**	**6.1**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**ND**
MW-4	4/24/89	524.2/8260	CCAS	35.0	11.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	32.0	9.3	<0.1	<0.1	---	<0.1	<0.1	<0.1	<0.1	---	---	---
	10/30/89	601	GTEL[2]	32.0	8.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	36.0	9.8	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	4/18/90	601	GTEL[2]	41.0	9.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	38.0	11.0	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	40	11	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	35	10	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	28	6.1	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	23	9.1	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**400**	**140**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-5	4/24/89	524.2/8260	CCAS	4.0	5.0	4.0	<1.0	2.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	5.6	4.0	5.3	0.3	---	0.2	2.3	0.5	<0.2	---	---	---
	10/30/89	601	GTEL[2]	2.9	2.0	2.7	<0.5	0.86	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	8.2	4.6	7.8	0.6	3.1	---	---	<0.5	<0.5	---	---	---
	4/18/90	601	GTEL[2]	6.3	2.8	2.6	<0.5	1.7	---	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	11.0	4.8	6.0	<0.5	2.3	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	7	3	5	<0.5	---	<0.5	1	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	4	2	3	<0.5	---	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	3.3	1.1	2.3	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/15/91	8010	SPA*	5.7	2.8	5.5	<0.5	---	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**4.0**	**2.0**	**3.9**	**<0.5**	**---**	**<0.5**	**0.7**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-6	4/24/89	524.2/8260	CCAS	13.0	7.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	9.6	4.0	<0.2	<0.2	---	<0.2	<0.2	0.5	0.6	---	---	---
	10/30/89	601	GTEL[2]	8.2	3.6	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	10.0	4.2	<0.5	<0.5	<0.5	---	---	<0.5	1.8	---	---	---
	4/18/90	601	GTEL[2]	11.0	3.8	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---

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Table 3. Analytic Results for Ground Water - Volatile Organic Compounds - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Sampled	Analytic Method	Analytic Lab	Carb Tet	Chloro-form	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	Other HVOCs[1]
				<----------					ppb						---------->
MW-6	8/9/90	601	GTEL[2]	20.0	6.6	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
(cont)	11/13/90	8010	SAL	15	5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	11	4	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	8.0	2.2	2.4	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	13	5.4	<0.5	<0.5	---	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**11**	**4.0**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-7	4/24/89	524.2/8260	CCAS	3.0	9.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	<2.0	<10.0	<2.0	<2.0	---	<2.0	<2.0	<10.0	6.0	---	---	---
	7/28/89	8260[3]	CCAS	<5.0	<20.0	<5.0	<5.0	---	<5.0	<5.0	<5.0	<5.0	---	---	---
	10/30/89	601	GTEL[2]	<1.0	3.9	<1.0	<1.0	<1.0	---	---	<1.0	6.4	---	---	---
	10/30/89	601[3]	GTEL[2]	<1.0	3.1	<1.0	<1.0	<1.0	---	---	<1.0	6.2	---	---	---
	1/9/90	601	GTEL[2]	<0.5	3.0	<0.5	<0.5	<0.5	---	---	<0.5	8.4	---	---	---
	4/18/90	601	GTEL[2]	<0.5	3.2	<0.5	<0.5	<0.5	---	---	<0.5	7.7	0.6	0.6	---
	8/9/90	601	GTEL[2]	3.3	7.7	<0.5	<0.5	<0.5	---	---	<0.5	8.4	<0.5	1.8	---
	11/13/90	8010	SAL	0.6	3	<0.5	<0.5	---	<0.5	<0.5	<0.5	4	<0.5	<0.5	---
	5/15/91	8010	SAL	2	2	<0.5	<0.5	---	<0.5	<0.5	<0.5	3	<0.5	<0.5	ND
	8/27/91	8010	SPA	0.7	2.8	<0.5	<0.5	---	---	<0.5	<0.5	2.7	<0.5	<0.5	ND
	11/15/91	8010	SPA*	0.8	2.7	<0.5	<0.5	---	<0.5	<0.5	<0.5	3.1	<0.5	0.8	ND
	2/20/92	**8010**	**SPA***	**2.2**	**1.9**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**3.3**	**<0.5**	**<0.5**	**ND**
MW-8	4/24/89	524.2/8260	CCAS	2.0	3.0	6.0	<1.0	4.0	---	---	<1.0	<1.0	---	---	---
	4/24/89	524.2/8260[3]	CCAS	2.0	2.0	6.0	<1.0	3.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	2.3	2.0	5.6	<0.2	---	<0.2	3.8	<0.2	<0.2	---	---	---
	10/30/89	601	GTEL[2]	2.5	2.6	8.0	<0.5	5.5	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	4.9	3.9	19.0	0.9	6.6	---	---	<0.5	<0.5	---	---	---
	4/18/90	601	GTEL[2]	3.8	2.8	17.0	0.6	5.7	---	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	5.3	4.4	27.0	1.2	9.2	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	3	2	21	0.7	---	<0.5	6	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	2	2	30	0.9	---	<0.5	6	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	1.4	1.1	32	1.0	---	---	4.7	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	1.5	1.9	50	<0.5	---	<0.5	5.8	<0.5	<0.5	2.0	<0.5	ND
	2/20/92	**8010**	**SPA***	**1.3**	**2.3**	**68**	**24**	**---**	**<0.5**	**7.6**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**

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Table 3. Analytic Results for Ground Water - Volatile Organic Compounds - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

Well ID	Date Sampled	Analytic Method	Analytic Lab	Carb Tet	Chloro-form	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	Other HVOCs[1]
				<----------					ppb						---------->
MW-9	6/22/90	8010	PACE	<0.5	<0.5	<0.5	<0.5	---	<0.5	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	0.71	<0.5	<0.5	---
	11/13/90	8010	SAL	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	1	<0.5	<0.5	---
	5/15/91	8010	SAL	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-10	6/22/90	8010	PACE	9.6	8.9	<0.5	<0.5	---	<0.5	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	11.0	7.8	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	5	4	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	5	4	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	6.9	3.4	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	2.7	3.3	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**3.3**	**3.4**	**3.0**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-11	6/22/90	8010	PACE	4.6	6.5	73	1.3	---	<0.5	8.9	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	8.1	6.8	84	2.0	4.6	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	<0.5	<0.5	39	<0.5	---	<0.5	2	5	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	1	3	7	0.5	---	<0.5	2	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	4.1	3.3	73	1.0	---	---	2.4	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	3.3	3.6	64	0.9	---	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**<2.5**	**<2.5**	**62**	**<2.5**	**---**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**ND**
MW-12	6/22/90	8010	PACE	6.0	7.3	7.4	<0.5	---	<0.5	13	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	601	GTEL[2]	8.0	7.0	6.7	<0.5	5.8	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	<0.5	<0.5	9	<0.5	---	<0.5	3	3	<0.5	<0.5	<0.5	---
	5/15/91	8010	SAL	4	4	10	<0.5	---	<0.5	3	<0.5	<0.5	<0.5	<0.5	ND
	8/27/91	8010	SPA	3.1	2.6	10	<0.5	---	---	2.3	<0.5	<0.5	<0.5	<0.5	ND
	11/15/91	8010	SPA*	1.9	3.5	8.9	<0.5	---	<0.5	5.9	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**3.3**	**3.4**	**3.7**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-13	11/15/91	8010	SPA*	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND[8]
	2/20/92	**8010**	**SPA***	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**

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Table 3. Analytic Results for Ground Water - Volatile Organic Compounds - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

.5 4.5 5 5 10 6 .5

Well ID	Date Sampled	Analytic Method	Analytic Lab	Carb Tet	Chloro-form	PCE	TCE	1,2-DCE	t-1,2-DCE	c-1,2-DCE	TCA	1,2-DCA	1,2-DCP	MC	Other HVOCs[1]
				<----------					ppb						---------->
MW-14	11/15/91	8010	SPA*	<0.5	5.5	33	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**<0.5**	**4.3**	**38**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-AA	11/3/88	624	BC	<1.0	<1.0	<1.0	<1.0	---	<1.0	---	<1.0	<1.0	---	---	---
(Trip	2/10/89	524.2/8240	CCAS	<0.1	<0.5	<0.1	<0.1	---	<0.1	<0.1	<0.1	<0.1	---	---	---
Blank)	4/24/89	524.2/8260	CCAS	<1.0	<1.0	<1.0	<1.0	<1.0	---	---	<1.0	<1.0	---	---	---
	7/28/89	8260	CCAS	<0.1	<0.5	<0.1	<0.1	<0.1	---	<0.1	<0.1	<0.1	---	---	---
	10/30/89	601	GTEL[2]	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	1/9/90	601	GTEL[2]	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	---	---	---
	4/18/90	601	GTEL[2]	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	6/22/90	8010	PACE	<0.5	<0.5	<0.5	<0.5	---	<0.5	---	<0.5	<0.5	<0.5	<0.5	---
	8/9/90	8010	GTEL[2]	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	<0.5	---
	11/13/90	8010	SAL	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---
	5/15/91	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	8/27/91	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	11/15/91	8010	SPA*	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**
MW-BB	5/15/91	---	---	---	---	---	---	---	---	---	---	---	---	---	---
(Bailer	8/27/91	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Blank)	11/15/91	8010	SPA*	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	2/20/92	**8010**	**SPA***	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**ND**

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Table 3. Analytic Results for Ground Water - Volatile Organic Compounds - Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California (continued)

EXPLANATION:

Carb Tet = Carbon Tetrachloride
PCE = Tetrachloroethene
TCE = Trichloroethylene
1,2-DCE = 1,2-Dichloroethene
t-1,2-DCE = trans-1,2-Dichloroethene
c-1,2-DCE = cis-1,2-Dichloroethene
TCA = 1,1,1-Trichloroethane
1,2-DCA = 1,2-Dichloroethane
1,2-DCP = 1,2-Dichloropropane
MC = Methylene chloride (dichloromethane)
Other HVOCs = Other Halogenated Volatile Organic Compounds
--- = Not analyzed
ND = Not detected

ANALYTIC METHODS:

624 = EPA Method 624 for VOCs
524.2/8240 = EPA Method 524.2/8240 for VOCs
8260 = Approved variance for Method 8240 using a capillary column and GC/MS for VOCs
601 = EPA Method 601 for VOCs
8010 = EPA Method 8010 for VOCs

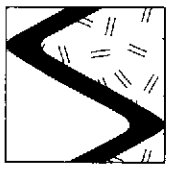
ANALYTIC LABORATORIES:

BC = Brown and Caldwell Laboratories of Emeryville, California
CCAS = Coast to Coast Analytical Services of San Luis Obispo, California
GTEL = Groundwater Technology Environmental Laboratories of Concord, California
PACE = Pace Laboratories, Inc. of Novato, California
SAL = Superior Analytical Laboratories, Inc. of San Francisco, California
SPA = Superior Precision Analytical, Inc. of San Francisco, California
SPA* = Superior Precision Analytical, Inc. of Martinez, California

NOTES:

Analytic results for ground water prior to May 15, 1991 were compiled from the ground water sampling report for this former service station prepared 12/14/90 by Western Geologic Resources, Inc. of San Rafael, California.

1 The tabulated analytic results for ground water prior to May 15, 1991 do not specify whether or not other HVOCs were detected.
2 GTEL does not speciate 1,2-dichloroethene; however, according to a footnote from a table created by Western Geological Services of San Rafael, California, the analytical reports incorrectly state levels for trans-1,2-dichloroethene.
3 Duplicate analysis.
4 Trichlorofluoromethane was detected at 1.4 ppb.
5 1,1-Dichloroethene was detected at 1.3 ppb.
6 1,1-Dichloroethane was detected at 0.5 ppb.
7 Chlorobenzene was detected at 0.7 ppb.
8 1,1-Dichloroethane was detected at 0.6 ppb.



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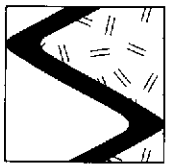
APPENDIX C
SIERRA ENVIRONMENTAL SERVICES
STANDARD OPERATING PROCEDURES



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SES STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING - QUARTERLY MONITORING

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of four well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed ±0.5°F, 0.1 or 5%, respectively).

Ground water samples are collected from the wells with steam-cleaned Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer

time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank and bailer blank accompanies each sampling set, or 5% trip blanks and 5% bailer blanks are included for sets of greater than 20 samples. The bailer blank is prepared by pouring previously boiled water into a steam-cleaned Teflon bailer prior to sampling a well. The trip and bailer blanks are analyzed for some or all of the same compounds as the ground water samples.

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APPENDIX D
CHAIN OF CUSTODY DOCUMENTS AND
LABORATORY ANALYTIC REPORTS

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 85104

Chain-of-Custody-Record

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

Chevron Facility Number 9-0020
Facility Address 1633 Harrison St. Oakland
Consultant Project Number 1-199-04
Consultant Name Sierra Environmental Services
Address P.O. Box 2546 Martinez CA 94553
Project Contact (Name) CHRIS BRAMER
(Phone) 510 370 1280 (Fax Number) 510 370 7159

Chevron Contact (Name) NANCY VUKELICH
(Phone) 510-842-9581
Laboratory Name Superior 1
Laboratory Release Number 4368660
Samples Collected by (Name) Chris Conner / Joe Leising
Collection Date Feb 20, 1992
Signature Christopher P Conner

	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)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Analyze in Order Remarks
									Analyses To Be Performed													
1	~~MW~~-AA		6x 40ml	W	G		HCl	Y	✓			✓										
2	~~MW~~-BB								✓			✓										
3	MW-10								✓			✓										
4	MW-12								✓			✓										
5	MW-14								✓			✓										
6	MW-11								✓			✓										
7	MW-1								✓			✓										
8	MW-6								✓			✓										
9	MW-2								✓			✓										
10	MW-8								✓			✓										
11	MW-3								✓			✓										
12	MW-5								✓			✓										
13	MW-4								✓			✓										
14	MW-13								✓			✓										

Please initial:
Samples Stored in ice ET
Appropriate containers
Samples preserved
VOA's without headspace
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Christopher P Conner		Feb 21-92 1700			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					02-21-91

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
(5 Days)
10 Days
As Contracted
17:00

COC-3.DWG/03 91/MCH

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 8/5/04

Chain-of-Custody-Record

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

Chevron Facility Number 9-0020
Facility Address 1633 Harrison St. Oakland
Consultant Project Number 1-199-04
Consultant Name Sierra Environmental Services
Address P.O.Box 2546 Martinez CA 94553
Project Contact (Name) CHRIS BRAMER
(Phone) 510 370 1280 (Fax Number) 510 370 7959

Chevron Contact (Name) NANCY VUKELICH
(Phone) 510-842-9581
Laboratory Name Superior
Laboratory Release Number 4368660
Samples Collected by (Name) Chris Conner / Joe Leising
Collection Date Feb 20, 1992
Signature Christopher P Conner

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)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
MW-7		6 40ml	W	G		HCl	Y	✓			✓										Analyze
MW-9		↓	↓	↓		↓	↓	✓			✓										"

Analyses To Be Performed

Please Initial:
Samples Stored in Ice
Appropriate containers
Samples preserved
VOA's without headspace
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Christopher P Conner	SES	1700 Feb 21-92			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					02-21-91 17:00

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

COC-3.DWG/03 91/HCH

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

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

LABORATORY NO.: 85104
CLIENT: Sierra Environmental
CLIENT JOB NO.: 1-199-04

DATE RECEIVED: 02/21/92
DATE REPORTED: 02/26/92

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
85104- 1	AA	02/20/92	02/24/92
85104- 2	BB	02/20/92	02/24/92
85104- 3	MW-10	02/20/92	02/24/92
85104- 4	MW-12	02/20/92	02/24/92
85104- 5	MW-14	02/20/92	02/24/92
85104- 6	MW-11	02/20/92	02/24/92
85104- 7	MW-1	02/20/92	02/24/92
85104- 8	MW-6	02/20/92	02/24/92
85104- 9	MW-2	02/20/92	02/24/92
85104-10	MW-8	02/20/92	02/24/92

Laboratory Number:	85104 1	85104 2	85104 3	85104 4	85104 5
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	2.0	2.5	1.3
TOLUENE:	ND<0.5	ND<0.5	2.2	3.1	1.8
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5	0.7	1.1
XYLENES:	ND<0.5	ND<0.5	2.1	3.0	5.2

Laboratory Number:	85104 6	85104 7	85104 8	85104 9	85104 10
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	1.9	0.5	0.9	ND<0.5	ND<0.5
TOLUENE:	2.1	0.6	1.1	ND<0.5	ND<0.5
ETHYL BENZENE:	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
XYLENES:	4.4	0.9	1.4	ND<0.5	ND<0.5

Superior Precision Analytical, Inc.
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C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 85104
CLIENT: Sierra Environmental
CLIENT JOB NO.: 1-199-04

DATE RECEIVED: 02/21/92
DATE REPORTED: 02/26/92

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
85104-11	MW-3	02/20/92	02/24/92
85104-12	MW-5	02/20/92	02/24/92
85104-13	MW-4	02/20/92	02/24/92
85104-14	MW-13	02/20/92	02/24/92
85104-15	MW-7	02/20/92	02/25/92
85104-16	MW-9	02/20/92	02/24/92

Laboratory Number:	85104 11	85104 12	85104 13	85104 14	85104 15
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50	3100	5200
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	ND<0.5	120	520
TOLUENE:	ND<0.5	ND<0.5	ND<0.5	50	150
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5	240	100
XYLENES:	0.9	ND<0.5	ND<0.5	400	380

Laboratory Number:	85104 16
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)
OIL AND GREASE:	NA
TPH/GASOLINE RANGE:	3400
TPH/DIESEL RANGE:	NA
BENZENE:	13
TOLUENE:	30
ETHYL BENZENE:	230
XYLENES:	460

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

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 85104

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = part per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L
Standard Reference: 10/04/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L
Standard Reference: 10/11/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	01/02/92	200 ng	101/96	5	70-130
Benzene	02/18/92	200 ng	101/105	4	70-130
Toluene	02/18/92	200 ng	97/100	3	70-130
Ethyl Benzene	02/18/92	200 ng	98/101	3	70-130
Total Xylene	02/18/92	200 ng	110/113	3	70-130

Richard Srna, Ph.D.
Laboratory Director

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO: 1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-1 (Analyzed:02/24/92)
SAMPLE: AA (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 72%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/24/92)
MS/MSD Average Recovery:104 %
MS/MSD %RPD: 3%

Robin Paulson
Senior Analyst

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO: 1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-2 (Analyzed:02/24/92)
SAMPLE: BB (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 68%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/24/92)
MS/MSD Average Recovery:104 %
MS/MSD %RPD: 3%

Robin Paulson
Senior Analyst

Superior Precision Analytical, Inc.
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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO: 1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-3 (Analyzed:02/24/92)
SAMPLE: MW-10 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	3.4
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	3.3
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	3.0
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 74%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/24/92)
MS/MSD Average Recovery:104 %
MS/MSD %RPD: 3%

Robin Paulson
Senior Analyst

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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO:1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-4 (Analyzed:02/24/92)
SAMPLE: MW-12 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	3.4
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	3.3
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	3.7
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 67%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/24/92)
MS/MSD Average Recovery:104 %
MS/MSD %RPD: 3%

Robin Paulson
Senior Analyst

Superior Precision Analytical, Inc.
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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO:1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-5 (Analyzed:02/25/92)
SAMPLE: MW-14 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	4.3
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	38
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 80%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/25/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD:16%

Robin Paulson
Senior Analyst

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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO:1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-6 (Analyzed:02/25/92)
SAMPLE: MW-11 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	5.0	ND
Bromomethane/Chloroethane	5.0	ND
Trichlorofluoromethane	2.5	ND
1,1-Dichloroethene/Freon 113	2.5	ND
Dichloromethane	2.5	ND
trans-1,2-Dichloroethene	2.5	ND
1,1-Dichloroethane	2.5	ND
cis-1,2-Dichloroethene	2.5	ND
Chloroform	2.5	ND
1,1,1-Trichloroethane	2.5	ND
Carbon Tetrachloride	2.5	ND
1,2-Dichloroethane	2.5	ND
Trichloroethene (TCE)	2.5	ND
1,2-Dichloropropane	2.5	ND
Bromodichloromethane	2.5	ND
cis-1,3-Dichloropropene	2.5	ND
trans-1,3-Dichloropropene	2.5	ND
1,1,2-Trichloroethane	2.5	ND
Tetrachloroethene (PCE)	2.5	62
Dibromochloromethane	2.5	ND
Chlorobenzene	2.5	ND
Bromoform	2.5	ND
1,1,2,2-Tetrachloroethane	2.5	ND
1,3-Dichlorobenzene	2.5	ND
1,4-Dichlorobenzene	2.5	ND
1,2-Dichlorobenzene	2.5	ND

Surrogate (4-CT) Recovery: 71%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/25/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD:16%

Robin Paulson
Senior Analyst

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 ▪ Martinez, California 94553 ▪ (510) 229-0166 / fax (510) 229-0916

CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO:1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-7 (Analyzed:02/25/92)
SAMPLE: MW-1 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	7.5
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	24
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 73%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/25/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD:16%

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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85104
CLIENT: Sierra Environmental
PROJECT NO:1-199-04

DATE SAMPLED :02/20/92
DATE RECEIVED:02/18/92
DATE REPORTED:02/28/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-8 (Analyzed:02/26/92)
SAMPLE: MW-6 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	4.0
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	11
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 74%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD: 7%

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CERTIFICATE OF ANALYSIS

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-9 (Analyzed:02/26/92)
SAMPLE: MW-2 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	5.0	ND
Bromomethane/Chloroethane	5.0	ND
Trichlorofluoromethane	2.5	ND
1,1-Dichloroethene/Freon 113	2.5	ND
Dichloromethane	2.5	ND
trans-1,2-Dichloroethene	2.5	ND
1,1-Dichloroethane	2.5	ND
cis-1,2-Dichloroethene	2.5	4.3
Chloroform	2.5	ND
1,1,1-Trichloroethane	2.5	ND
Carbon Tetrachloride	2.5	11
1,2-Dichloroethane	2.5	ND
Trichloroethene (TCE)	2.5	3.1
1,2-Dichloropropane	2.5	ND
Bromodichloromethane	2.5	ND
cis-1,3-Dichloropropene	2.5	ND
trans-1,3-Dichloropropene	2.5	ND
1,1,2-Trichloroethane	2.5	ND
Tetrachloroethene (PCE)	2.5	62
Dibromochloromethane	2.5	ND
Chlorobenzene	2.5	ND
Bromoform	2.5	ND
1,1,2,2-Tetrachloroethane	2.5	ND
1,3-Dichlorobenzene	2.5	ND
1,4-Dichlorobenzene	2.5	ND
1,2-Dichlorobenzene	2.5	ND

Surrogate (4-CT) Recovery: 85%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD: 7%

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-10(Analyzed:02/25/92)
SAMPLE: MW-8 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	7.6
Chloroform	0.5	2.3
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	1.3
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	2.4
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	68
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 65%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/25/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD:16%

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-11(Analyzed:02/26/92)
SAMPLE: MW-3 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	5.0	ND
Bromomethane/Chloroethane	5.0	ND
Trichlorofluoromethane	2.5	ND
1,1-Dichloroethene/Freon 113	2.5	ND
Dichloromethane	2.5	ND
trans-1,2-Dichloroethene	2.5	ND
1,1-Dichloroethane	2.5	ND
cis-1,2-Dichloroethene	2.5	6.1
Chloroform	2.5	4.0
1,1,1-Trichloroethane	2.5	ND
Carbon Tetrachloride	2.5	2.8
1,2-Dichloroethane	2.5	ND
Trichloroethene (TCE)	2.5	3.0
1,2-Dichloropropane	2.5	ND
Bromodichloromethane	2.5	ND
cis-1,3-Dichloropropene	2.5	ND
trans-1,3-Dichloropropene	2.5	ND
1,1,2-Trichloroethane	2.5	ND
Tetrachloroethene (PCE)	2.5	96
Dibromochloromethane	2.5	ND
Chlorobenzene	2.5	ND
Bromoform	2.5	ND
1,1,2,2-Tetrachloroethane	2.5	ND
1,3-Dichlorobenzene	2.5	ND
1,4-Dichlorobenzene	2.5	ND
1,2-Dichlorobenzene	2.5	ND

Surrogate (4-CT) Recovery: 74%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD: 7%

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-12(Analyzed:02/26/92)
SAMPLE: MW-5 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	0.7
Chloroform	0.5	2.0
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	4.0
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	3.9
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 69%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD: 7%

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-13(Analyzed:02/26/92)
SAMPLE: MW-4 (WATER)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	140
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	400
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 68%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD: 7%

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-14(Analyzed:02/26/92)
SAMPLE: MW-13 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 79%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD: 7%

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-15(Analyzed:02/26/92)
SAMPLE: MW-7 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	1.9
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	2.2
1,2-Dichloroethane	0.5	3.3
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 73%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD:7%

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EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85104-16(Analyzed:02/26/92)
SAMPLE: MW-9 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (4-CT) Recovery: 69%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/26/92)
MS/MSD Average Recovery: 90 %
MS/MSD %RPD: 7%

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