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 23, 1992

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

STID 1110

Re: Former Chevron Service Station #9-0019
210 Grand Avenue, Oakland 94610

Dear Mr. Smith:

Enclosed we are forwarding the Quarterly Ground Water Sampling 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 halogenated volatile organics. **Benzene** was detected in monitor wells **MW-3, MW-4, MW-5, and MW-6** only at concentrations of **4.5, 15, 14,000, and 2.0 ppb, respectively**. Negligible concentrations of 1,2-DCA was detected in monitor well MW-5 only. Depth to ground water was measured at approximately 2.6 to 6.6-feet below grade, and the direction of flow fluctuates from the west-northwest to the southwest.

Chevron will continue to sample this site and report findings on a quarterly basis. **A corrective action work plan is currently being prepared and will be forwarded to you by April 15, 1992,** for your review and concurrence.

5-5-92 not here yet.

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
Mr. Kent O'Brien, Geraghty & Miller
Ms. Sandra Lindsey, GTI-Concord
Ms. B.C. Owen
File (9-0019Q3)

SIERRA

Environmental Services

March 13, 1992

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

Re: Former Chevron Service Station #9-0019
210 Grand Avenue
Oakland, California
SES Project #1-200-04

Dear Ms. Vukelich:

This report presents the results of the quarterly ground water sampling at former Chevron Service Station #9-0019, located at 210 Grand Avenue in Oakland, California (Figure 1, Appendix A). Eight wells, MW-1 and MW-3 through MW-9, were sampled (Figure 2, Appendix A).

On February 26, 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 26, 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 document 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

CJB/RG/ly
20004QM.MR2

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

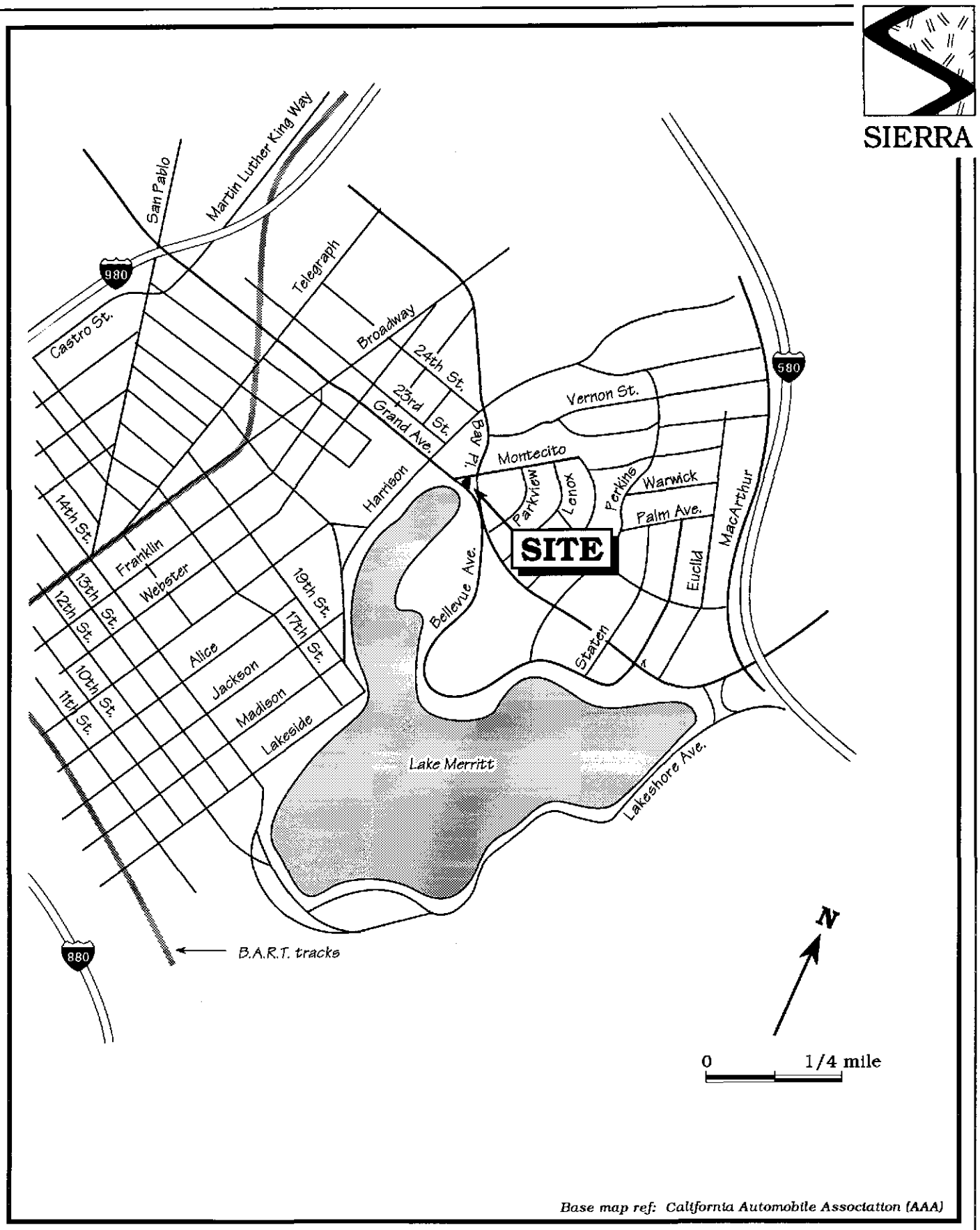

Figure 1. Site Location Map – Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California

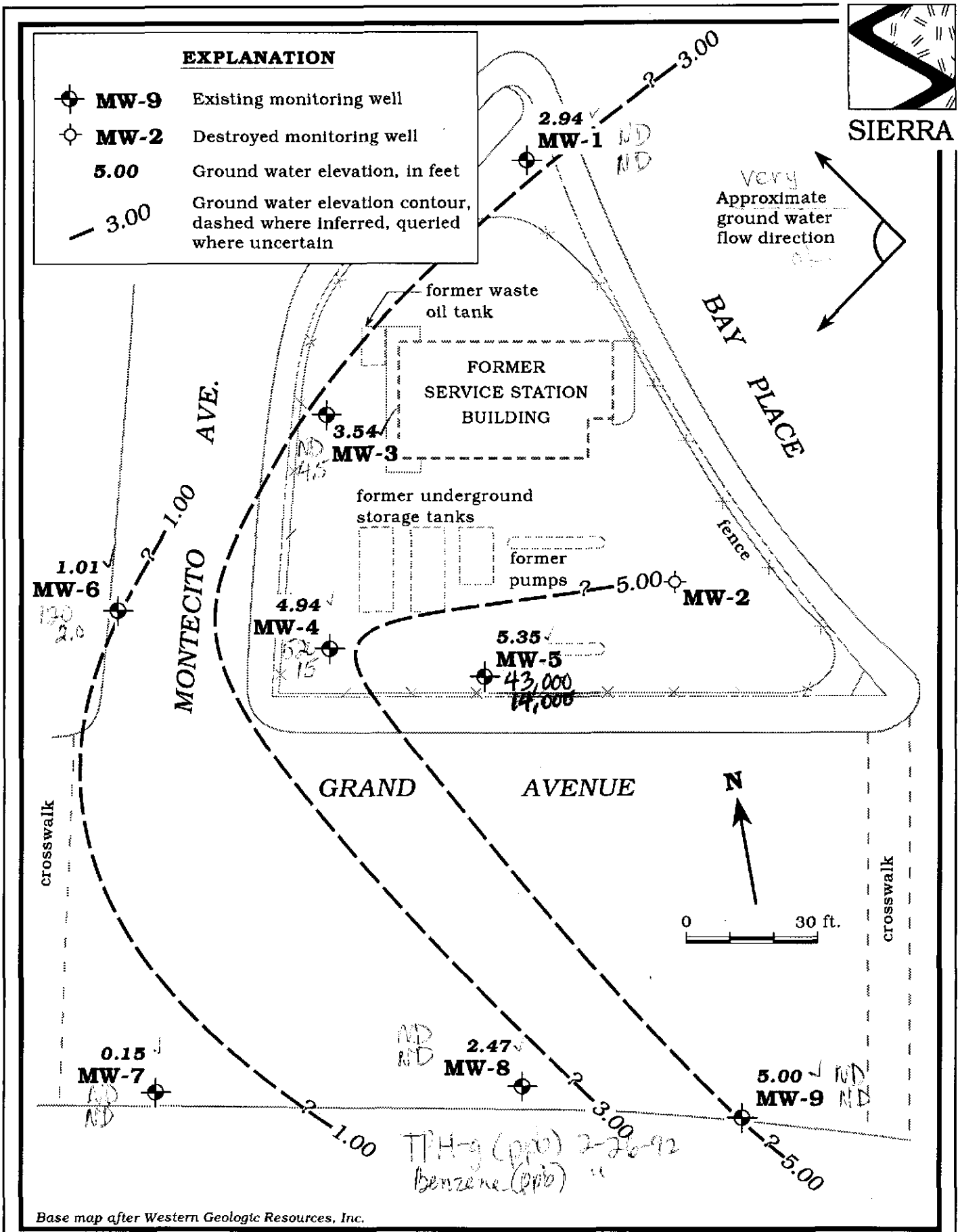

Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map – February 26, 1992 – Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0019, 210 Grand Avenue, 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	3/14/89	6.74	9.63	2.89	0	6 - 12	5 - 12	1 - 5
	6/8/89	7.14		2.49	0			
	9/14/89	7.21		2.42	0			
	12/8/89	7.29		2.34	0			
	3/19/90	7.00		2.63	0			
	7/6/90	7.13		2.50	0			
	10/3/90	7.53		2.10	0			
	8/23/91	7.06		2.57	0			
	11/22/91	7.47		2.16	0			
	2/26/92	**6.69**		**2.94**	**0**			
MW-2	3/14/89	6.08	8.99	2.91	0	8 - 13	7 - 13	1 - 7
	6/8/89	5.22		3.77	0			
	9/14/89	5.95		3.04	0			
	12/8/89	9.25		-0.26	0			
	3/19/90	5.92		3.07	0			
	7/6/90	6.79	9.01	2.22	0			
	10/3/90	---[1]		---[1]	0			
	8/23/91	---[1]		---[1]				
	11/22/91	---[2]		---[2]	0			
MW-3	3/14/89	6.02	8.18	2.16	0	9 - 15.5	8 - 15.5	1 - 8
	6/8/89	5.88		2.30	0			
	9/14/89	6.30		1.88	0			
	12/8/89	9.52		-1.34	0			
	3/19/90	6.17		2.01	0			
	7/6/90	7.52	8.19	0.67	0			
	10/3/90	7.31		0.88	0			
	8/23/91	5.65		2.53	0			
	11/22/91	6.78		1.41	0			
	2/26/92	**4.65**		**3.54**	**0**			

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0019, 210 Grand Avenue, 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-4	3/14/89	5.52	7.60	2.08	0	9.5 - 14.5	9 - 14.5	1 - 9
	6/8/89	4.19		3.41	0			
	9/14/89	4.80		2.80	0			
	12/8/89	4.86		2.74	0			
	3/19/90	4.65		2.95	0			
	7/6/90	6.42	7.59	1.17	0			
	10/3/90	6.39		1.20	0			
	8/23/91	4.42		3.17	0			
	11/22/91	5.38		2.21	0			
	2/26/92	**2.65**		**4.94**	**0**			
MW-5	3/14/89	6.98	8.35	1.37	0	7.5 - 15	6.5 - 15	1 - 6.5
	6/8/89	4.73		3.62	0			
	9/14/89	5.37		2.98	0			
	12/8/89	9.13		-0.78	0			
	3/19/90	5.12		3.23	0			
	7/6/90	5.81		2.54	0			
	10/3/90	6.90		1.45	0			
	8/23/91	5.05		3.30	0			
	11/22/91	6.25		2.10	0			
	2/26/92	**3.00**		**5.35**	**0**			
MW-6	7/6/90	9.09	6.56	-2.53	0	5.5 - 10	5 - 10	1 - 5
	10/3/90	5.78		.78	0			
	8/23/91	7.49		-0.93	0			
	11/22/91	7.63		-1.07	0			
	2/26/92	**5.55**		**1.01**	**0**			
MW-7	7/6/90	5.85	4.99	-0.86	0	4.5 - 10	4 - 10	1 - 4
	10/3/90	6.25		-1.26	0			
	8/23/91	5.50		-0.51	0			
	11/22/91	5.73		-.74	0			
	2/26/92	**4.84**		**.15**	**0**			

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-0019, 210 Grand Avenue, 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-8	7/6/90	3.98	6.77	2.79	0	5.5 - 8	5.5 - 8	1 - 5.5
	10/3/90	4.73		2.04	0			
	8/23/91	4.76		2.01	0			
	11/22/91	5.73		1.04	0			
	2/26/92	**4.30**		**2.47**	**0**			
MW-9	7/6/90	4.61	7.63	3.02	0	5 - 10	4.5 - 10	1 - 4.5
	10/3/90	5.14		2.49	0			
	8/23/91	5.45		2.18	0			
	11/22/91	5.48		2.15	0			
	2/26/92	**2.63**		**5.00**	**0**			

EXPLANATION:

DTW = Depth to water
TOC = Top of casing elevation
GWE = Ground water elevation
msl = Measurements referenced relative to mean sea level
--- = Well not measured

NOTES:

Water level and well construction data prior to August 23, 1991 were compiled from the ground water sampling report for this site prepared November 12, 1990 by Western Geologic Resources, Inc. of San Rafael, California.

[1] Well filled with dirt during site demolition.
[2] Well destroyed November 15, 1991.

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Table 2. Analytic Results for Ground Water - Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California

Sample ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	O&G	Chloroform	1,2-DCA	F113	TCA
				<----------ppb---------->									
MW-1	3/14/89	CCAS	8260/503E	600	<0.2	<0.2	3.2	1.7	<3,000	1.0	<0.2	<20.0	<0.2
	6/9/89	CCAS	8260	<50	<0.1	<0.5	<0.1	<0.2	---	<0.5	<0.1	<20.0	<0.1
	9/14/89	CCAS	8260	<50	<0.2	<1.0	<0.2	<0.4	---	<1.0	<0.2	<1.0	0.7
	12/8/89	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	3/19/90	GTEL	8015/8020/601	190	0.8	<0.3	7	3	---	<0.5	<0.5	---	<0.5
	7/6/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	10/3/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	8/23/91	SPA	8015/8020/8010	150	5.0	11	3.5	10	---	<0.5	<0.5	---	<0.5
	11/22/91	SPA	8015/8020/8010	86	7.2	11	2.9	13	---	<0.5	<0.5	<0.5	<0.5
	2/26/92	**SPA**	**8015/8020/8010**	**<50**	**<0.5**	**<0.5**	**<0.5**	**1.4**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-2	3/14/89	CCAS	8260/503E	<100	6.7	7.1	0.5	4.6	<3,000	<1.0	0.7	<20.0	<0.2
	6/9/89	CCAS	8260	<100	<0.2	<1.0	<0.2	<0.4	---	<1.0	<0.2	<20.0	<0.2
	9/14/89	CCAS	8260	<50	<0.2	<1.0	<0.2	<0.4	---	<1.0	<0.2	<1.0	<0.2
	12/8/89	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	3/19/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	7/6/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	10/3/90[1]	---	---	---	---	---	---	---	---	---	---	---	---
	8/23/91[1]	---	---	---	---	---	---	---	---	---	---	---	---
	11/22/91[6]	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	3/14/89	CCAS	8260/503E	<100	2.1	0.8	<0.2	2.0	<3,000	<1.0	3.0	<20.0	<0.2
	6/9/89	CCAS	8260	<100	<0.5	<1.0	<0.2	<0.4	---	<1.0	3.3	<20.0	<0.2
	9/14/89	CCAS	8260	<50	<0.2	<1.0	<0.2	<0.4	---	<1.0	2.2	<1.0	<0.2
	12/8/89	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	1.3	---	<0.5
	3/19/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	0.5	1.3	---	<0.5
	7/6/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	10/3/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	0.83	---	<0.5
	8/23/91	SPA	8015/8020/8010	220	16	22	5.5	16	---	<0.5	0.6	---	<0.5
	11/22/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	0.6	---	0.6	1.0	<0.5	<0.5
	2/26/92	**SPA**	**8015/8020/8010**	**<50**	**4.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-4	3/14/89	CCAS	8260/503E	3,000	810.0	200.0	30.0	130.0	<3,000	<20.0	<5.0	<20.0	<5.0
	6/9/89	CCAS	8260	900	440.0	13.0	22.0	40.0	---	<20.0	<5.0	60.0	<5.0
	9/14/89	CCAS	8260	540	220.0	2.0	6.1	9.3	---	<1.0	2.3	<1.0	<0.2
	12/8/89	GTEL	8015/8020/601	150	18	<0.3	1.0	<0.6	---	<0.5	1.9	---	<0.5
	3/19/90	GTEL	8015/8020/601	270	50	<0.3	0.7	<0.6	---	<0.5	0.8	---	<0.5

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Table 2. Analytic Results for Ground Water - Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California (continued)

Sample ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	O&G	Chloroform	1,2-DCA	F113	TCA
				<----------ppb---------->									
MW-4	7/6/90	GTEL	8015/8020/601	140	0.7	<0.3	0.5	<0.6	---	<0.5	0.79	---	<0.5
(cont)	10/3/90	GTEL	8015/8020/601	180	<0.3	<0.3	2	<0.6	---	<0.5	<0.5	---	<0.5
	8/23/91	SPA	8015/8020/8010	400	9.9	6.8	3.1	7.1	---	<0.5	<0.5	---	<0.5
	11/22/91	SPA	8015/8020/8010	130	3.4	1.3	3.5	6.0	---	<0.5	<0.5	<0.5	<0.5
	2/26/92	**SPA**	**8015/8020/8010**	**520**	**15**	**2.7**	**6.1**	**8.6**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-5	3/14/89	CCAS	8260/503E	20,000	6,600.0	1,600.0	270.0	1,100.0	<3,000	<100.0	<20.0	<20.0	<20.0
	6/9/89	CCAS	8260	15,000	>2,800.0[2]	270.0	240.0	640.0	---	<20.0	28.0	<20.0	<5.0
(D)	6/9/89	CCAS	8260	12,000	5,100.0	300.0	240.0	700.0	---	<200.0	<50.0	<20.0	<50.0
	9/14/89	CCAS	8260	15,000	>730.0[2]	>320.0[2]	>290.0[2]	440.0	---	<10.0	<2.0	<20.0	<2.0
(D)	9/14/89	CCAS	8260	15,000	3,300	450	490	730	---	<100	<20	<100	<20
(T)	9/14/89	CCAS	8260	16,000	3,100	550	400	690	---	<50	<10	<50	<10
	12/8/89	GTEL	8015/8020/601	20,000	4,600	640	390	1,300	---	<0.5	27	---	<0.5
	3/19/90	GTEL	8015/8020/601	25,000	6,500	1,200	450	2,200	---	<0.5	10	---	0.7
	6/6/90	GTEL	8015/8020/601	30,000	5,600	890	210	1,400	---	<0.5	<0.5	---	<0.5[3]
	10/3/90	GTEL	8015/8020/601	29,000	6,000	790	270	1,500	---	<0.5	<0.5	---	<0.5[4]
	8/23/91	SPA	8015/8020/8010	36,000	6,100	1,200	460	2,600	---	<0.5	3.9	---	<0.5[5]
	11/22/91	SPA	8015/8020/8010	24,000	8,000	1,500	530	2,600	---	<0.5	3.9	<0.5	<0.5[12,13]
	2/26/92	**SPA**	**8015/8020/8010**	**43,000**	**14,000**	**1,600**	**640**	**4,700**	**---**	**<0.5**	**2.0**	**<0.5**	**<0.5**
MW-6	7/6/90	GTEL	8015/8020/601	210	<0.3	<0.3	3	7	---	<0.5	<0.5	---	<0.5
	10/3/90	GTEL	8015/8020/601	320	<0.3	0.3	1	<0.6	---	<0.5	<0.5	---	<0.5
	8/23/91	SPA	8015/8020/8010	320	1.7	<0.5	2.1	<0.5	---	<0.5	<0.5	---	<0.5
	11/22/91	SPA	8015/8020/8010	190	1.9	2.2	5.4	7.7	---	<0.5	<0.5	<0.5	<0.5
	2/26/92	**SPA**	**8015/8020/8010**	**120**	**2.0**	**1.5**	**3.5**	**5.1**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-7	7/6/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	<1,000	<0.5	<0.5	---	<0.5
	10/3/90	GTEL	8015/8020/601	<50	<1.5	<1.5	<1.5	<3	---	<0.5	<0.5	---	<0.5
	8/23/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	11/22/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	2/26/92	**SPA**	**8015/8020/8010**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-8	7/6/90	GTEL	8015/8020/601/413.2	<50	<0.3	<0.3	<0.3	<0.6	<1,000	<0.5	<0.5	---	<0.5
	10/3/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	8/23/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	11/22/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	2/26/92	**SPA**	**8015/8020/8010**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

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Table 2. Analytic Results for Ground Water - Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California (continued)

Sample ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X	O&G	Chloroform	1,2-DCA	F113	TCA
				<----------ppb---------->									
MW-9	7/6/90	GTEL	8015/8020/601/413.2	<50	<0.3	<0.3	<0.3	<0.6	<1,000	<0.5	<0.5	---	<0.5
	10/3/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	8/23/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	---	<0.5
	11/22/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	<0.5	<0.5	<0.5	<0.5
	2/26/92	**SPA**	**8015/8020/8010**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Trip Blank	12/8/89	CCAS	8260	<100	<0.1	<0.2	<0.1	<0.2	---	<0.5	<0.1	---	<0.1
	6/9/89	CCAS	8260	<50	<0.5	<0.5	<0.1	<0.2	---	<0.5	<0.1	<20.0	<0.1
	9/14/89	CCAS	8260	<50	<0.1	<0.5	<0.1	<0.2	---	<0.5	<0.1	<0.5	<0.1
	12/8/89	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	4.4	<0.5	---	1.9
	3/19/90	GTEL	8015/8020	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	7/6/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	<0.6	---	<0.5	<0.5	---	<0.5
	10/3/90	GTEL	8015/8020/601	<50	<0.3	<0.3	<0.3	1	---	<0.5	<0.5	---	<0.5
AA	8/23/91	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	11/22/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	<0.5	---[7,8,9]
	2/26/92	**SPA**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**---**	**---**	**---**	**---**
Bailer Blank													
BB	8/23/91	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	11/22/91	SPA	8015/8020/8010	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	<0.5	---[7,10,11]
	2/26/92	**SPA**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**	**---**	**---**	**---**	**---**
DHS MCLs	---	---	---	NE	1	---	680	1,750	NE	NE	0.5	1,200	200
DHS RALs	---	---	---	NE	---	100	---	---	NE	NE	---	---	---

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Table 2. Analytic Results for Ground Water - Former Chevron Service Station #9-0019, 210 Grand Avenue, 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
1,2-DCA = 1,2-Dichloroethane
F113 = Trichlorotrifluoroethane (Freon 113)
TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
ppb = Parts per billion
--- = Not analyzed/not applicable
(D) = Duplicate sample
(T) = Triplicate sample
DHS MCLs = Department of Health Services Maximum Contaminant Levels
DHS RALs = Department of Health Services Recommended Action Levels
NE = Not established

ANALYTIC METHODS:

8260 = EPA Method 8260 for TPPH(G), BTEX and halogenated volatile organics
503E = Standard Methods Method 503E for O&G
8015 = EPA Method 8015 for TPPH(G)
8020 = EPA Method 8020 for BTEX
601 = EPA Method 601 for Halogenated Volatile Organics
8010 = EPA Method 8010 for Halogenated Volatile Organics

ANALYTIC LABORATORIES:

CCAS = Central Cost Analytic Services, San Luis Obispo, California
GTEL = GTEL Environmental Laboratory of Concord, California
SPA = Superior Precision Analytical, Inc. of San Francisco and Martinez, California

NOTES:

Analytic results for ground water prior to August 23, 1991 were compiled from the ground water sampling report for this site prepared November 12, 1990 by Western Geologic Resources, Inc., of San Rafael, California.

[1] Well obstructed during site demolition.
[2] Saturated column.
[3] 1,2-Dichloropropane was detected at 1.2 ppb.
[4] 1,2-Dichloropropane and trichloroethane were detected at 2 ppb and 0.74 ppb, respectively.
[5] 1,2 dichloropropane was detected at 0.9 ppb.
[6] Well destroyed November 15, 1991.
[7] Bromodichloromethane was detected at 0.8 ppb.
[8] Dibromochloromethane was detected at 2.4 ppb.
[9] Bromoform was detected at 4.7 ppb.
[10] Dibromochloromethane was detected at 2.2 ppb.
[11] Bromoform was detected at 4.8 ppb.
[12] TCE was detected at 1.0 ppb.
[13] 1,2-Dichloropropane was detected at 0.8 ppb.

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Table 3. Analytic Results for Ground Water - Metals - Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California

Sample ID	Date Sampled	Anaytic Lab	Analytic Method	Cadmium	Chromium	Nickel	Lead	Zinc
				<---------- ppm ---------->	ppb	ppb	ppb	ppb
MW-1	11/22/91	SPA	6010	<0.05	<0.05	<0.1	<0.1	<0.05
MW-2[1]	---	---	---	---	---	---	---	---
MW-3	11/22/91	SPA	6010	<0.05	<0.05	<0.1	<0.1	<0.05
MW-4	11/22/91	SPA	6010	<0.05	<0.05	<0.1	<0.1	.18 180
MW-5	11/22/91	SPA	6010	<0.05	.27 270	0.7 700	0.3 300	1.2 1200
MW-6	11/22/91	SPA	6010	<0.05	<0.05	<0.1	<0.1	.26 260
MW-7	11/22/91	SPA	6010	<0.05	<0.05	<0.1	0.1 100	.13 130
MW-8	11/22/91	SPA	6010	<0.05	0.05 50	0.1 100	0.2 200	.19 190
MW-9	11/22/91	SPA	6010	<0.05	<0.05	<0.1	<0.1	<0.05

ANALYTICAL METHOD:

6010 = EPA Method 6010 for Cadmium, Chromium, Nickel, Lead and Zinc

ANALYTIC LABORATORY:

SPA = Superior Precision Analytical, Inc. of Martinez, California

NOTES:

[1] MW-2 destroyed November 15, 1991.

20004T.GWM

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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 DOCUMENT AND
LABORATORY ANALYTIC REPORTS

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☑ No 85120

Chain-of-Custody-Record

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

Chevron Facility Number 9-0019
Facility Address 210 Grand Ave. Oakland
Consultant Project Number 1-200-04
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 7955

Chevron Contact (Name) Nancy Vukelich
(Phone) 842-9581
Laboratory Name Superior Precision Analytical
Laboratory Release Number 4482030
Samples Collected by (Name) Andrew Minkwitz
Collection Date 2-26-92
Signature

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
AA	1	3/40ml	W	G		HCL	Yes	✓								Analyze In Order Listed
BB	2	3/40ml	W					✓								
MW-7	3	6/40ml	W					✓	Acyn	✓	✓					
MW-8	4	6/40ml	W					✓			✓					
MW-9	5	6/40ml	W					✓	O & G		✓					
MW-3	6	6/40ml	W					✓			✓					
MW-1	7	6/40ml	W					✓	DO		✓					
MW-4	8	6/40ml	W					✓			✓					
MW-6	9	6/40ml	W					✓			✓					
MW-5	10	6/40ml	W					✓	2nd DO		✓					

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
	SES	2-27-92 0900		SES	2/27/ 0900
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SES	2/27 0920	Brenda L. OL	SAL	2/27/92 9:20
Relinquished By (Signature)	Organization	Date/Time	Recieved For Laboratory By (Signature)		Date/Time

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

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

CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-3 (Analyzed:02/27/92)
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	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 (02/27/92)
MS/MSD Average Recovery: 90%
MS/MSD %RPD: 3%

Afsaneh Salimpour
Senior Analyst

Superior Precision Analytical, Inc.
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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-4 (Analyzed:02/27/92)
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	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: 73%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/27/92)
MS/MSD Average Recovery: 90%
MS/MSD %RPD: 3%

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Senior Analyst

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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-5 (Analyzed:02/27/92)
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: 62%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/27/92)
MS/MSD Average Recovery: 90%
MS/MSD %RPD: 3%

Ghanch Salimpour
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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-6 (Analyzed:02/27/92)
SAMPLE: MW-3 (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: 66%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/27/92)
MS/MSD Average Recovery: 90%
MS/MSD %RPD: 3%

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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-7 (Analyzed:02/27/92)
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	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: 63%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/27/92)
MS/MSD Average Recovery: 90%
MS/MSD %RPD: 3%

Asanch Salimpour
Senior Analyst

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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-8 (Analyzed:02/28/92)
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	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: 84%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/28/92)
MS/MSD Average Recovery: 96%
MS/MSD %RPD: 3%

Ghaneh Salimpour
Senior Analyst

Superior Precision Analytical, Inc.
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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-9 (Analyzed:02/28/92)
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	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: 81%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/28/92)
MS/MSD Average Recovery: 96%
MS/MSD %RPD: 3%

Ysaneh Salimpour
Senior Analyst

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CERTIFICATE OF ANALYSIS

LABORATORY NO: 85120
CLIENT: SIERRA ENVIRONMENTAL SERVICES
PROJECT NO: 1-200-04

DATE SAMPLED :02/26/92
DATE RECEIVED:02/27/92
DATE REPORTED:03/02/92

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 85120-10 (Analyzed:02/28/92)
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	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	2.0
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: 84%

MDL: Method Detection Limit

QA/QC Summary: For Water Matrix (02/28/92)
MS/MSD Average Recovery: 96%
MS/MSD %RPD: 3%

Afsaneh Salimpour
Senior Analyst

Superior Precision Analytical, Inc.
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CERTIFICATE OF ANALYSIS

LABORATORY NO.: 85120
CLIENT: Sierra Environmental
CLIENT JOB NO.: 1-200-04

DATE RECEIVED: 02/27/92
DATE REPORTED: 02/28/92

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
85120- 1	aa	02/26/92	02/27/92
85120- 2	bb	02/26/92	02/27/92
85120- 3	mw-7	02/26/92	02/27/92
85120- 4	mw-8	02/26/92	02/27/92
85120- 5	mw-9	02/26/92	02/27/92
85120- 6	mw-3	02/26/92	02/27/92
85120- 7	mw-1	02/26/92	02/27/92
85120- 8	mw-4	02/26/92	02/27/92
85120- 9	mw-6	02/26/92	02/27/92
85120-10	mw-5	02/26/92	02/27/92

Laboratory Number:	85120 1	85120 2	85120 3	85120 4	85120 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	ND<0.5	ND<0.5	ND<0.5
TOLUENE:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
XYLENES:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5

Laboratory Number:	85120 6	85120 7	85120 8	85120 9	85120 10
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	520	120	43000
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	4.5	ND<0.5	15	2.0	14000
TOLUENE:	ND<0.5	ND<0.5	2.7	1.5	1600
ETHYL BENZENE:	ND<0.5	ND<0.5	6.1	3.5	640
XYLENES:	ND<0.5	1.4	8.6	5.1	4700

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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: 85120

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts 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	96/100	4	70-130
Benzene	02/26/92	200 ng	104/104	0	70-130
Toluene	02/26/92	200 ng	99/100	1	70-130
Ethyl Benzene	02/26/92	200 ng	100/100	0	70-130
Total Xylene	02/26/92	200 ng	111/113	2	70-130

Richard Srna, Ph.D.
Laboratory Director