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

Marketing Department

91 OCT -7 PM 12: 04

October 2, 1991

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

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

Dear Mr. Smith:

Enclosed we are forwarding the **Quarterly Ground Water Sampling Report dated September 20, 1991**, 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-1, MW-3, MW-4, MW-5 and MW-6 only at concentrations of **5.0, 16, 9.9, 6100 and 1.7** ppb, respectively. Negligible concentrations of 1,2 DCA were detected in monitor wells MW-3 and MW-5 only. Depth to groundwater was measured at approximately 4.5 to 7.5-feet below grade, and the direction of flow fluctuates from the west to the southwest.

Chevron will continue to sample this site and report findings on a quarterly basis. At completion of one (1) additional quarter of sampling, an evaluation will be conducted of the groundwater data for assessment of appropriate next actions. A report will be prepared documenting our proposed next actions.

If you have any questions or comments, please do not hesitate to contact me at (415) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

cc: Mr. Eddie So, RWQCB-Bay Area
Ms. B.C. Owen
File (9-0019Q1)

SIERRA

Environmental Services

September 20, 1991

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 August 15, 1991, SES personnel visited the site. 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).

Ground water samples were collected on August 15, 1991 in accordance with SES Standard Operating Procedure - Ground Water Sampling (Appendix C). All analyses were performed by Superior Precision Analytical, Inc. of San Francisco, 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

J.F. Leising
Environmental Technician

Roger Greenslelder
Registered Geologist #003011

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

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

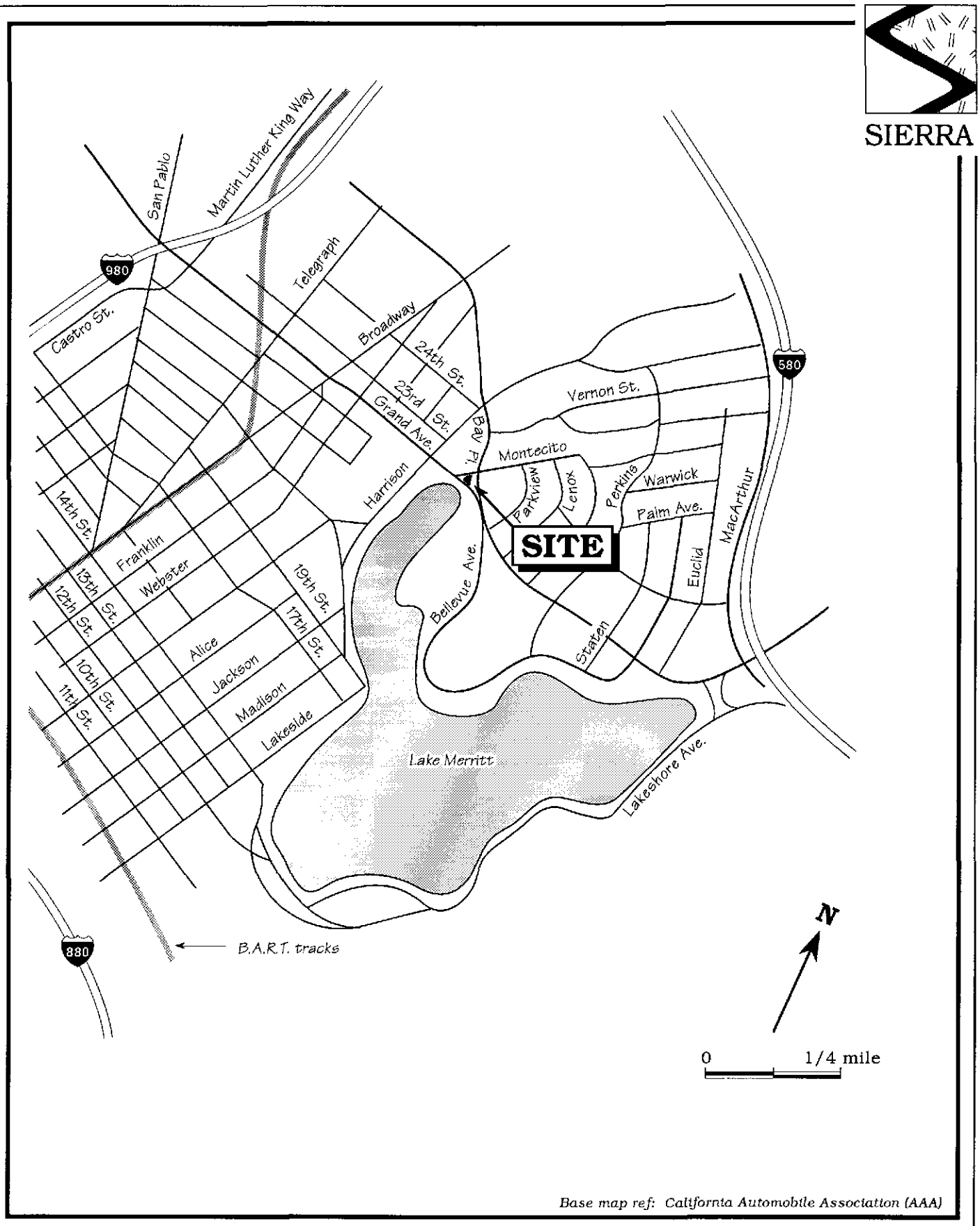

Figure 1. Site Location Map – Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California

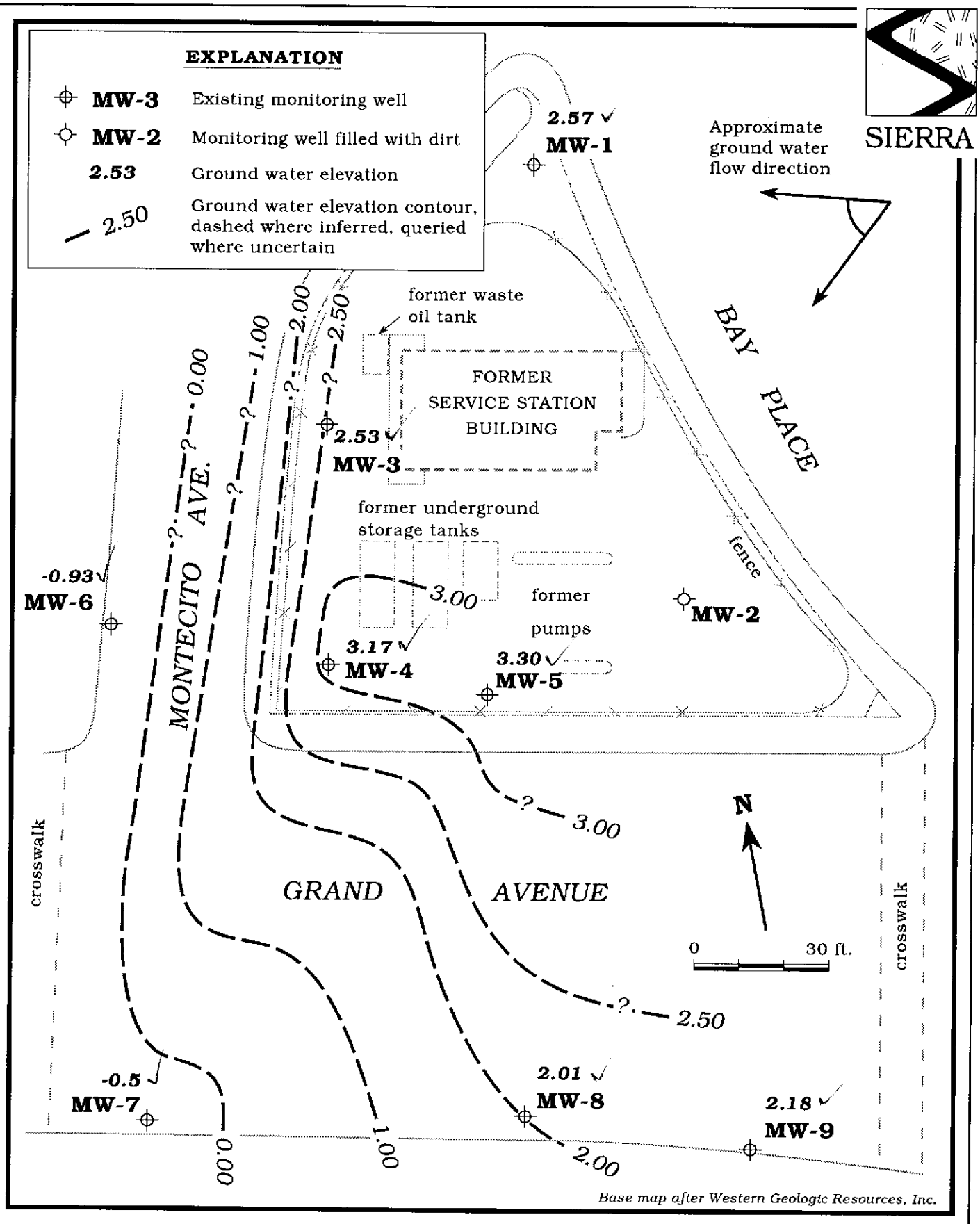

Figure 2. Monitoring Well Location and Ground Water Elevation Contour Map – August 23, 1991 – Former Chevron Service Station #9-0019, 210 Grand Avenue, Oakland, California

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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	9.63	2.49	0			
	9/14/89	7.21	9.63	2.42	0			
	12/8/89	7.29	9.63	2.34	0			
	3/19/90	7.00	9.63	2.63	0			
	7/6/90	7.13	9.63	2.50	0			
	10/3/90	7.53	9.63	2.10	0			
	8/23/91	**7.06**	**9.63**	**2.57**	**0**			
MW-2	3/14/89	6.08	8.99	2.91	0	8 - 13	7 - 13	1 - 7
	6/8/89	5.22	8.99	3.77	0			
	9/14/89	5.95	8.99	3.04	0			
	12/8/89	9.25	8.99	-0.26	0			
	3/19/90	5.92	8.99	3.07	0			
	7/6/90	6.79	9.01	2.22	0			
	10/3/90	---[1]	9.01	---[1]	0			
	8/23/91	**---[1]**	**9.01**	**---[1]**				
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	8.18	2.30	0			
	9/14/89	6.30	8.18	1.88	0			
	12/8/89	9.52	8.18	-1.34	0			
	3/19/90	6.17	8.18	2.01	0			
	7/6/90	7.52	8.19	0.67	0			
	10/3/90	7.31	8.19	0.88	0			
	8/23/91	**5.65**	**8.19**	**2.53**	**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	7.60	3.41	0			
	9/14/89	4.80	7.60	2.80	0			
	12/8/89	4.86	7.60	2.74	0			
	3/19/90	4.65	7.60	2.95	0			
	7/6/90	6.42	7.59	1.17	0			
	10/3/90	6.39	7.59	1.20	0			
	8/23/91	**4.42**	**7.59**	**3.17**	**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	8.35	3.62	0			
	9/14/89	5.37	8.35	2.98	0			
	12/8/89	9.13	8.35	-0.78	0			
	3/19/90	5.12	8.35	3.23	0			
	7/6/90	5.81	8.35	2.54	0			
	10/3/90	6.90	8.35	1.45	0			
	8/23/91	**5.05**	**8.35**	**3.30**	**0**			
MW-6	7/6/90	9.09[2]	6.56	-2.53[2]	0	5.5 - 10	5 - 10	1 - 5
	10/3/90	5.78	6.56	.78	0			
	8/23/91	**7.49**	**6.56**	**-0.93**	**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	4.99	-1.26	0			
	8/23/91	**5.50**	**4.99**	**-0.51**	**0**			
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	6.77	2.04	0			
	8/23/91	**4.76**	**6.77**	**2.01**	**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-9	7/6/90	4.61	7.63	3.02	0	5 - 10	4.5 - 10	1 - 4.5
	10/3/90	5.14	7.63	2.49	0			
	8/23/91	**5.45**	**7.63**	**2.18**	**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] Anomalous data, not used in contouring.

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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**
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
[1]	10/3/90	---	---	---	---	---	---	---	---	---	---	---	---
[1]	**8/23/91**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
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**
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
	7/6/90	GTEL	8015/8020/601	140	0.7	<0.3	0.5	<0.6	---	<0.5	0.79	---	<0.5
	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**

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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-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
[3]	6/6/90	GTEL	8015/8020/601	30,000	5,600	890	210	1,400	---	<0.5	<0.5	---	<0.5
[4]	10/3/90	GTEL	8015/8020/601	29,000	6,000	790	270	1,500	---	<0.5	<0.5	---	<0.5
[5]	**8/23/91**	**SPA**	**8015/8020/8010**	**36,000**	**6,100**	**1,200**	**460**	**2,600**	**---**	**<0.5**	**3.9**	**---**	**<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**
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**
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**
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**
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**	**---**	**---**	**---**	**---**	**---**

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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---------->									
Bailer Blank													
BB	**8/23/91**	**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	---	---	---

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
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, 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 filled with dirt 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.

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SES STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

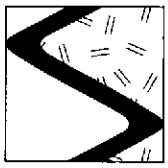
The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination 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).

The purge water is stored temporarily on-site in 55-gallon Department of Transportation-approved drums pending analytic results. The drums are labeled with the date, contents, the SES field personnel initials and SES phone number.

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.

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

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

LABORATORY NO.: 12242
CLIENT: Sierra Environmental Services
CLIENT JOB NO.: 1-200-04

DATE RECEIVED: 08/23/91
DATE REPORTED: 08/30/91
DATE REVISED : 09/10/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
12242- 1	AA	08/23/91	08/26/91
12242- 2	BB	08/23/91	09/06/91
12242- 3	MW-7	08/23/91	08/26/91
12242- 4	MW-8	08/23/91	08/26/91
12242- 5	MW-9	08/23/91	08/26/91
12242- 6	MW-1	08/23/91	08/26/91
12242- 7	MW-3	08/23/91	08/26/91
12242- 8	MW-4	08/23/91	08/26/91
12242- 9	MW-6	08/23/91	08/26/91
12242-10	MW-5	08/23/91	08/26/91

Laboratory Number:	12242 1	12242 2	12242 3	12242 4	12242 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:	12242 6	12242 7 (MW-3)	12242 8	12242 9	12242 10
ANALYTE LIST	Amounts/Quantitation Limits (ug/l)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	150	220	400	320	36000
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	5.0	16	9.9	1.7	6100
TOLUENE:	11	22	6.8	ND<0.5	1200
ETHYL BENZENE:	3.5	5.5	3.1	2.1	460
XYLENES:	10	16	7.1	ND<0.5	2600

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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: 12242

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 503E:
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: 07/23/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/l
Standard Reference: 06/13/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	07/23/91	200ng	99/100	0.4	59-121
Benzene	06/13/91	200ng	88/91	2.8	70-125
Toluene	06/13/91	200ng	87/91	4.5	74-116
Ethyl Benzene	06/13/91	200ng	87/91	4.5	75-120
Total Xylene	06/13/91	600ng	86/90	4.7	75-119

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Cecilia Y Jongsun (for)
Laboratory Director

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CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12242-6
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:MW-1

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	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
Trichloroethylene	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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

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Cecilia G Jongsin (for
Laboratory Director

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CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12242-7
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:MW-3

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane *	0.5	0.6
Trichloroethylene	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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

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Cecilia Magsumbol (for)
Laboratory Director

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CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12242-8
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:MW-4

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	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
Trichloroethylene	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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

Richard Srna, Ph.D.
Laboratory Director

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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.: 12242-10
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91
DATE REVISED : 09/18/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE: MW-5

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	**3.9**
Trichloroethylene	0.5	ND
1,2-Dichloropropane	0.5	**0.9**
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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

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Cecilia G. Joaquin (for)
Laboratory Director

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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.: 12242-9
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:MW-6

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	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
Trichloroethylene	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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

Richard Srna, Ph.D.
Laboratory Director

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CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12242-3
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:MW-7

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	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
Trichloroethylene	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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

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CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12242-4
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:MW-8

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	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
Trichloroethylene	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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

Richard Srna, Ph.D.

Cecilia G Jongeni (for)
Laboratory Director

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1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

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

LABORATORY NO.: 12242-5
CLIENT: Sierra Environmental Services
JOB NO.: 1-200-04

DATE SAMPLED: 08/23/91
DATE RECEIVED: 08/23/91
DATE ANALYZED :08/28/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS
SAMPLE:MW-9

Compound	MDL (ug/L)	RESULTS (ug/l)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene	0.5	ND
Methylene Chloride	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	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
Trichloroethylene	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	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
1,2-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
Cis-1,2-Dichloroethene	0.5	ND

MDL = Method Detection Limit
ug/l = parts per billion (ppb)
QA/QC Summary: Daily Standard RPD = <15
MS/MSD average recovery = 83 % :MS/MSD RPD =< 7 %

Richard Srna, Ph.D.

Cecilia Jongsma (for)
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 1242

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: Box 2546
Project Contact (Name): Jeanne Wahler
(Phone) 415-370-1280 (Fax Number)

Chevron Contact (Name): Nancy Vukelich
(Phone) 415-842-9581
Laboratory Name: SPA (SAL)
Laboratory Release Number: 449203o (SAL)
Samples Collected by (Name): John Trigg & J. F. Leising
Collection Date: 8/23/91
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)	Analyses To Be Performed: 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		3	W	NA		HCl	Yes	✓												
BB		3						✓												
MW-7		6						✓			✓									
MW-8		6						✓			✓									one vial broken MW
MW-9		6						✓			✓									
MW-1		6						✓			✓									
MW-3		6						✓			✓									
MW-4		6						✓			✓									
MW-6		6						✓			✓									
MW-5		6	✓	✓		✓	✓	✓			✓									

Please initial:
Samples Stored in Ice. Yes
Appropriate containers. Yes
Samples preserved. Y/N
VOA's without headspace Yes
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SES	8/23/91 17:27			
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
					8/23/91 5:25

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted P171

COC-3.DWG/83 91/HCH