

Chevron U.S.A. Inc.

2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500 Mail Address: PO. Box 5004, San Ramon, CA 94583-0804

91 OCT 23 AMII: 02

Marketing Department

October 21, 1991

Mr. Ravi Arulananthum Alameda County Environmental Health 80 Swan Way, Room 200 Oakland, CA 94621

Re:

Chevron Station #9-5542

7007 San Ramon Valley Blvd., Dublin, CA 94568

Dear Mr. Arulananthum:

Enclosed is a report dated October 15, 1991 which was prepared by Chevron's consultant, Sierra Environmental Services (Sierra), to describe groundwater monitoring which occurred on September 20 and October 4, 1991 at the site referenced above.

Chevron will continue its program of quarterly groundwater monitoring at the site. Chevron's environmental consultant, Gettler-Ryan, will install an additional downgradient groundwater monitoring well in an effort to define the extent of dissolved hydrocarbons in the groundwater. The workplan for this project has been submitted, and Gettler-Ryan is in the process of applying for the necessary permits. In addition, Chevron has been discussing remediation strategies with the environmental consulting firm, Geraghty and Miller.

If you have any questions or comments, you may contact me at (510) 842-8658.

Sincerely,

Clint B. Rogers

Environmental Engineer

Sint B. Royan

Enclosure

cc:

Richard Hiett, San Francisco Bay RWQCB, Oakland, CA

Jeff Monroe, Gettler-Ryan, Hayward, CA

Tom Howard, Geraghty and Miller, Richmond, CA

Mary Diamond, See's Candy, 3423 s. La Cienega Blvd., Los Angeles, CA 90016-4401 Real Estate Dept., See's Candy, 210 El Camino Real, South San Francisco, CA 94080



October 15, 1991

Clint Rogers Chevron USA P.O. Box 5004 San Ramon, CA 94583

Re:

Chevron Service Station #9-5542

7007 San Ramon Road Dublin, California SES Project #1-214-04

Dear Mr. Rogers:

This report presents the results of the quarterly ground water sampling at Chevron Service Station #9-5542, located at 7007 San Ramon Road in Dublin, California (Figure 1, Appendix A). Seven wells, MW-1 through MW-7, were sampled (Figure 2, Appendix A).

On September 20 and October 4, 1991, SES personnel visited the site. Water level measurements were collected from all wells and all wells were checked for 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 ground water samples were collected on September 20, 1991 in accordance with SES Standard Operating Procedure - Ground Water Sampling (Appendix C). All analyses were performed by Superior Analytical Laboratory 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

Sharon Halper

Senior Project Geologist

Dr. Røger Greensfelder

Registered Geologist #0030

SH/RG:ly 21404QM.OC1

Appendices

A - Figures

B - Tables

C - SES Standard Operating Procedure

D - Chain of Custody Document and Laboratory Analytic Reports

(510) 370 - 1280

W. GREENBEELDER

No. 003011

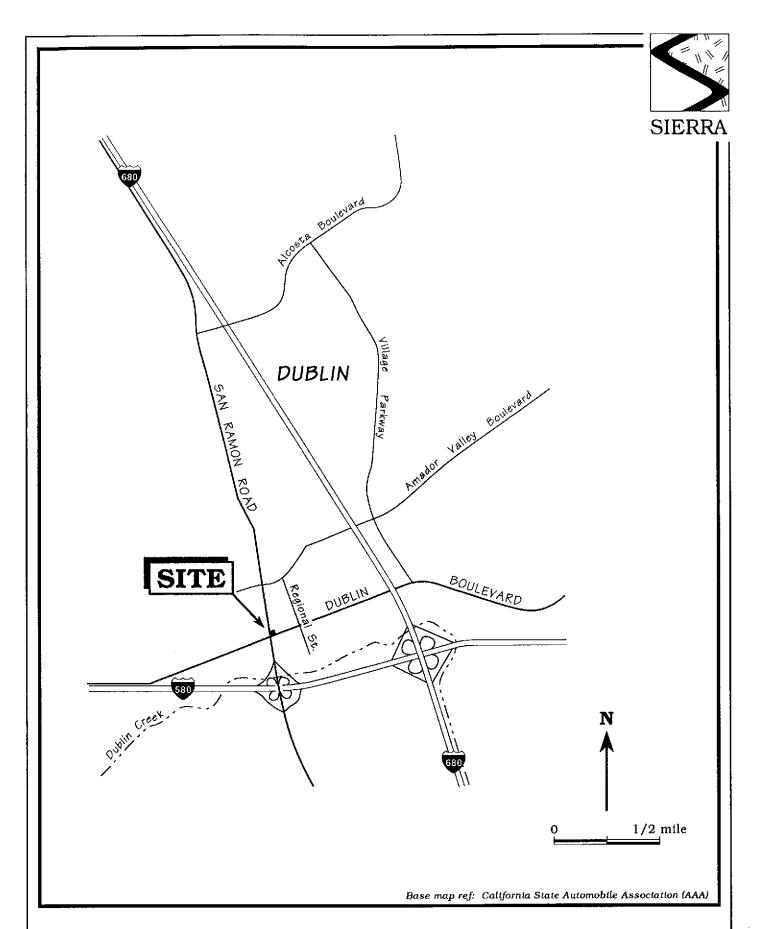


Figure 1. Site Location Map - Chevron Service Station #9-5542 - 7007 San Ramon Road, Dublin, California

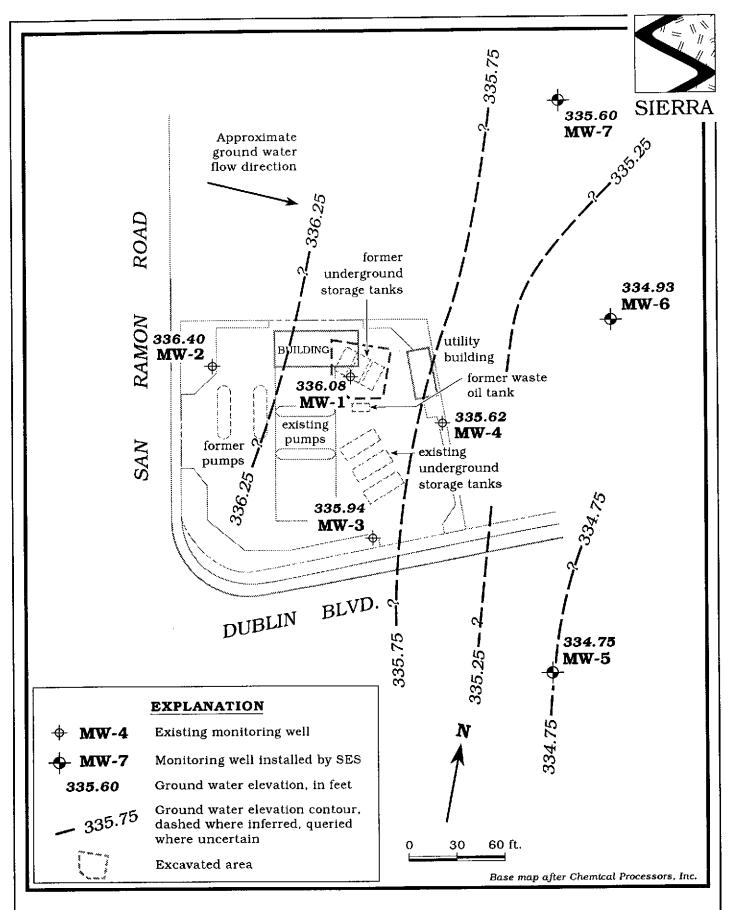


Figure 2. Monitoring Well Location and Ground Water Elevation Contour Map - October 4, 1991 - Chevron Service Station #9-5542 - 7007 San Ramon Road, Dublin, California



Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California

Well ID	Date Measured	DTW (ft)	TOC* (ft)	GWE (msl)	Product Thickness** (ft)	Screen Interval	Sand Pack Interval -feet below grade	Bentonite/Grout Interval >
MW-1	5/31/91	25.67	363.98	338.31	0	20.0 - 35.0	19.5 - 35.5	0 - 19.5
	6/21/91	26.23		337.75	0			
	7/17/91	26.53		337.45	0			
	10/4/91	27.90		336.08	O			
MW-2	5/31/91	25.51	364.19	338.68	o	22.0 - 37.0	20.0 - 37.0	0 - 20.0
	6/21/91	26.13		338.06	0			
	7/17/91	26.46		337.73	0			
	10/4/91	27.79		336.40	o			
MW-3	5/31/91	23.20	361.92	338.72	o	20.0 - 35.0	19.0 - 35.0	0 - 19.0
	6/21/91	24.13		337. 7 9	0			
	7/17/91	24.59		337.73	0			
	9/20/91	25.98		335.94	0			
MW-4	5/31/91	24.67	362.70	338.03	0	20.0 - 35.0	19.0 - 35.0	0 - 19.0
	6/21/91	25.31		337.39	0			
	7/17/91	25.73		336.97	О			
	10/4/91	27.08		335.62	0			
MW-5	6/21/91	23.17	359.95	336.78	0	21.0 - 36.0	19.5 - 36.0	0 - 19.5
	7/17/91	23.68		336.27	0			
	10/4/91	25.20		334.75	0			
MW-6	6/21/91	23.55	360.22	336,67	o	20.0 - 35.0	18.5 - 35.0	0 - 18.5
	7/17/91	24.00		336.22	0			
	10/4/91	25.29		334.93	0			



Table 1. Water Level Data and Well Construction Details - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California

Well ID	Date Measured	DTW (ft)	TOC* (ft)	GWE (msl)	Product Thickness** (ft)	Screen Interval	Sand Pack Interval feet below grade	Bentonite/Grout Interval >
MW-7	6/21/91	23.45	360.63	337.18	0	20.0 - 35.0	18.5 - 35.0	0 - 18.5
	7/17/91 10/4/91	23.90 25.03		336.73 335.60	0 0			

EXPLANATION:

DTW = Depth to water

TOC = Top of casing elevation

GWE = Ground water elevation

msl = Measurements referenced relative to mean sea level

NOTES:

Well construction details for MW-1 through MW-4 were compiled from a draft report prepared by Chempro, undated.

- * Top of casing elevations were surveyed by Ron Miller, Professional Engineer #15816, June 26, 1991.
- $\ensuremath{^{**}}$ Product thickness was measured with an MMC flexi-dip interface probe.

21400T.WL



Table 2. Analytic Results for Ground Water - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California

Sample ID	Date	Analytic Method	Analytic Lab	TPPH(G) <	O&G	В	T 	E ppb	X	HVOCs	1,2-DCA	EDB	OL >
 MW-1	4/3-4/90	*	8015/602/504	46,000		8,400	7,400	860	5,600			1.04	
(D)	4/3-4/90		8015/602/504	43,000		8,400	7.200	840	5,200			1.1	
(D)	5/31/91	SAL	8015/8020/8010	31,000		7,400	2,500	630	2,100	ND	2		
	5/31/91	SAL	503E		<5,000				-,				
	9/20/91	SAL	8015/8020/8010	31,000		3,000	2,800	610	3,100	ND	0.6		
MW-2	4/3-4/90	•	8015/602/504	<50		<0.3	<0.3	< 0.3	<0.6			< 0.02	
	5/31/91	SAL	8015/8020/8010	100		3.1	4.2	0.7	2.0	ND	< 0.5		
	5/31/91	SAL	503E		<5,000								
	9/20/91	SAL	8015/8020	68		1.3	1.6	0.8	3.0				-44
MW-3	4/3-4/90		8015/602/504	2,200		36	5	6	17			< 0.02	
-1211	5/31/91	SAL	8015/8020/8010	2,200		130	11	31	78	ND	19		
	5/31/91	SAL	503E		<5,000								
	9/20/91	SAL	8015/8020	2,200		190	6.0	24	32				
MW-4	4/3-4/90	•	8015/413.1/602/504	43,000	18,000	4,000	5,000	790	5,500			< 0.02	
	4/3-4/90	•	624**	***		6,000	8,200	1,500					
	5/31/91	SAL	8015/8020/8010	34,000		2,900	2,900	680	3,300	ND	< 0.5		
	5/31/91	SAL	503E	•••	<5,000								
	9/20/91	SAL	8015/8020/8010	37,000		4,000	3,200	580	3,000	ND	9.2		
MW-5	6/21/91	SAL	8015/8020	<50		<0.5	<0.5	<0.5	<0.5		<0.5		
	6/21/91	SAL	8010/LUFT						***	ND			<4,000
	9/20/91	SAL	8015/8020	170¹		0.8	0.9	<0.5	1.5				
MW-6	6/21/91	SAL	8015/8020	3,700		50	2.6	150	340		<0.5		
	6/21/91	SAL	8010/LUFT							ND			<4,000
	9/20/91	SAL	8015/8020	3,200		28	<0.5	140	100				
MW-7	6/21/91	SAL	8015/8020	<50		<0.5	< 0.5	<0.5	<0.5	***	<0.5		
	6/21/91	SAL	8010/LUFT			***				ND			<4,000
	9/20/91	SAL	8015/8020	69		4.4	3.3	1.2	3.9		•••		
Trip Blank													
(MW-AA)	5/31/91	SAL	8015/8020	<50		< 0.5	<0.5	<0.5	< 0.5				
	6/21/91	SAL	8015/8020	<50		<0.5	<0.5	<0.5	<0.5				
	9/20/91	SAL	8015/8020	<50		<0.5	<0.5	<0.5	<0.5		***		



Table 2. Analytic Results for Ground Water - Chevron Service Station #9-5542, 7007 San Ramon Road, Dublin, California (continued)

Sample ID	Date	Analytic Method	Analytic Lab	TPPH(G)	O&G	В	Т	E ppb	х	HVOCs	1,2-DCA	EDB	OL >
Bailer Blank (MW-BB)	5/31/91	SAL	8015/8020	<50		<0.5	<0.5	<0.5	<0.5				
	6/21/91 9/20/91	SAL SAL	8015/8020 8015/8020	<50 <50		<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5				
DHS MCLs				NE	NE	1		680	1,750	***	0.5	0.02	NE
DHS RALs					NE		100		***	***			NE

EXPLANATION:

 $\mathsf{TPPH}(\mathsf{G}) = \mathsf{Total}$ Purgeable Petroleum Hydrocarbons as Gasoline

O&G = Oil and Grease B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

HVOCs = Halogenated Volatile Organic Compounds

1,2-DCA = 1,2-Dichloroethane

EDB = Ethylene dibromide

OL = Organic lead

ppb = Parts per billion

ND = Not detected at detection limits of 0.5 to 1 ppb

--- = Not analyzed/not applicable

DHS = Department of Health Services

MCLs = Maximum Contaminant Levels

RALs = Recommended Action Levels

NE = Not established

D = duplicate sample

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)

602 = EPA Method 602 for BTEX

504 = EPA Method 504 for EDB

503E = Standards Methods Method 503E for O&G

8020 = EPA Method 8020 for BTEX

8010 = EPA Method 8010 for HVOCs

413.1 = EPA Method 413.1 for total O&G

624 = EPA Method 624 for BTEX and VOCs

LUFT = DHS LUFT Manual method for OL

ANALYTIC LABORATORY:

SAL = Superior Analytic Laboratory of San Francisco and Martinez, California

NOTES:

Well locations are shown on Figure 5 (Appendix A)

- Analytic data was compiled from a draft report prepared by Chempro, undated.
 Analytic laboratory was not shown.
- ** 624 compounds other than BTE were not reported
- *** DHS MCLs and RALs for HVOCs vary
- A non-standard gasoline pattern was observed in the chromatogram.



APPENDIX C SIERRA ENVIRONMENTAL SERVICES STANDARD OPERATING PROCEDURE



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. Prepreserved 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.

GWTRSAMP.SOP



APPENDIX D CHAIN OF CUSTODY DOCUMENT AND LABORATORY ANALYTIC REPORTS

Fax copy of Lab Report and COC to Chevron Contact: No 12372 Chain-of-Custody-Record 9-5542 Chevron Contact (Name) Clint 266EK5 Chevron Facility Number Facility Address 7007 SAN RAMON VALLEY BIND, DUBLIN (Phone) 842 - 8658 Consultant Project Number 1-214-04 Chevron U.S.A. Inc. Laboratory Name SUPERIOR ANALYTICAL LABORATORY P.O. BOX 5004 Consultant Name SIERRA ENVIRONMENTAL SERVICES Laboratory Release Number 5464460 San Ramon, CA 94583 Address P.O BOX 2546 MARTINEZCA 94553 Samples Collected by (Name) ERIC CR 055

Collection Date 9-20-91 FAX (415)842-9591 Project Contact (Name) SHARON HAIDEN (Phone) (90) 370-1280 (Fax Number) (510) 370 7959 Signature Air Charcool Analyses To Be Performed Grab Composite Discrete Purgeable Halocarbons (8010)@#aaaafdy Mg Purgeable Aromotics (8020) Number of Containers Purgeable Organics (8240) Sample Preservation Sample Number BTEX + TPH GAS (8020 + 8015) N H Oil and Grease (5520) 4 8 8 ဖပ္မ Remarks 3/4014 HCL <u>Amalyze in</u> AA 3/40 A // BB u // MW-5 11 11 H5000 ij 11 11 MW-7 MW-2 11 11 fi Please initial: Samples Store 11 u 4 11 MW-3 Adpropt 11 IJ 4 11 M/11-6 Schning. h 11 mw-1 ٠. ij ff mu-~~~~ IJ 11 MW-4 4 Relinquished By (Signature) Date/Time Received By (Signature) Date/Time Organization Organization Turn Around Time (Circle Choice) SES 9/20/9/ 1830 24 Hrs. 48 Hrs. Relinquished By (Signature) Date/Time Received By (Signature) Organization Date/Time Organization 5 Days 10 Days Regioved For Laboratory By (Signature) Date/Time Relinquiched By (Signature) Organization Date/Time As Contracted Mehry 1/19/80



Superior Precision Analytical, Inc.

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12372

DATE RECEIVED: 09/20/91

CLIENT: Sierra Environmental Services

DATE REPORTED: 09/30/91

CLIENT JOB NO.: 1-214-04

ruge rer s	Page	1	of	2
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12372- 1 12372- 2 12372- 3 12372- 4 12372- 5 12372- 6 12372- 7 12372- 8	Customer AA BB MW-5 MW-7 MW-2 MW-3 MW-6 MW-1 MW-4		entificati	on	Date Sample	.ed 0/91 0/91 0/91 0/91 0/91 0/91	Date Analyzed 09/25/91 09/25/91 09/25/91 09/25/91 09/25/91 09/25/91 09/25/91 09/26/91
Laboratory Nu	mber:	12372 1	12372 2	12372 3	12372 4		372 5
ANALYTE LIST		Amounts/	'Quantitati	on Limits	(ug/L)	<u> </u>	
OIL AND GREAS	E:	NA	NA	NA	NA	NA	
TPH/GASOLINE	RANGE:	ND<50	ND<50	170*	69	68	
TPH/DIESEL RA	NGE:	NA	NA	NA	NA	NA	
BENZENE:		ND<0.5	ND<0.5	0.8	4.4 3.3	1.	
TOLUENE:		ND<0.5	ND<0.5 ND<0.5	0.9 ND<0.5	1.2	0.	
ETHYL BENZENE XYLENES:	•	ND<0.5 ND<0.5	ND<0.5	1.5	3.9	3.	
Laboratory Nu	mber:	12372 6	12372 7	12372	12372 9		
ANALYTE LIST		Amounts	'Quantitati	on Limits	(ug/L)		
OIL AND GREAS		NA	NA	NA	NA		
TPH/GASOLINE		2200	3200	31000	37000		
TPH/DIESEL RA	NGE :	NA 100	NA	NA 2000	NA 4000		
BENZENE:		190	28 ND 0 5	3000 2800	4000 3200		
TOLUENE:	٠.	6.0 24	ND<0.5 140	2800 610	580		
ETHYL BENZENE XYLENES:	•	32	100	3100	3000		



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

CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2 QA/QC INFORMATION SET: 12372

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	95/94	1.8	59-121
Benzene	06/13/91	200ng	95/97	2.1	70-125
Toluene	06/13/91	200ng	92/94	2.2	74-116
Ethyl Benzene		200ng	92/95	2.7	75-120
Total Xylene	06/13/91	600ng	99/102	2.2	75-119

^{*}Gasoline range concentration reported. A non-standard gasoline pattern was observed in the chromatogram.

Richard Srna, Ph.D.

Dun' A Nwgr (for)
Laboratory Director



Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

CERTIFICATE OF ANALYSIS

Services

LABORATORY NO.: 12372-8

CLIENT: Sierra Environmental

DATE SAMPLED: 09/20/91

DATE RECEIVED: 09/20/91 DATE ANALYZED: 09/30/91

JOB NO.: 1-214-04

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	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 = 81 % :MS/MSD RPD =< 2 %

Richard Srna, Ph.D.



Superior Precision Analytical, Inc.

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 12372- 9

DATE SAMPLED: 09/20/91

CLIENT: Sierra Environmental

DATE RECEIVED: 09/20/91

Services

DATE ANALYZED: 09/30/91

JOB NO.: 1-214-04

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	9.2
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 = 81 % :MS/MSD RPD =< 2 %

Richard Srna, Ph.D.