Chevron

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

January 10, 1992

Ms. Pamela Evans
Alameda County Health Care Services Agency
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-5630
997 Grant Avenue, San Lorenzo

Dear Ms. Evans:

Enclosed we are forwarding the Quarterly Ground Water Sampling Report dated December 18, 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 and BTEX. Benzene was not detected in any of the monitor wells sampled. Monitor well C-2 was unable to be sampled due to an obstruction. However, historical sampling results from C-2 have reported non-detectable to negligible concentrations of hydrocarbon contaminants. This well will be repaired prior to the next scheduled sampling event. Depth to ground water was measured at approximately 9 to 11-feet below grade, and the direction of flow is to the north-northeast.

Chevron will continue to sample this site and report findings on a quarterly basis.

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. INC.

Nancy Vukelich
Environmental Engineer

cc: Mr. Eddy So, RWQCB-Bay Area
Ms. B.C. Owen
File (9-5630Q2)

Mr. Ron Sykora
David D. Bohannon Organization
60 Hillsdale Mall
San Mateo, CA 94403

92 JAN 14 PM 4:28

bcc: Mr. Chris Bramer
Sierra Environmental Services
P.O. Box 2546
Martinez, CA 94553

} Please proceed with repair of well C-2. I have increased your routine monitoring release to reflect the cost estimate submitted on January 7th. Please repair prior to the next scheduled sampling event in March. Thank you. Advise when work will commence.

DEC 26 '91 T.L.H

SIERRA
Environmental Services

December 18, 1991

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

Re: Former Chevron Service Station #9-5630
997 Grant Avenue
San Lorenzo, California
SES Project #1-206-04

Dear Ms. Vukelich:

This report presents the results of the quarterly ground water sampling at Former Chevron Service Station #9-5630, located at 997 Grant Avenue, San Lorenzo, California (Figure 1, Appendix A). Three wells, C-1, C-2 and C-3, were sampled (Figure 2, Appendix A).

On December 4, 1991, 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 ground water samples were collected on December 4, 1991 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 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

Carol Eaton for

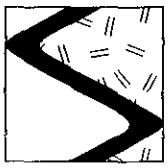
Chris J. Bramer
Senior Project Engineer

Roger Greensfelder
Registered Geologist #003011

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

CJB/RE/ly
20604QM.DE1

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



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APPENDIX A
FIGURES

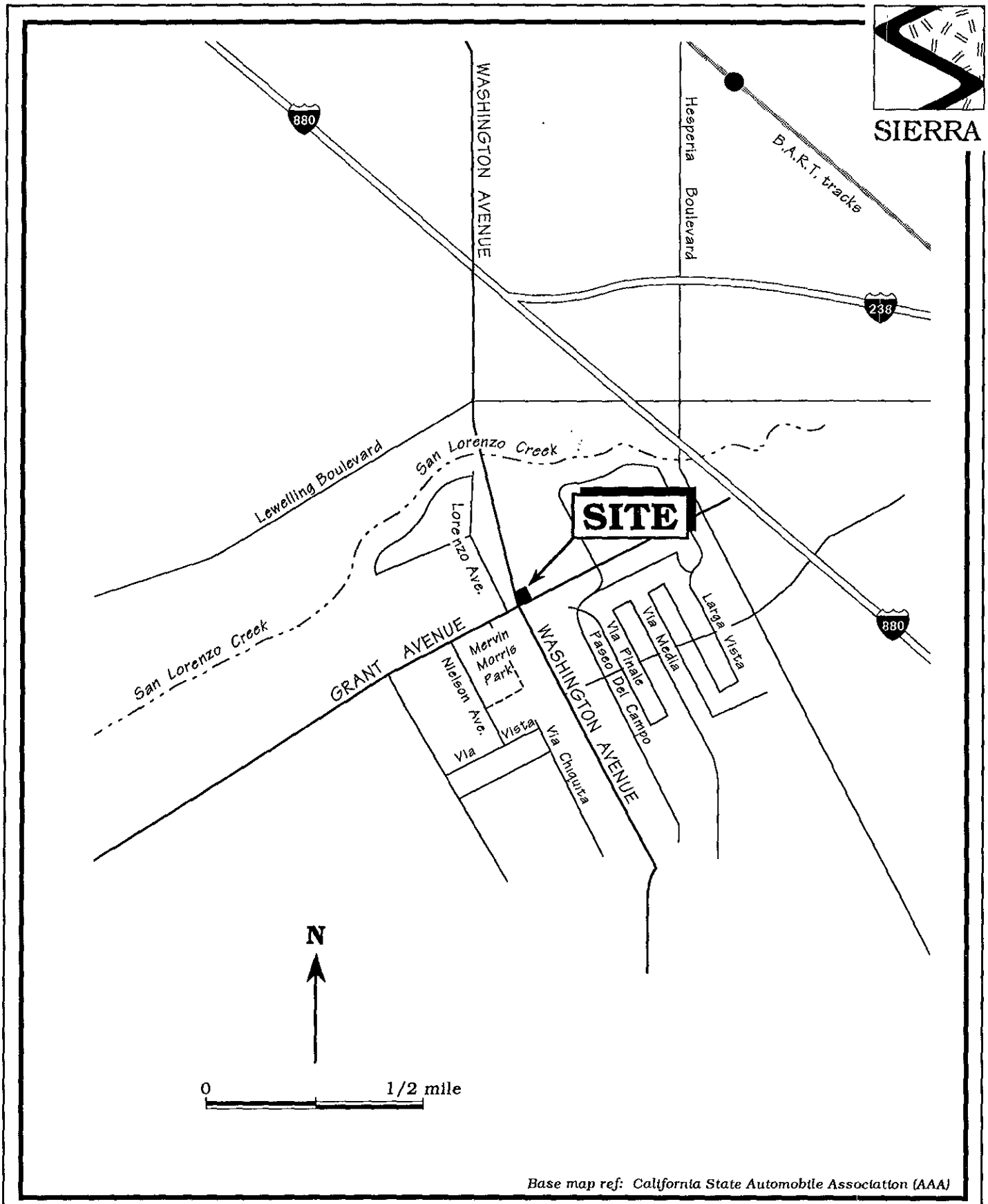


Figure 1. Site Location Map – Former Chevron Service Station #9-5630 – 997 Grant Avenue, San Lorenzo, California

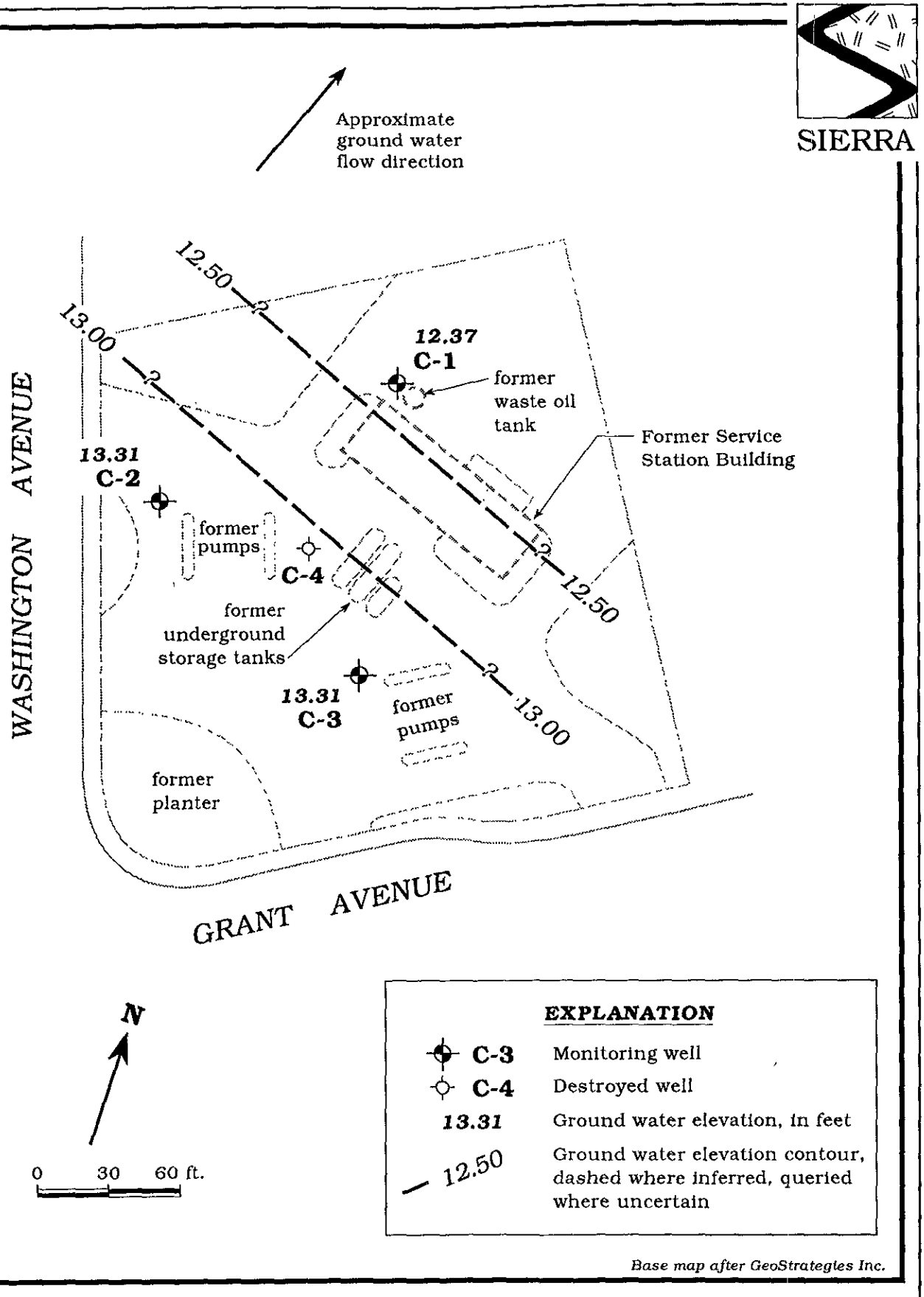
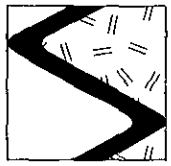


Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map – December 4. 1991 – Former Chevron Service Station #9-5630, 997 Grant Avenue, San Lorenzo, California



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APPENDIX B
TABLES

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-5630, 997 Grant Avenue, San Lorenzo, 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*---------->		
C-1	12/5/90	12.44	24.08	11.64	0	15 - 28	13 - 28	0 - 13
	9/6/91	13.20		10.88	0			
	12/4/91	**11.71**		**12.37**	**0**			
C-2	12/5/90	11.30	22.69	11.39	0	15 - 28	13 - 28	0 - 13
	9/6/91	11.00		11.69	0			
	12/4/91	**9.38**		**13.31**	**0**			
C-3	12/5/90	11.75	23.45	11.70	0	17 - 27	15 - 27	0 - 15
	9/6/91	11.62		11.83	0			
	12/4/91	**10.14**		**13.31**	**0**			
C-4	12/5/90	11.85	23.32	11.47	0	17 - 29	17 - 29	0 - 15
	9/6/91[1]	---	---	---	---			
	12/4/91[1]	**---**	**---**	**---**	**---**			

EXPLANATION:

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

NOTE:

SES product thicknesses were measured with an MMC flexi-dip interface probe.

[1] Well was destroyed during tank removal and soil excavation operations.

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Table 2. Analytic Results for Ground Water - Former Chevron Service Station #9-5630, 997 Grant Avenue, San Lorenzo, California

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH (G)	B	T	E	X	O&G
				<----------ppb---------->					
C-1	12/5/90	SAL	8015/8020/503E	<50	<0.5	<0.5	<0.5	<0.5	<5,000
	9/6/91	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	12/4/91	**SPA**	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
C-2	12/5/90	SAL	8015/8020	<50	0.7	<0.5	<0.5	0.5	---
	9/6/91	SPA	8015/8020	<50	1.3	0.6	0.7	1.5	---
	12/4/91[2]	---	---	---	---	---	---	---	---
C-3	12/5/90	SAL	8015/8020	<50	1	0.7	<0.5	<0.5	---
	9/6/91	SPA	8015/8020	1,100	150	0.6	51	1.9	---
	12/4/91	**SPA**	8015/8020	89	<0.5	<0.5	0.7	0.6	---
				50	2.1				
C-4	12/5/90	SAL	8015/8020	<50	4	2	0.7	3	---
	9/6/91[1]	---	---	---	---	---	---	---	---
AA (Trip Blank)	12/5/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	9/6/91	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	12/4/91	**SPA**	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
BB (Bailer Blank)	9/6/91	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
	12/4/91	**SPA**	8015/8020	<50	<0.5	<0.5	<0.5	<0.5	---
DHS MCLs	---	---	---	NE	1	---	680	1,750	NE
DHS RALs	---	---	---	NE	---	100	---	---	NE

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Table 2. Analytic Results for Ground Water - Former Chevron Service Station #9-5630, 997 Grant Avenue, San Lorenzo, California (continued)

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
O&G = Total Oil and Grease
--- = Not analyzed/Not applicable
DHS MCLs = Department of Health Services Maximum Contaminant Levels
DHS RALs = Department of Health Services Recommended Action Levels
NE = Not established
ppb = Parts per billion

ANALYTIC METHODS:

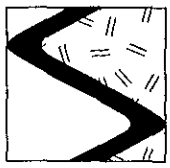
8015 = EPA Method 8015/5030 for TPPH(G)
8020 = EPA Method 8020 for BTEX
503E = Standards Method Method 503E for O&G

ANALYTIC LABORATORY:

SAL = Superior Analytical Laboratory of San Francisco, California
SPA = Superior Precision Analytical, Inc. of Martinez, California

NOTE:

[1] Well was destroyed during tank removal and soil excavation operations.
[2] Well obstructed, therefore could not be sampled.



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APPENDIX C
SIERRA ENVIRONMENTAL SERVICES
STANDARD OPERATING PROCEDURE

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SES STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

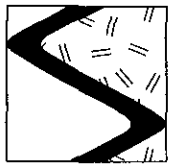
The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination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



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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

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 84539
CLIENT: Sierra Environmental
CLIENT JOB NO.: 1-206-04

DATE RECEIVED: 12/04/91
DATE REPORTED: 12/10/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
84539- 1	AA	12/04/91	12/09/91
84539- 2	BB	12/04/91	12/09/91
84539- 3	C-1	12/04/91	12/09/91
84539- 4	C-3	12/04/91	12/10/91

Laboratory Number:	84539 1	84539 2	84539 3	84539 4
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)			
OIL AND GREASE:	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50	89
TPH/DIESEL RANGE:	NA	NA	NA	NA
BENZENE:	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
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5	0.7
XYLENES:	ND<0.5	ND<0.5	ND<0.5	0.6

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

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 84539

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	10/04/91	200 ng	102/117	14	70-130
Benzene	12/02/91	200 ng	88/98	11	70-130
Toluene	12/02/91	200 ng	87/98	12	70-130
Ethyl Benzene	12/02/91	200 ng	91/103	12	70-130
Total Xylenes	12/02/91	200 ng	98/110	12	70-130

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 04539

Chain-of-Custody-Record

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

Chevron Facility Number 9-5630
Facility Address 997 Grant Ave, San Lorenzo
Consultant Project Number 1-206-04
Consultant Name Sierra Environmental Services
Address Box 2546, Martinez CA
Project Contact (Name) Jeanne Walker
(Phone) 510 370-1280 (Fax Number) 370-7959

Chevron Contact (Name) Nancy Ostelich
(Phone) 842-9581
Laboratory Name SPL
Laboratory Release Number [redacted] 4247210
Samples Collected by (Name) ERIC GROSS
Collection Date 12-4-91
Signature Eric Gross

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		3	W	N/A		HCl	Yes	✓								Analyze in order shown ↓
BB								✓								
C-1								✓								
[redacted]								✓								
C-3								✓								

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

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Eric Gross	SES	12-4-91 1630			
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
			F Tanguilig		12-4-91 16:36

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

COC-3.DWG/03 91/HCH