Chevron

June 20, 1994

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Marketing Department
Phone 510 842 9500

Ms. Jennifer Eberle
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Service Station #9-2506
2630 Broadway, Oakland, CA

Dear Ms. Eberle:

Enclosed is the quarterly Ground Water Sampling report dated April 25, 1994, prepared by our consultant Sierra Environmental Services for the above referenced site. Ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline and BTEX. Dissolved concentrations of these constituents are consistent with historical results. Depth to ground water was measured at approximately 4.9 to 9.4 feet below grade and the direction of flow is to the **north.**

Our consultant, RESNA Industries, has obtained the encroachment permits for the proposed wells outlined in our work plan of November 18, 1993. Currently, excavation permits are being secured from City of Oakland. Once the permits are obtained, field activities will begin.

Chevron will continue to monitor and sample all wells at 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) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Kevin Graves, RWQCB - Bay Area
Mr. S.A. Willer

94 JUN 22 PM 12:41
ALCO
HAZMAT

File: 9-2506 QM3

MAY 11 '94 J.M.M.

SIERRA
Environmental Services

April 25, 1994

Mark Miller
Chevron USA Products Company
P.O. Box 5004
San Ramon, CA 94583

Re: Chevron Service Station #9-2506
2630 Broadway
Oakland, California
SES Project #1-364-04

Dear Mr. Miller:

This report presents the results of the quarterly ground water sampling at Chevron Service Station #9-2506, located at 2630 Broadway in Oakland, California. Eight wells, B-1 through B-8, were sampled (Figure 1).

On March 17, 1994, 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 checked. Water level data are shown in Table 1 and ground water elevation contours are included on Figure 1.

The ground water samples were collected on March 17, 1994 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). All analyses were performed by Superior Precision Analytical, Inc. of San Francisco, California. Analytic results for ground water are presented in Table 1. The chain of custody document and laboratory analytic reports are attached. 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

Argy Mena
Staff Geologist

Chris J. Bramer
Professional Engineer #C48846

AJM/CJB/wmc
36404QM.MY4

Attachments Figure
Table
SES Standard Operating Procedure
Chain of Custody Document and Laboratory Analytic Reports

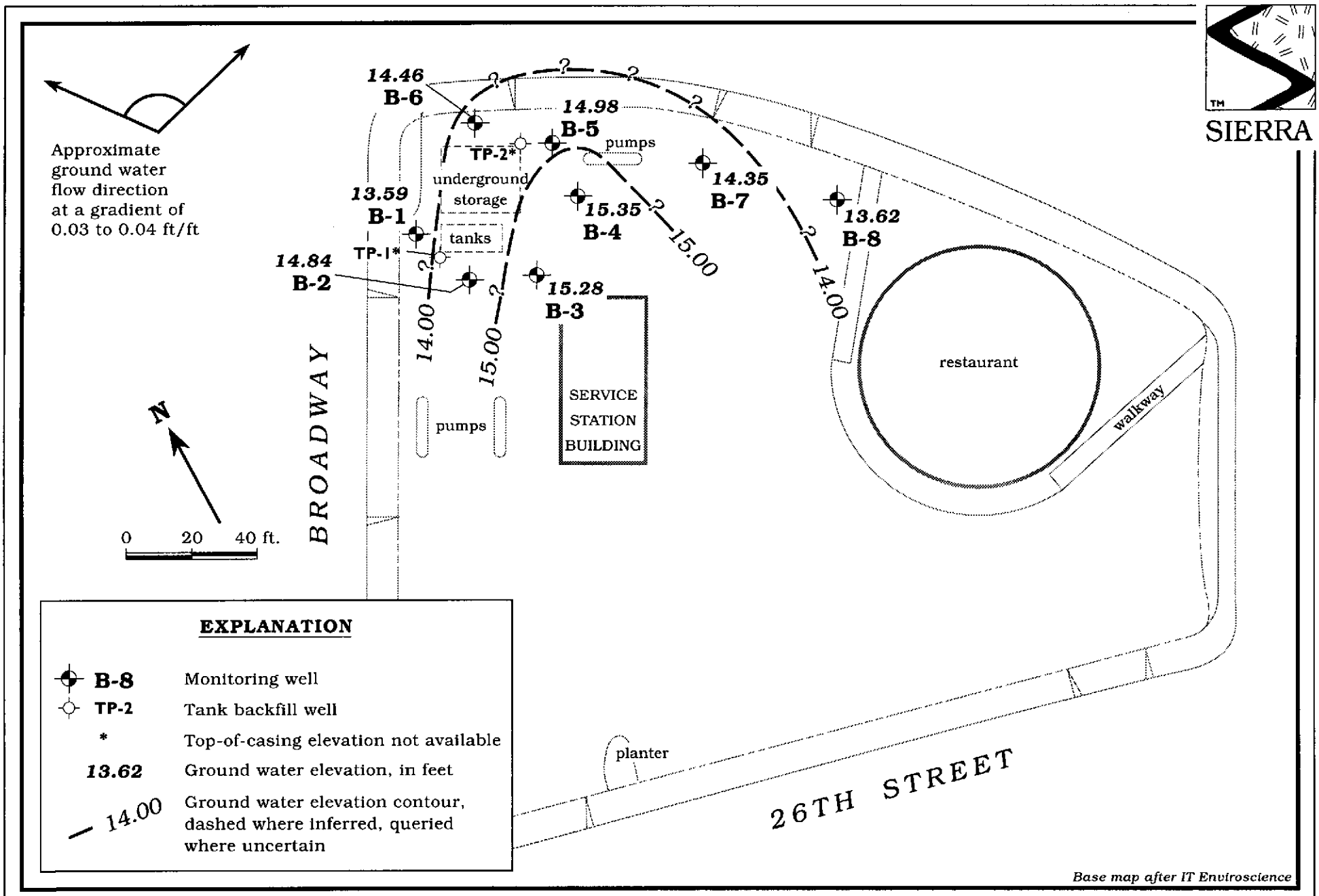

Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - March 17, 1994 - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
B-1/ 23.00[1]	3/18/82	7.81	15.19	0	---	---	---	---	---	---
	3/25/82	8.67	14.33	0	---	---	---	---	---	---
	5/21/82	9.30	13.70	0	---	---	---	---	---	---
	5/26/82	10.18	12.82	0	---	---	---	---	---	---
	6/24/82	9.92	13.08	0	---	---	---	---	---	---
	9/9/93	9.90	13.10	0	8015/8020	8,800[2]	240	280	<2.5	<7.5
	12/2/93	9.10	13.90	0	8015/8020	1,100	100	7.9	3.4	3.9
	3/17/94	**9.41**	**13.59**	**0**	**8015/8020**	**1,600**	**370**	**13**	**13**	**26**
B-2/ 22.28[1]	3/18/82	3.83	18.45	0	---	---	---	---	---	---
	3/25/82	5.79	16.49	0	---	---	---	---	---	---
	5/21/82	4.85	17.43	0	---	---	---	---	---	---
	5/26/82	8.53	13.75	0	---	---	---	---	---	---
	6/24/82	8.40	13.88	0	---	---	---	---	---	---
	9/9/93	6.46	15.82	0	8015/8020	4,700	470	630	180	590
	12/2/93	5.41	16.87	0	8015/8020	2,200	59	27	110	350
	3/17/94	**7.44**	**14.84**	**0**	**8015/8020**	**1,800**	**52**	**33**	**97**	**320**
B-3/ 21.78[1]	3/18/82	5.65	16.13	0	---	---	---	---	---	---
	3/25/82	5.75	16.03	0	---	---	---	---	---	---
	5/21/82	5.58	16.20	0	---	---	---	---	---	---
	5/26/82	7.99	13.79	0	---	---	---	---	---	---
	6/24/82	7.68	14.10	0	---	---	---	---	---	---
	9/9/93	5.99	15.79	0	8015/8020	7,800	500	760	180	720
	12/2/93	5.70	16.08	0	8015/8020	9,800	790	870	380	1,500
	3/17/94	**6.50**	**15.28**	**0**	**8015/8020**	**2,400**	**88**	**55**	**74**	**270**
B-4/ 21.35[1]	3/18/82	4.65	16.70	0	---	---	---	---	---	---
	3/25/82	5.08	16.27	0	---	---	---	---	---	---
	5/21/82	---	---	2.5	---	---	---	---	---	---
	5/26/82	9.21	12.14	---	---	---	---	---	---	---
	6/24/82	8.22	13.13	0.5	---	---	---	---	---	---

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
B-4	9/9/93	6.09	15.26	0	8015/8020	88,000	3,200	16,000	2,000	9,500
(cont)	12/2/93	5.54	15.81	0	8015/8020	110,000	3,600	25,000	2,800	15,000
	3/17/94	**6.00**	**15.35**	**0**	**8015/8020**	**60,000**	**1,400**	**16,000**	**1,800**	**8,900**
B-5/										
21.53[1]	3/18/82	5.13	16.40	0	---	---	---	---	---	---
	3/25/82	5.27	16.26	0	---	---	---	---	---	---
	5/21/82	4.40	17.13	0	---	---	---	---	---	---
	5/26/82	7.55	13.98	0	---	---	---	---	---	---
	6/24/82	7.27	14.26	0	---	---	---	---	---	---
	9/9/93	6.45	15.08	0	8015/8020	110,000	1,800	1,800	6,300	25,000
	12/2/93	5.13	16.40	0	8015/8020	81,000	4,400	3,800	6,700	28,000
	3/17/94	**6.55**	**14.98**	**0**	**8015/8020**	**38,000**	**2,100**	**3,100**	**1,800**	**9,100**
B-6/										
22.03[1]	3/18/82	7.56	14.47	0	---	---	---	---	---	---
	3/25/82	6.08	15.95	0	---	---	---	---	---	---
	5/21/82	4.85	17.18	0	---	---	---	---	---	---
	5/26/82	8.31	13.72	0	---	---	---	---	---	---
	6/24/82	8.03	14.00	0	---	---	---	---	---	---
	9/9/93	8.12	13.91	0	8015/8020	6,800[2]	<0.5	<0.5	<0.5	<1.5
	12/2/93	7.06	14.97	0	8015/8020	320	29	<0.5	<0.5	<0.5
	3/17/94	**7.57**	**14.46**	**0**	**8015/8020**	**570**	**130**	**6.2**	**4.7**	**14**
B-7/										
19.54[1]	3/18/82	4.08	15.46	0	---	---	---	---	---	---
	3/25/82	4.00	15.54	0	---	---	---	---	---	---
	5/21/82	3.00	16.54	0	---	---	---	---	---	---
	5/26/82	4.96	14.58	0	---	---	---	---	---	---
	6/24/82	4.90	14.64	0	---	---	---	---	---	---
	9/9/93	6.54	13.00	0	8015/8020	230	1.3	2.3	0.6	2.1
	12/2/93	6.20	13.34	0	8015/8020	190	4.7	<0.5	1.1	1.9
	3/17/94	**5.19**	**14.35**	**0**	**8015/8020**	**320**	**15**	**3.3**	**1.0**	**3.0**
B-8/										
18.49[1]	3/18/82	4.27	14.22	0	---	---	---	---	---	---

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
B-8	3/25/82	4.06	14.43	0	---	---	---	---	---	---
(cont)	5/21/82	4.86	13.63	0	---	---	---	---	---	---
	5/26/82	4.96	13.53	0	---	---	---	---	---	---
	6/24/82	4.87	13.62	0	---	---	---	---	---	---
	9/9/93	5.20	13.29	0	8015/8020	<50	3.4	<0.5	<0.5	<1.5
	12/2/93	5.31	13.18	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/17/94	**4.87**	**13.62**	**0**	**8015/8020**	**<50**	**1.7**	**0.5**	**<0.5**	**0.6**
TP-1/										
---	9/9/93	7.33	---	0	8015/8020	8,500	770	890	120	590
TP-2/										
---	9/9/93	6.18	---	0	8015/8020	13,000	2,400	3,200	380	1,900
Trip-Lab Blank										
TB-LB	9/9/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	12/2/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/17/94	**---**	**---**	**---**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Bailer Blank										
BB	9/9/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	12/2/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/17/94	**---**	**---**	**---**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**0.6**

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-2506, 2630 Broadway, Oakland, California (continued)

EXPLANATION:

DTW = Depth to water
TOC = Top of casing elevation
GWE = Ground water elevation
msl = Measurements referenced relative to mean sea level
--- = Not available/not applicable
TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
ppb = Parts per billion
--- = Not analyzed/Not applicable

NOTES:

Water level data prior to September 9, 1993, compiled from IT Enviroscience Progress Report, prepared for Chevron, August 2, 1982.

* Product thickness was measured on and after September 9, 1993, with an MMC flexi-dip interface probe.

[1] Top of casing elevations were compiled from IT Enviroscience Program Report, August 2, 1982. TOC for MW-1 was assumed to be 23 feet MSL.

[2] Laboratory indicates a non-typical gasoline pattern.

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)
8020 = EPA Method 8020 for BTEX

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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 three 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 taken to Chevron's Richmond Refinery for disposal.

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) 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.

Fax copy of Lab Report and COC to Chevron Contact: 30362 ☐ Yes ☒ No

Chain-of-Custody-Record

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

Chevron Facility Number 9-2506
Facility Address 2630 BROADWAY, OAKLAND
Consultant Project Number 1-364-04
Consultant Name SIERRA ENVIRONMENTAL SERVICES
Address PO BOX 2546, MARTINEZ, CA 94553
Project Contact (Name) MR. ED MORALES
(Phone) (510)370-1280 (Fax Number) (510)370-7959

Chevron Contact (Name) MR. MARK MILLER
(Phone) 842-8134
Laboratory Name SUPERIOR PRECISION ANALYTICAL
Laboratory Release Number 8842480
Samples Collected by (Name) MR. RICK HILTON
Collection Date 3/17/94
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)					DO NOT BILL CHEVRON FOR TB-LB SAMPLES Remarks
TBLB	1	2	W	G	—	HCl	YES	X												Analyze as shown
BB	2	3			1135			X												
B-8	3				1154			X												
B-7	4				1209			X												
B-6	5				1225			X												
B-1	6				1247			X												
B-2	7				1305			X												
B-3	8				1325			X												
B-4	9				1349			X												
B-5	10				1406			X												
TP-1	11				1456			X												HOLD AJR
TP-2	12				1429			X												HOLD AJR

Please Initial: AJR
Samples Stored in Ice: Yes 4°C
Appropriate containers: Yes
Samples preserved: Yes
VOA's without headspace: Yes
Comments: 55 VOAs

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SES	3/18/94 2:15		SES	3/18/94 2:15
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SES	3/18/94 2:16			
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
				SPA MTZ	3/18/94 1430

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted
3/18/94 AJR

COC-3.DWG/03-01/ACH

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

Sierra Environmental
Attn: ED MORALES

Project 1-364-04
Reported 03/29/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
30362- 1	TB-LB	03/17/94	03/24/94	Water
30362- 2	BB	03/17/94	03/24/94	Water
30362- 3	B-8	03/17/94	03/23/94	Water
30362- 4	B-7	03/17/94	03/22/94	Water
30362- 5	B-6	03/17/94	03/22/94	Water
30362- 6	B-1	03/17/94	03/23/94	Water
30362- 7	B-2	03/17/94	03/22/94	Water
30362- 8	B-3	03/17/94	03/22/94	Water
30362- 9	B-4	03/17/94	03/24/94	Water
30362-10	B-5	03/17/94	03/23/94	Water

RESULTS OF ANALYSIS

Laboratory Number:	30362- 1	30362- 2	30362- 3	30362- 4	30362- 5
Gasoline:	ND<50	ND<50	ND<50	320	570
Benzene:	ND<0.5	ND<0.5	1.7	15	130
Toluene:	ND<0.5	ND<0.5	0.5	3.3	6.2
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	1.0	4.7
Total Xylenes:	ND<0.5	0.6	0.6	3.0	14
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	30362- 6	30362- 7	30362- 8	30362- 9	30362-10
Gasoline:	1600	1800	2400	60000	38000
Benzene:	370	52	88	1400	2100
Toluene:	13	33	55	16000	3100
Ethyl Benzene:	13	97	74	1800	1800
Total Xylenes:	26	320	270	8900	9100
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

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

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 30362

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 SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	102/98	4%	70-130
Benzene:	108/113	5%	70-130
Toluene:	101/102	1%	70-130
Ethyl Benzene:	85/86	1%	70-130
Total Xylenes:	91/95	4%	70-130

Michael R Veron
Senior Chemist
Account Manager