Chevron

93 JUL 27 AM 11:52

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

July 22, 1993

Ms. Susan Hugo
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station No. 9-3864
5101 Telegraph Avenue, Oakland, California

Dear Ms. Hugo :

Enclosed is Sierra Environmental Services July 9, 1993 quarterly monitoring and sampling report.

Dissolved hydrocarbons were detected in all monitoring wells. Levels close to the detection were detected in monitoring well C-4. Depth to water ranged from 13.98 to 16.27 feet.

Chevron finally received from the property owners the necessary documents that would allow Chevron to obtain a permit to install permanent off-site wells. Chevron at this time [redacted]

Please refer to the report for additional information. If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Site Assessment and Remediation Engineer

LKAN/MacFile 9-3864R17

Enclosure

cc : Mr. Richard Hiett, RWQCB-San Francisco Bay Area
2101 Webster Street, Suite 500, Oakland, CA 94612

Dr. Ravi Arulananthum, Alameda County Health Care Services
80 Swan Way, Room 200, Oakland, CA 94621

Ms. Bette Owen, Chevron U.S.A. Products Co.

JUL 21 '93 J.M.M.

SIERRA

July 9, 1993

Ken Kan
Chevron USA
P.O. Box 5004
San Ramon, CA 94583

Re: Former Chevron Service Station #9-3864
5101 Telegraph Avenue
Oakland, California
SES Project #1-203-04

Dear Mr. Kan:

This report presents the results of quarterly ground water sampling at Former Chevron Service Station #9-3864, located at 5101 Telegraph Avenue in Oakland, California. Four wells, C-1 through C-4, were sampled (Figure 1).

On June 11, 1993, 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 and ground water elevation contours are included on Figure 1.

The water samples were collected on June 11, 1993 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). All analyses were performed by Superior Precision Analytical, Inc. of Martinez, California. Analytic results for ground water are presented in Table 2. 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.

REGISTERED PROFESSIONAL ENGINEER
CHRIS J. BRAMER
C 048846
Exp 9/96
CIVIL
STATE OF CALIFORNIA

Sincerely,
Sierra Environmental Services

Richard E. Hilton
Staff Environmental Scientist

Chris J. Bramer
Professional Engineer #C48846

REH/CJB/mc
20304QM.JL3

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

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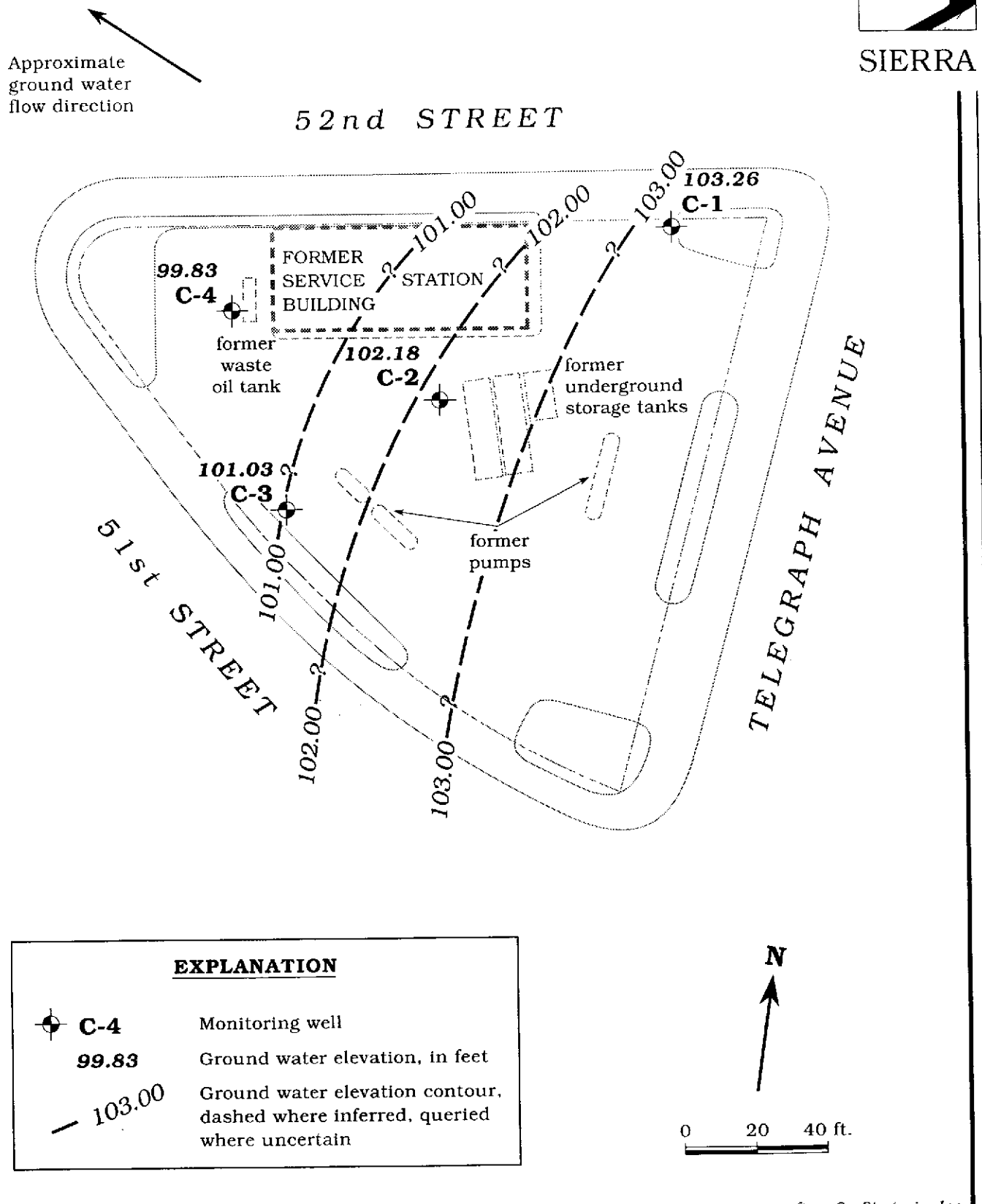

Figure 2. Monitoring Well Location and Ground Water Contour Map - June 11, 1993 - Former Chevron Service Station #9-3864, 5101 Telegraph Avenue, Oakland, California

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Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-3864, 5101 Telegraph 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---------->		
C-1	12/6/90	15.34	117.45	102.11	0	10 - 29.5	8 - 30	0 - 8
	6/6/91	14.62		102.83	0			
	12/4/91	14.48		102.97	0			
	6/2/92	14.53		102.92	0			
	9/16/92	14.93		102.52	0			
	12/21/92	13.73		103.72	0			
	3/11/93	13.83		103.62	0			
	6/11/93	**14.19**		**103.26**	**0**			
C-2	12/6/90	15.34	116.16	100.82	0	10 - 29.5	8 - 30	0 - 8
	6/6/91	14.62		101.54	0			
	12/4/91	15.43		100.73	0			
	6/2/92	14.42		101.74	0			
	9/16/92	14.81		101.35	0			
	12/21/92	13.37		102.79	0			
	3/11/93	13.47		102.69	0			
	6/11/93	**13.98**		**102.18**	**0**			
C-3	12/6/90	16.86	115.70	98.84	0	10 - 29.5	8 - 30	0 - 8
	6/6/91	15.69		100.01	0			
	12/4/91	15.38		100.32	0			
	6/2/92	15.40		100.30	0			
	9/16/92	15.89		99.81	0			
	12/21/92	13.91		101.79	0			
	3/11/93	13.75		101.95	0			
	6/11/93	**14.67**		**101.03**	**0**			
C-4	12/6/90	17.68	116.10	98.42	0	10 - 29.5	8 - 30	0 - 8
	6/6/91	16.49		99.61	0			
	12/4/91	16.82		99.28	0			
	6/2/92	16.92		99.18	0			
	9/16/92	17.71		98.39	0			
	12/21/92	15.36		100.74	0			
	3/11/93	15.49		100.61	0			
	6/11/93	**16.27**		**99.83**	**0**			

Table 1. Water Level Data and Well Construction Details - Former Chevron Service Station #9-3864, 5101 Telegraph Avenue, 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

NOTES:

Depth to water measurements and top of casing elevations prior to June 6, 1991 were compiled from the January 17, 1991 Site Update Report prepared for this service station by GeoStrategies, Inc. of Hayward, California.

Well construction details were compiled from November 14 and 15, 1990 boring logs by GeoStrategies, Inc.

* Product thickness was measured by GeoStrategies, Inc. on December 6, 1990 with an electronic oil-water interface probe. SES product thickness measurements after 12/6/90 were made with an MMC flexi-dip interface probe.

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Table 2. Analytic Results for Ground Water - Former Chevron Service Station #9-3864, 5101 Telegraph Avenue, Oakland, California

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X
				<----------		*ppb*		---------->
C-1	12/6/90	SAL	8015/8020	1,900	17	11	3	21
	6/6/91	SAL	8015/8020	3,400	21	15	11	18
	12/4/91	SPA	8015/8020	2,700	22	16	13	23
	6/2/92	SPA	8015/8020	1,900	170	170	13	83
	9/16/92	SPA	8015/8020	810	5.8	5.7	2.0	6.3
	12/21/92	SPA	8015/8020	75	2.4	2.9	1.4	4.7
	3/11/93	SPA	8015/8020	150	2.4	20	3.3	23
	6/11/93	**SPA**	**8015/8020**	**400**	**4.3**	**2.3**	**1.0**	**3.5**
C-2	12/6/90	SAL	8015/8020	210	140	9	2	11
	6/6/91	SAL	8015/8020	4,800	340	23	19	23
	12/4/91	SPA	8015/8020	3,900	85	15	9.1	15
	6/2/92	SPA	8015/8020	3,300	76	9.2	14	15
	9/16/92	SPA	8015/8020	3,000	16	15	3.4	7.5
	12/21/92	SPA	8015/8020	2,200	21	12	7.1	15
	3/11/93	SPA	8015/8020	2,200	33	24	12	25
	6/11/93	**SPA**	**8015/8020**	**2,600**	**21**	**25**	**11**	**26**
C-3	12/6/90	SAL	8015/8020	210	2	<0.5	<0.5	1
	12/6/90[1]	SAL	8015/8020	220	2	0.6	<0.5	2
	6/6/91	SAL	8015/8020	6,400	310	21	16	21
	12/4/91	SPA	8015/8020	5,100	120	18	17	20
	6/2/92	SPA	8015/8020	6,700	140	44	17	37
	9/16/92	SPA	8015/8020	7,100	130	26	12	30
	12/21/92	SPA	8015/8020	13,000	390	360	100	410
	3/11/93	SPA	8015/8020	5,100	86	20	12	23
	6/11/93	**SPA**	**8015/8020**	**7,200**	**91**	**38**	**19**	**38**
C-4	12/6/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/18/90[2]	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/6/91	SAL	8015/8020	<50	1.0	1.0	<0.5	0.7
	12/4/91	SPA	8015/8020	70	6.5	9.8	1.7	8.6
	6/2/92	SPA	8015/8020	70	3.0	4.4	1.8	9.0
	9/16/92	SPA	8015/8020	<50	1.4	1.8	<0.5	1.1
	12/21/92	SPA	8015/8020	<50	0.6	0.7	<0.5	1.5
	3/11/93	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	6/11/93	**SPA**	**8015/8020**	**52**	**0.9**	**3.1**	**0.7**	**3.8**

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Table 2. Analytic Results for Ground Water - Chevron Service Station #9-3864, 5101 Telegraph Avenue, Oakland, California (continued)

Well ID	Date Sampled	Analytic Lab	Analytic Method	TPPH(G)	B	T	E	X
				<----------ppb---------->				
Trip Blank	12/6/90	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/18/90[3]	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
(AA)	6/6/91	SAL	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
TB-LB	6/2/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/16/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/11/93	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	6/11/93	**SPA**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<1.5**
Bailer Blank	6/6/91	SAL	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
(BB)	12/4/91	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/2/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/16/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	3/11/93	SPA	8015/8020	<50	<0.5	<0.5	<0.5	<1.5
	6/11/93	**SPA**	**8015/8020**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<1.5**

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
ppb = Parts per billion
--- = Not analyzed/not applicable

ANALYTIC METHODS:

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

ANALYTIC LABORATORIES:

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

NOTES:

Ground water analytic data from December 6 and 18, 1990 was compiled from the January 17, 1991 Site Update Reports prepared for this service station by GeoStrategies, Inc. of Hayward, California.

[1] Duplicate sample.

[2] C-4 was also analyzed for halogenated volatile organic compounds (HVOCs) by EPA Method 8010, and metals (Cd, Cr, Pb, Ni and Zn) by EPA-approved methods. Two ppb chloroform, 0.18 ppm chromium, 0.25 ppm nickel and 0.23 ppm zinc were detected. Other HVOCs, Cd and Pb were not detected.

[3] The trip blank was also analyzed for HVOCs. HVOCs were not detected.

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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 e 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 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 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.

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☒ No 85932

Chain-of-Custody-Record

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

Chevron Facility Number 9-3864
Facility Address 5101 TELEGRAPH, OAKLAND
Consultant Project Number 1-203-04
Consultant Name SIERRA ENVIRONMENTAL SERVICES
Address PO BOX 2546, MARTINEZ, CA 94553
Project Contact (Name) ARGY MENA
(Phone) 510-370-1280 (Fax Number) 510-370-7959

Chevron Contact (Name) MR. KEN KAN
(Phone) 842-8752
Laboratory Name SUPERIOR PRECISION Analytical
Laboratory Release Number 405670
Samples Collected by (Name) RICK HILTON
Collection Date 6/14/93
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
TBLB		3	W	G	0835	HCl	YES	X												Analyze in order listed
BB		↓	↓	↓	0838	↓	↓	X												
C-4					0841			X												
C-1					0909			X												
C-2					0932			X												
C-3					0955			X												

Note: Do Not Bill TB-LB Samples

Please initial: RP
Samples Stored in ice 4°C
Appropriate containers YES
Samples preserved YES
VOA's without headspace YES
Comments: 810

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SES	6/14/93 0820			
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
					6/14/93 0820

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

Superior Precision Analytical, Inc.

Sierra Environmental
Attn: ARGY MENA

Project 1-203-04
Reported 06/22/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
88932- 1	TB-LB	06/11/93	06/19/93	Water
88932- 2	BB	06/11/93	06/19/93	Water
88932- 3	C-4	06/11/93	06/19/93	Water
88932- 4	C-1	06/11/93	06/19/93	Water
88932- 5	C-2	06/11/93	06/19/93	Water
88932- 6	C-3	06/11/93	06/10/93	Water

RESULTS OF ANALYSIS

Laboratory Number:	88932- 1	88932- 2	88932- 3	88932- 4	88932- 5
Gasoline:	ND<50	ND<50	52	400	2600
Benzene:	ND<0.5	ND<0.5	0.9	4.3	21
Toluene:	ND<0.5	ND<0.5	3.1	2.3	25
Ethyl Benzene:	ND<0.5	ND<0.5	0.7	1.0	11
Xylenes:	ND<1.5	ND<1.5	3.8	3.5	26
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	88932- 6
Gasoline:	7200
Benzene:	91
Toluene:	38
Ethyl Benzene:	19
Xylenes:	38
Concentration:	ug/L

Superior Precision Analytical, Inc.

CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 88932

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:	79/83%	6%	70-130
Benzene:	95/99%	4%	70-130
Toluene:	95/108%	12%	70-130
Ethyl Benzene:	96/106%	10%	70-130
Xylenes:	97/109%	11%	70-130

Richard Srna, Ph.D.

Felomina V Sanguilig (for)
Laboratory Director