



Chevron U.S.A. Inc.

2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address PO Box 5004, San Ramon, CA 94583-0804

91 SEP 27 PM 4:00

Marketing Department

September 24, 1991

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

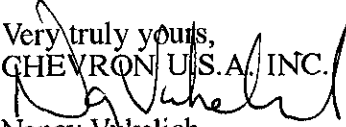
**Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland**

Dear Mr. Smith:

Enclosed we are forwarding the Quarterly Ground Water Monitoring report dated September 20, 1991, prepared by our consultant Alton Geoscience for the above referenced site. As indicated in the report, groundwater samples collected were analyzed for total petroleum hydrocarbons as gasoline and BTEX. Benzene was detected in monitor wells C-1 and C-4 at concentrations of 2000 and 400 ppb, respectively. Separate phase hydrocarbons were observed in monitor wells C-2, C-3, C-5 and CR-1 at measured thicknesses of 0.11, 2.64, 2.69 and 2.69 feet, respectively. Purging of the phase separated hydrocarbons will continue until a dedicated recovery system can be installed.

A corrective action work plan is currently being prepared and will be forwarded to your office for your review and concurrence. Chevron will continue to examine all monitor wells for the presence of separate phase hydrocarbons on a monthly basis and perform quarterly chemical analysis. Monitor wells which exhibit separate phase hydrocarbons are bailed during this inspection. Plume migration is surmised to be slow based on the relatively flat gradient.

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

Enclosure

cc: Mr. Rich Hiatt, RWQCB
Ms B.C. Owen
File (9-4816Q1)

September 20, 1991

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

310-557

Subject: Quarterly Ground Water Monitoring Report
Former Chevron Service Station No. 9-4816
301 14th Street
Oakland, California

Dear Ms. Vukelich:

In accordance with our agreement, Alton Geoscience transmits this Quarterly Ground Water Monitoring and Sampling Report for Chevron Station No. 9-4816, located at 301 14th Street, Oakland, California. Figure 1 shows the site location.

Monitoring and sampling of the ground water monitoring wells was performed on August 7, 1991, in accordance with the requirements and procedures of the California Regional Water Quality Control Board, (RWQCB) and local regulatory agencies.

FIELD PROCEDURES

Prior to purging and sampling the wells, the depth to ground water in each well was measured from the top of casing to the nearest 0.01 foot using an electronic interface probe. Ground water samples were also collected at this time and checked for the presence of liquid-phase hydrocarbons or sheen.

Ground water analytical samples were collected after more than 3 casing volumes of ground water were purged from each well. Each sample was collected using a clean bailer (dedicated for each well), and then transferred to the appropriate clean sample containers for delivery to a California-certified laboratory following proper preservation and chain of custody procedures. Purged ground water was stored onsite in DOT-approved, 55-gallon drums until properly disposed of offsite.

Ms. Nancy Vukelich
September 20, 1991
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SAMPLING AND ANALYTICAL RESULTS

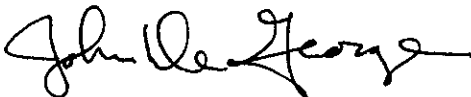
The results of the monitoring and laboratory analyses of the ground water samples for this quarter, as well as the results of previous monitoring and sampling events, are summarized in Table 1. Based on the previous wellhead elevation survey data and depth to water measurements collected during the monitoring event on July 12, 1991, ground water elevations and the general ground water flow direction at this site were calculated as shown in Figure 2.

Free product was noted in monitoring wells CR-1, C-2, C-3, C-5, and was subsequently removed by use of a bailer until the liquid phase hydrocarbon was no longer discernable in the wells. The official laboratory reports and chain of custody records are included in Appendix A.

Please call if you have any questions concerning this report.

Sincerely,

ALTON GEOSCIENCE



John De George
Staff Geologist



Al Sevilla, R.C.E. 26392
Regional Manager

wp94816jd

Table 1
 Summary of Results of Ground Water Sampling
 Former Chevron Service Station No. 9-4816
 301 14th Street, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
C-1	06/13/90	30.82	21.97	---	8.85	26000	2800	5100	400	2600	NA
C-1	10/30/90	30.82	21.72	---	9.10	67000	6700	8700	900	5000	NA
C-1	01/04/91	30.82	21.84	---	8.98	---	---	---	---	---	NA
C-1	01/07/91	30.82	21.95	---	8.87	100000	12000	20000	1600	11000	NA
C-1	01/11/91	30.82	21.99	---	8.83	---	---	---	---	---	NA
C-1	02/15/91	30.82	22.12	---	8.70	---	---	---	---	---	NA
C-1	05/02/91	30.82	22.06	---	8.76	59000	5600	7700	700	5200	SAL
C-1	05/30/91	30.82	22.04	---	8.78	---	---	---	---	---	NA
C-1	06/13/91	30.82	21.80	---	9.02	---	---	---	---	---	NA
C-1	07/12/91	30.82	22.01	---	8.81	---	---	---	---	---	NA
C-1	08/07/91	30.82	---	---	---	7900	2000	150	240	330	SAL
C-2	06/13/90	30.91	22.08	---	8.83	15000	1100	1900	260	1700	NA
C-2	10/30/90	30.91	21.81	---	9.10	13000	2800	1900	240	1000	NA
C-2	01/04/91	30.91	21.90	---	9.01	---	---	---	---	---	NA
C-2	01/07/91	30.91	22.03	---	8.88	15000	3400	2500	340	1400	NA
C-2	01/11/91	30.91	22.13	---	8.78	---	---	---	---	---	NA
C-2	02/15/91	30.91	22.36	---	8.55	---	---	---	---	---	NA
C-2	05/02/91	30.91	22.44	---	8.47	19000	4500	3200	660	2900	SAL
C-2D	05/02/91	30.91	22.44	---	8.47	21000	3200	2200	410	2000	SAL
C-2	05/30/91	30.91	22.44	---	8.47	---	---	---	---	---	NA
C-2	06/13/91	30.91	---	---	---	---	---	---	---	---	NA
C-2	07/12/91	30.91	22.57	0.01	8.35	---	---	---	---	---	NA
C-2	08/07/91	30.91	---	0.11	---	---	---	---	---	---	NA
C-3	06/13/90	---	24.75	3.00	---	---	---	---	---	---	NA
C-3	10/30/90	---	23.81	2.50	---	---	---	---	---	---	NA
C-3	01/04/91	---	24.15	2.70	---	---	---	---	---	---	NA
C-3	01/07/91	---	24.13	2.50	---	---	---	---	---	---	NA
C-3	01/11/91	---	24.35	2.66	---	---	---	---	---	---	NA
C-3	02/15/91	---	24.70	2.93	---	---	---	---	---	---	NA
C-3*	05/02/91	---	---	---	---	---	---	---	---	---	NA
C-3	05/30/91	---	24.08	2.49	---	---	---	---	---	---	NA
C-3	06/13/91	---	---	---	---	---	---	---	---	---	NA
C-3	07/12/91	---	---	---	---	---	---	---	---	---	NA
C-3	08/07/91	---	---	2.64	---	---	---	---	---	---	NA

Table 1
 Summary of Results of Ground Water Sampling
 Former Chevron Service Station No. 9-4816
 301 14th Street, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
C-4	06/13/90	31.42	22.73	---	8.69	440	47	47	3	61	NA
C-4	10/30/90	31.42	22.48	---	8.94	210	72	13	1	11	NA
C-4	01/04/91	31.42	22.64	---	8.78	---	---	---	---	---	NA
C-4	01/07/91	31.42	22.74	---	8.68	890	100	130	15	88	NA
C-4	01/11/91	31.42	22.81	---	8.61	---	---	---	---	---	NA
C-4	02/15/91	31.42	22.55	---	8.87	---	---	---	---	---	NA
C-4	05/02/91	31.42	22.54	---	8.88	330	140	11	2	9	SAL
C-4	05/30/91	31.42	22.55	---	8.87	---	---	---	---	---	NA
C-4	06/13/91	31.42	---	---	---	---	---	---	---	---	NA
C-4	07/12/91	31.42	---	---	---	---	---	---	---	---	NA
C-4	08/07/91	31.42	---	---	---	1500	400	79	13	61	SAL
C-5	10/30/90	31.25	22.11	---	9.14	20000	2500	3300	320	2200	NA
C-5	01/04/91	31.25	22.55	0.31	---	---	---	---	---	---	NA
C-5	01/07/91	31.25	22.36	0.04	9.26	---	---	---	---	---	NA
C-5	01/11/91	31.25	23.08	0.73	---	---	---	---	---	---	NA
C-5	02/15/91	31.25	24.70	2.74	---	---	---	---	---	---	NA
C-5	05/02/91	31.25	22.02	2.00	---	---	---	---	---	---	NA
C-5	05/30/91	31.25	24.78	2.70	---	---	---	---	---	---	NA
C-5	06/13/91	31.25	24.70	2.77	---	---	---	---	---	---	NA
C-5	07/12/91	31.25	25.10	2.72	---	---	---	---	---	---	NA
C-5	08/07/91	31.25	---	2.69	---	---	---	---	---	---	NA
C-6	05/02/91	30.41	21.84	---	8.57	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-6	05/30/91	30.41	---	---	---	---	---	---	---	---	NA
C-6	07/12/91	30.41	22.86	---	7.55	---	---	---	---	---	NA
C-6 **	08/07/91	30.41	---	---	---	---	---	---	---	---	NA
C-7	05/02/91	30.56	21.81	---	8.75	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-7	05/30/91	30.56	---	---	---	---	---	---	---	---	NA
C-7	07/12/91	30.56	22.15	---	8.41	---	---	---	---	---	NA
C-7	08/07/91	30.56	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-8	05/02/91	30.12	21.24	---	8.88	5000	ND<0.5	17	140	470	SAL
C-8	05/30/91	30.12	---	---	---	---	---	---	---	---	NA
C-8	07/12/91	30.12	---	---	---	---	---	---	---	---	NA
C-8	08/07/91	30.12	---	---	---	6300	ND<0.5	28	100	120	SAL

Table 1
Summary of Results of Ground Water Sampling
Former Chevron Service Station No. 9-4816
301 14th Street, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF WELL BOX ELEVATION	DEPTH TO WATER	FREE PRODUCT THICKNESS	GROUND WATER ELEVATION	TPH-G	B	T	E	X	LAB
C-9	05/02/91	30.15	21.27	---	8.88	ND<50	ND<0.5	ND<0.5	ND<0.5	0.8	SAL
C-9	05/30/91	30.15	---	---	---	---	---	---	---	---	NA
C-9	07/12/91	30.15	21.57	---	8.58	---	---	---	---	---	NA
C-9	08/07/91	30.15	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-9D	08/07/91	30.15	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
CR-1	10/30/90	---	23.81	2.50	---	---	---	---	---	---	NA
CR-1	01/04/91	---	24.08	2.70	---	---	---	---	---	---	NA
CR-1	01/07/91	---	23.30	3.00	---	---	---	---	---	---	NA
CR-1	01/11/91	---	24.24	2.64	---	---	---	---	---	---	NA
CR-1	02/15/91	---	24.72	2.92	---	---	---	---	---	---	NA
CR-1*	05/02/91	---	---	---	---	---	---	---	---	---	NA
CR-1	05/30/91	---	23.07	2.42	---	---	---	---	---	---	NA
CR-1	06/13/91	---	---	---	---	---	---	---	---	---	NA
CR-1	07/12/91	---	---	---	---	---	---	---	---	---	NA
CR-1	08/07/91	---	---	2.69	---	---	---	---	---	---	NA
TB	05/02/91	NA	NA	NA	NA	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
TB	08/07/91	NA	NA	NA	NA	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
RINSATE	08/07/91	NA	NA	NA	NA	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL

EXPLANATION OF ABBREVIATIONS:

TPH-G :Total Petroleum Hydrocarbons as Gasoline
(EPA method 8015 modified)
B :Benzene (EPA method 8020 or 8240)
T :Toluene (EPA method 8020 or 8240)
E :Ethylbenzene (EPA method 8020 or 8240)
X :Xylenes (EPA method 8020 or 8240)
--- :Not Analyzed/ Not Measured
ND :Not Detected

TB :Trip Blank
D :Duplicate
NA :Not Applicable/Not Available
* :Not monitored or sampled due to onsite excavation work
** :Car with flat tire parked over well, could not purge or sample.

Note: Top of casing and Ground Water Elevations are expressed as feet above mean sea level (NGVD - 1929).
Free product thickness expressed in feet.

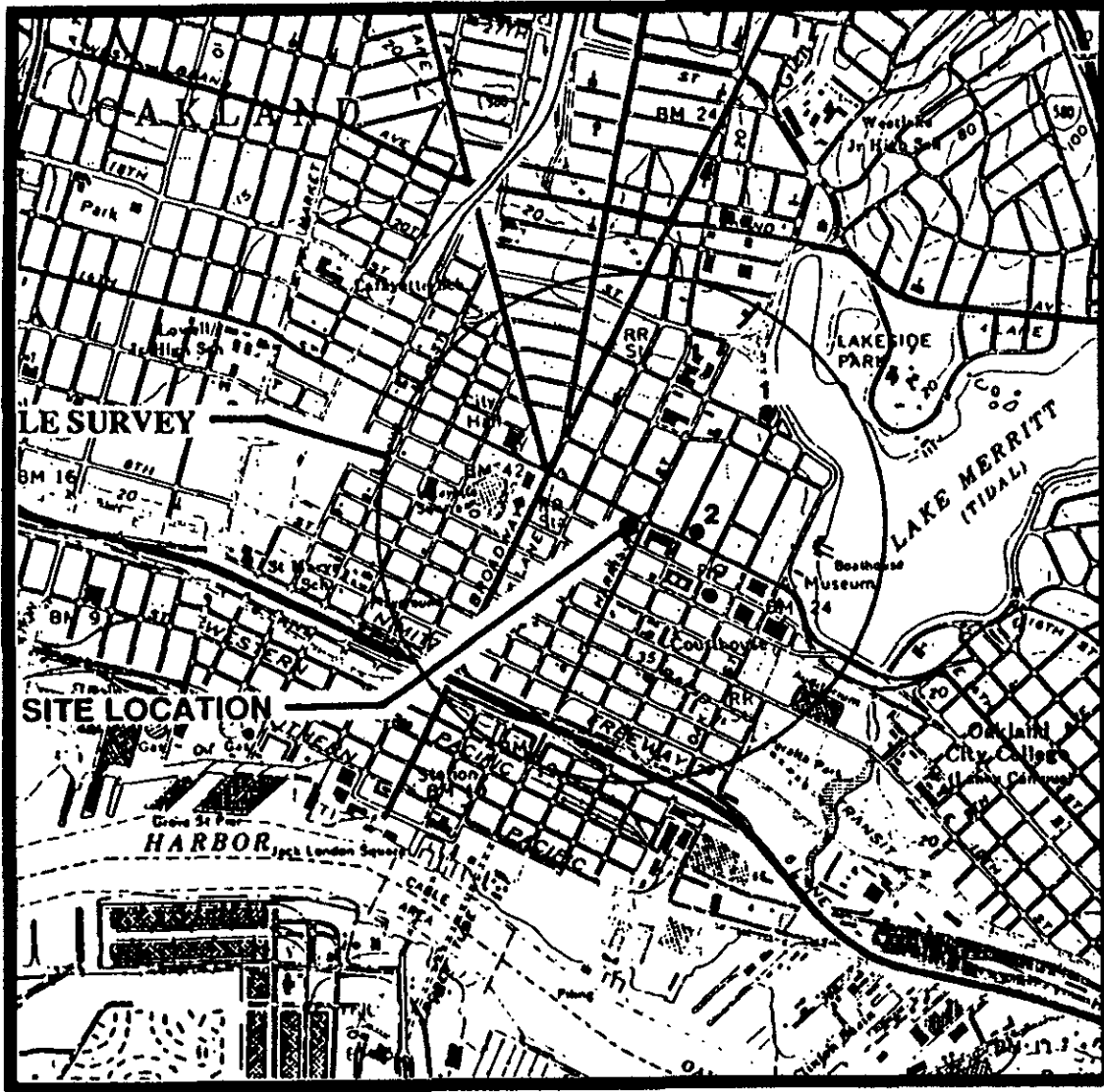



FIGURE 1: VICINITY MAP

FORMER CHEVRON SERVICE
 STATION NO. 9-4816
 301 14th STREET
 OAKLAND, CALIFORNIA

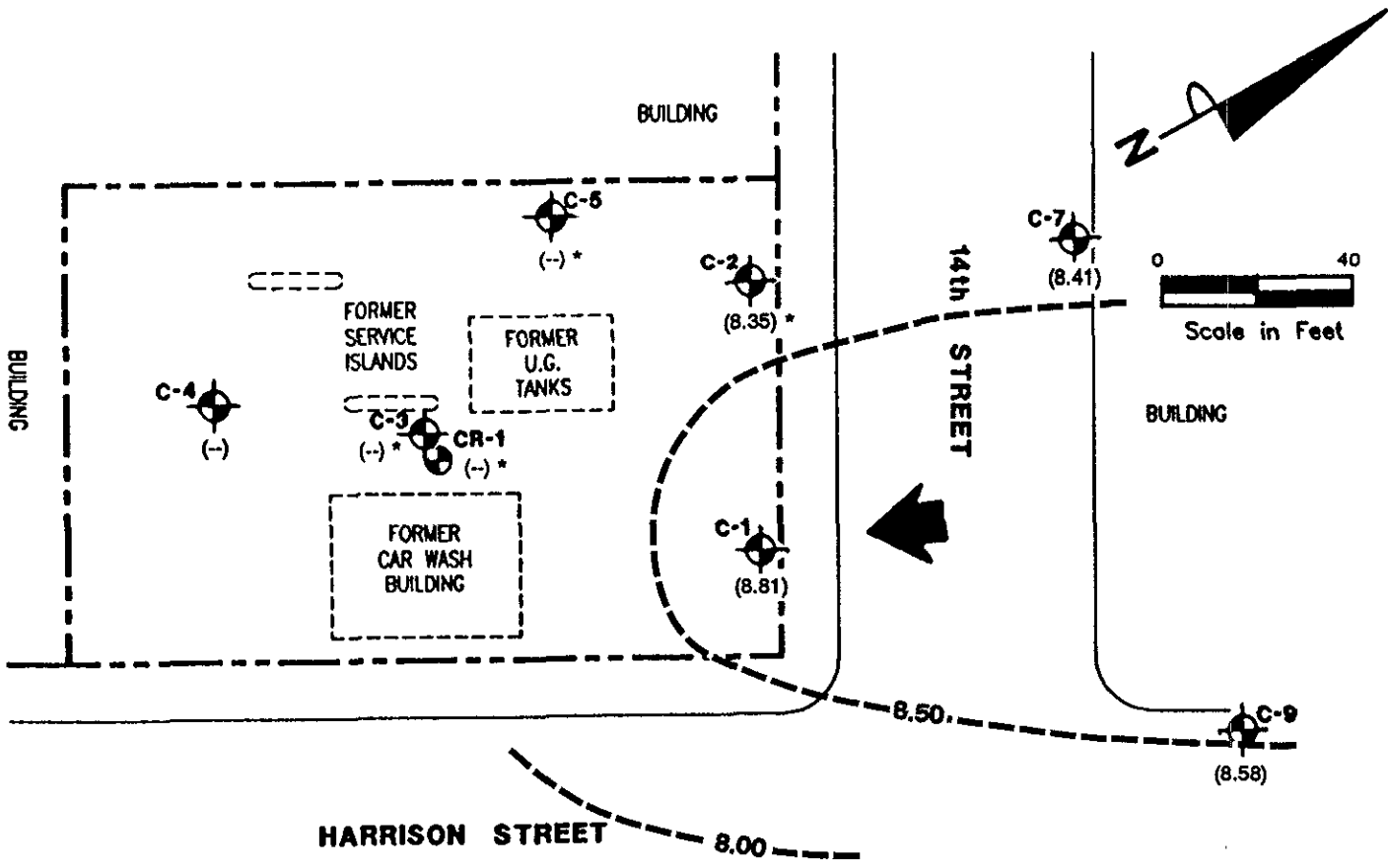


PROJECT NO. 310-557




SOURCE: GEOSTRATEGIES, INC.



ALTON GEOSCIENCE
 1000 Burnett Ave. Ste. 140
 Concord, California



LEGEND:

-  GROUND WATER MONITORING WELL
-  RECOVERY WELL
- (8.81) GROUND WATER ELEVATION (FEET ABOVE MEAN SEA LEVEL [NGVD-1929])
- (-) GROUND WATER ELEVATION DATA NOT AVAILABLE
- * GROUND WATER ELEVATION CON.
-  GENERAL DIRECTION OF GROUND WATER FLOW

NOTE:

1. CONTOUR LINES ARE INTERPRETIVE BASED ON FLUID LEVELS IN MONITORING WELLS MEASURED ON 7/12/91.

FIGURE 2.
GROUND WATER ELEVATION CONTOUR MAP

8-7-91

FORMER CHEVRON SERVICE
STATION NO. 9-4816
301 14th STREET
OAKLAND, CALIFORNIA



ALTON GEOSCIENCE
1000 Burnett Ave. Ste. 140
Concord, California

APPENDIX A

**OFFICIAL LABORATORY RESULTS, AND
CHAIN OF CUSTODY FORMS**

Superior Precision Analytical, Inc.

825 Arnold Drive, Ste. 114 • Martinez, California 94553 • (415) 229-1512 / fax (415) 229-1526

AUG 16 1991

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

LABORATORY NO.: 83666
CLIENT: Alton Geoscience
CLIENT JOB NO.: 310-557

DATE RECEIVED: 08/08/91
DATE REPORTED: 08/13/91

Page 1 of 2

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
83666- 1	0891011	08/07/91	08/08/91
83666- 2	0891041	08/07/91	08/09/91
83666- 3	0891071	08/07/91	08/09/91
83666- 4	0891081	08/07/91	08/09/91
83666- 5	0891091	08/07/91	08/13/91
83666- 6	0891093	08/07/91	08/09/91
83666- 7	0891002	08/07/91	08/09/91
83666- 8	0891004	08/07/91	08/09/91

Laboratory Number:	83666	83666	83666	83666	83666
	1	2	3	4	5

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	7900	1500	ND<50	6300	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	2000	400	ND<0.5	ND<0.5	ND<0.5
TOLUENE:	150	79	ND<0.5	28	ND<0.5
ETHYL BENZENE:	240	13	ND<0.5	100	ND<0.5
XYLENES:	330	61	ND<0.5	120	ND<0.5

Laboratory Number:	83666	83666	83666
	6	7	8

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)		
OIL AND GREASE:	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50
TPH/DIESEL RANGE:	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	ND<0.5
TOLUENE:	ND<0.5	ND<0.5	ND<0.5
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5
XYLENES:	ND<0.5	ND<0.5	ND<0.5

Superior Precision Analytical, Inc.

825 Arnold Drive, Ste. 114 • Martinez, California 94553 • (415) 229-1512 / fax (415) 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

Page 2 of 2
QA/QC INFORMATION
SET: 83666

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/l = part per billion (ppb)

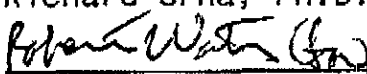
OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
Minimum Detection Limit in Water: 5000ug/L

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: 06/26/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L
Standard Reference: 07/08/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	06/26/91	200 ng	92/92	0	70-130
Benzene	07/08/91	200 ng	88/88	1	70-130
Toluene	07/08/91	200 ng	95/94	1	70-130
Ethyl Benzene	07/08/91	200 ng	99/97	2	70-130
Total Xylene	07/08/91	200 ng	94/92	2	70-130

Richard Srna, Ph.D.

Laboratory Director

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

05/10/00

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-4816</u>	Chevron Contact (Name) <u>Nancy Vukelich</u>
	Facility Address <u>301 14th St., Oakland</u>	(Phone) <u>(415) 842-9581</u>
	Consultant Project Number <u>310-557</u>	Laboratory Name <u>SAL</u>
	Consultant Name <u>Alton GeoScience</u>	Laboratory Release Number <u>3523000</u>
	Address <u>1000 Bennett Ave., Concord</u>	Samples Collected by (Name) <u>Lamy</u>
Project Contact (Name) <u>John De George</u>	Collection Date <u>8/7/91</u>	Signature <u>[Signature]</u>
(Phone) <u>(415) 682-1582</u>	(Fax Number) <u>682-8921</u>	

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed											Remarks			
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)							
0891011	1	3	W	G	1620	HCL	yes	X														Please Run TAH-G+ BTXE in Series! Remarks
0891041	2				1625																	
0891071	3				1509																	
0891081	4				1535																	
0891091	5				1558																	
0891093	6				1558																	
0891002	7	1			1506																	
0891004	8	2			1507																	

Please Initial:
 Samples Stored in Ice BW
 Appropriate containers BW
 Samples preserved BW
 VOA's without headspace BW
 Comments:

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>Alton</u>	Date/Time <u>8/7/91 1100</u>	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. <u>5 Days</u> 10 Days As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time	Received By (Signature) <u>[Signature]</u>	Organization	Date/Time	
Relinquished By (Signature) <u>[Signature]</u>	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>8/8/91 1100</u>	

COC-3.DWG/03 91/HCH