



Chevron U.S.A. Products Company

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

*Not a LoP case
Back to Paul*

Marketing Department

April 22, 1992

02 APR 23 11:23 AM '92

Mr. Edgar Howell
Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Re: **Chevron Service Station #9-0076**
4625 Foothill Blvd., Oakland

94601

Unauthorized release report?

Dear Mr. Howell:

Enclosed we are forwarding the Ground Water Monitoring Report dated April 10, 1992, prepared by our consultant Groundwater Technology, Inc. (GTI) 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 detected in monitor wells C-1, C-4, C-6 and C-7 at concentrations of 16, 6,000, 3,200 and 5,800 ppb, respectively. Separate-phase hydrocarbons were observed in monitor well C-2 at a measured thickness of .09-feet. $\times 12 = 1.08"$

Depth to ground water was measured at approximately 13.6 to 25-feet on-site and 40-feet off-site. The ground water elevations of the on-site monitor wells appear to define the potentiometric surface of a shallow water bearing zone, and/or a perched ground water table. All of the water bearing zones intercepted by the screened intervals of the on-site monitor wells can not be positively identified at this time using the available hydrogeologic data. The off-site monitor wells were installed with the screened interval set within a sand and gravel layer encountered at approximately 38-feet below grade. Ground water levels in these monitor wells were the lowest at the site and appear to define the potentiometric surface of a lower water bearing zone. The monitoring data presented in the enclosed report has not been contoured on the potentiometric surface map because of the uncertainty of the hydrogeology at the site. It is uncertain at this time whether the sand and gravel layers encountered during drilling are hydraulically connected. Based on these uncertainties, we have instructed GTI to evaluate the site data and provide recommendations on determining if the on-site and off-site water bearing zones are hydraulically connected.

The ground water extraction system started up on November 15, 1991. Chevron will continue to monitor this site and report findings on a quarterly basis and monitor the effectiveness of the ground water extraction system.

Page 2
#9-0076 - Oakland

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. PRODUCTS COMPANY

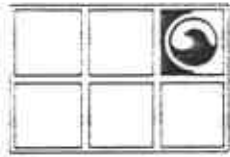


Nancy Vukelich
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Rich Hiatt, RWQCB-Bay Area
Mr. Matt Derby, Weiss Associates
Mr. S.A. Willer
File (9-0076Q3)

APR 16 '92 T.L.H.



GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387

FAX: (415) 685-9148

April 9, 1992

Project No. 020302227

Ms. Nancy Vukelich
Chevron U.S.A. Products Company
P. O. Box 5004
San Ramon, CA 94583-0804

**SUBJECT: GROUNDWATER MONITORING AND SAMPLING ACTIVITIES
CHEVRON SERVICE STATION NO. 9-0076
4625 FOOTHILL BLVD., OAKLAND, CALIFORNIA**

Dear Ms. Vukelich:

Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on March 18, 1992. The eight groundwater monitoring wells at this site were gauged to determine depth to groundwater (DTW) and to check for separate-phase hydrocarbons. A potentiometric surface map (Figure 1) and a summary of groundwater monitoring data (Table 1) are presented in Attachments A and B, respectively. After measuring the DTW, each monitoring well was purged and sampled. The groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and total petroleum hydrocarbons (TPH)-as-gasoline. Results of the chemical analyses are summarized in Table 1. Laboratory reports and chain-of-custody records are included in Attachment C. Monitoring well purge water was stored on site in labeled 55-gallon drums. The drums were removed when the purge water was removed by Groundwater Technology for transport and recycling at the Chevron, Richmond, California terminal on March 31, 1992.

Groundwater Technology is pleased to assist Chevron on this project. If you have any questions or comments, please call our Concord office.

Sincerely,
GROUNDWATER TECHNOLOGY, INC.

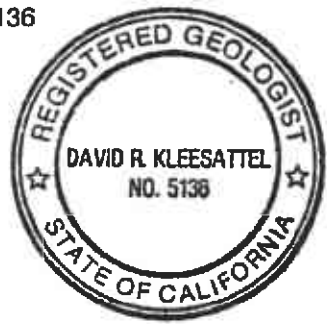
Sandra L. Lindsey
Sandra L. Lindsey
Project Manager

David R. Kleesattel
David R. Kleesattel
Registered Geologist
No. 5136

SLL:DRK:ab

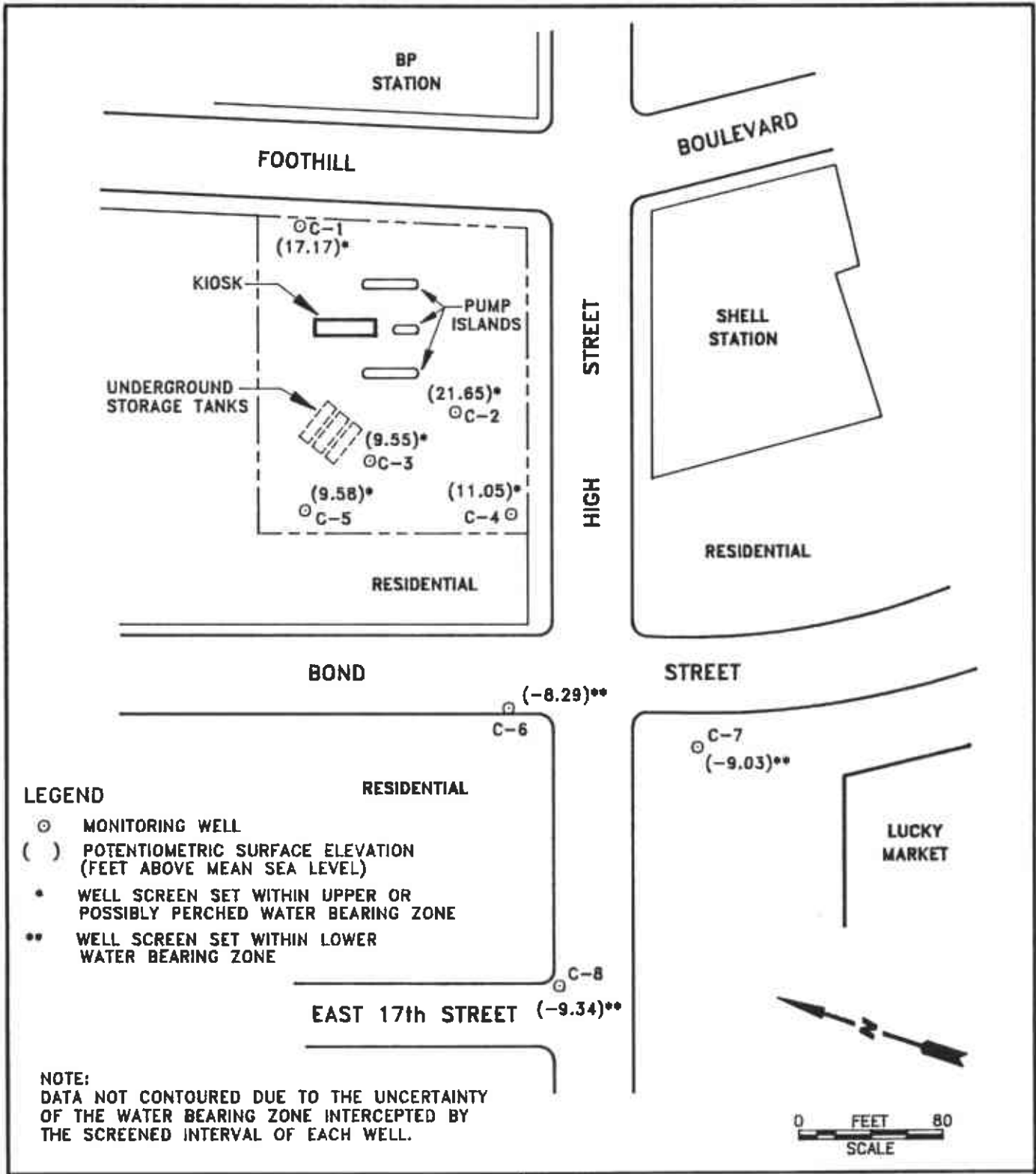
Attachments: Attachment A - Figure 1
Attachment B - Table 1
Attachment C - Laboratory Reports

LR2227A1.FH
(061022)



ATTACHMENT A

FIGURE 1



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY
CONCORD, CA 94520
(510) 671-2387

POTENTIOMETRIC SURFACE MAP (3/18/92)

CLIENT: CHEVRON U.S.A. PRODUCTS Co. SERVICE STATION No. 9-0076		LOCATION: 4625 FOOTHILL BLVD. OAKLAND, CALIFORNIA		REV. NO.: 0	DATE: 4/14/92
PM SAH	PE/RG DRK	DESIGNED GM	DETAILED ML	ACAD FILE: PSM31892/SP392	PROJECT NO.: 020302227
					FIGURE: 1

ATTACHMENT B

TABLE 1

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0076
4625 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	WTE (ft)	SPT (ft)
C-1 35.42	04/28/89a	940	30	1.3	11	13	20.05	15.37	0.0
	08/08/89a	820	45	2	13	13	24.07	11.35	0.0
	12/21/89	--	--	--	--	--	22.81	12.61	0.0
	08/27/90	440	15	1	6	13	22.12	13.30	0.0
	11/04/90	--	--	--	--	--	25.56	9.86	0.0
	06/18/91	74	5.6	0.6	1.9	1.3	21.64	13.78	0.0
	09/19/91	150	7.1	<0.5	2.3	3	24.58	10.84	0.0
	12/20/91	250	10	<0.5	3.7	1.6	26.17	9.25	0.0
	03/18/92	190	16	<0.5	8.5	2.9	18.25	17.17	0.0
C-2 35.18	04/28/89a	120,000	30,000	22,000	3,000	17,000	26.44	8.74	0.0
	08/08/89a	--	--	--	--	--	29.90	5.29	0.01
	12/21/89	--	--	--	--	--	29.32	5.86	0.0
	08/27/90	--	--	--	--	--	29.55	5.77	0.17
	11/04/90	--	--	--	--	--	30.47	4.71	0.0
	06/18/91	--	--	--	--	--	28.33	6.90	0.06
	09/19/91	--	--	--	--	--	29.39	5.84	0.06
	12/20/91	170,000	20,000	10,000	2,800	19,000	29.23	5.95	0.0
	03/18/92	--	--	--	--	--	13.60	21.58	0.09
C-3 35.28 35.30	04/28/89a	<500	1.7	<0.5	<0.5	<0.5	28.00	7.28	0.0
	08/08/89a	<500	1	<0.5	<0.5	<0.5	30.00	5.28	0.0
	12/21/89	--	--	--	--	--	30.53	4.75	0.0
	08/27/90	<50	<0.3	<0.3	<0.3	<0.6	29.68	5.60	0.0
	11/04/90	--	--	--	--	--	30.38	4.84	0.0
	06/18/91	52	1.1	<0.5	<0.5	1.2	28.46	6.84	0.0
	09/19/91	73	1.2	<0.5	<0.5	<0.5	29.33	5.97	0.0
	12/20/91	<50	0.7	<0.5	<0.5	<0.5	29.77	5.53	0.0
	03/18/92	<50	<0.5	<0.5	<0.5	<0.5	25.75	9.55	0.0

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0076
4625 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	WTE (ft)	SPT (ft)
C-4 33.45	01/12/89a	--	--	--	--	--	29.49	3.96	0.0
	04/12/89a	--	--	--	--	--	27.44	6.01	0.0
33.48	04/28/89	20,000	6,300	550	230	1,500	29.49	3.96	0.0
	08/08/89a	8,000	7,500	340	88	1,000	29.55	3.90	0.0
	12/21/89	--	--	--	--	--	30.02	3.43	0.0
	08/27/90	26,000	10,000	280	410	1,400	29.02	4.46	0.0
	11/04/90	--	--	--	--	--	29.81	3.67	0.0
	06/18/91	34,000	14,000	410	450	1,300	27.45	6.03	0.0
	09/19/91	16,000	7,400	90	110	460	28.65	4.83	0.0
	12/20/91	24,000	12,000	120	260	740	28.84	4.64	0.0
03/18/92	48,000	6,000	1,300	1,300	2,400	24.43	11.05	0.0	
C-5 35.50	08/27/90	<50	<0.3	<0.3	<0.3	<0.6	29.83	5.67	0.0
	11/14/90	--	--	--	--	--	30.56	4.94	0.0
	06/18/91	<50	<0.5	<0.5	<0.5	<0.5	28.52	6.98	0.0
	09/19/91	<50	<0.5	<0.5	<0.5	<0.5	29.51	5.99	0.0
	12/20/91	<50	<0.5	<0.5	<0.5	<0.5	29.96	5.54	0.0
	03/18/92	<50	<0.5	<0.5	<0.5	<0.5	25.92	9.58	0.0
C-6 32.40	08/27/90	7,200	2,100	6	41	300	44.11	-11.71	0.0
	11/14/90	--	--	--	--	--	44.03	-11.63	0.0
	06/18/91	4,400	2,500	18	160	77	43.49	-11.09	0.0
	09/19/91	3,100	1,600	8.3	73	8	34.32	-1.92	0.0
	12/20/91	4,400	1,300	3.2	74	10	41.35	-8.95	0.0
	03/18/92	9,800	3,200	34	250	500	40.69	-8.29	0.0
C-7 32.17	08/27/90	110	26	0.8	4	6	44.23	-12.06	0.0
	11/14/90	--	--	--	--	--	44.11	-11.94	0.0
	06/18/91	23,000	5,700	420	1,000	2,800	42.05	-9.88	0.0
	09/19/91	26,000	4,600	330	970	2,400	41.72	-9.55	0.0
	12/20/91	33,000	5,500	270	1,000	2,100	41.67	-9.50	0.0
	03/18/92	27,000	5,800	410	1,300	3,300	41.20	-9.03	0.0

**TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-0076
4625 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA**

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	WTE (ft)	SPT (ft)
C-8 30.68	11/14/90	<50	<0.3	<0.3	<0.3	<0.6	43.29	-12.61	0.0
	06/18/91	<50	<0.5	<0.5	<0.5	<0.5	42.62	-11.94	0.0
	09/19/91	<50	<0.5	<0.5	<0.5	<0.5	41.72	-11.04	0.0
	12/20/91	<50	<0.5	<0.5	<0.5	<0.5	40.98	-10.30	0.0
	03/18/92	<50	<0.5	<0.5	<0.5	<0.5	40.02	-9.34	0.0
TRIP BLANK	04/28/89	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
	08/08/89	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
	08/27/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
	11/14/90	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
	06/18/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
	09/19/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
	12/20/91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
03/18/92	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	

-- = Not applicable, not sampled, not measured
DTW = Depth to groundwater
SPT = Separate-phase hydrocarbon thickness
WTE = Water table elevation
a = Water elevations measured to grade

All elevations are given as feet above mean sea level.

Analytical results in micrograms per liter μL , or parts per billion

Top of casing surveyed 1/03/90 and 08/21/90

Data from 4/28/89 through 12/20/91 taken from Fourth Quarter 1991 Ground Water Monitoring Report dated January 30, 1992, (Weiss Associates).

Chevron, 4625 Foothill Blvd., Oakland, CA
Ms. Nancy Vukelich

April 9, 1992

ATTACHMENT C
LABORATORY ANALYTICAL REPORTS



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

LABORATORY NO.: 85286
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020302227.061004

DATE RECEIVED: 03/18/92
DATE REPORTED: 03/25/92

Page 1 of 3

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
85286- 1	TRIP BLANK	03/18/92	03/23/92
85286- 2	RBC8	03/18/92	03/23/92
85286- 3	C8	03/18/92	03/23/92
85286- 4	RBC7	03/18/92	/ /
85286- 5	C7	03/18/92	03/25/92
85286- 6	RBC6	03/18/92	/ /
85286- 7	C6	03/18/92	03/25/92
85286- 8	RBC4	03/18/92	/ /
85286- 9	C4	03/18/92	03/25/92
85286-10	RBC1	03/18/92	/ /

Laboratory Number:	85286 1	85286 2	85286 3	85286 4	85286 5
--------------------	------------	------------	------------	------------	------------

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50	ND<50	NA	27000
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	ND<0.5	ND<0.5	ND<0.5	NA	5800
TOLUENE:	ND<0.5	ND<0.5	ND<0.5	NA	410
ETHYL BENZENE:	ND<0.5	ND<0.5	ND<0.5	NA	1300
XYLENES:	ND<0.5	ND<0.5	ND<0.5	NA	3300

Laboratory Number:	85286 6	85286 7	85286 8	85286 9	85286 10
--------------------	------------	------------	------------	------------	-------------

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	NA	9800	NA	48000	NA
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	NA	3200	NA	6000	NA
TOLUENE:	NA	34	NA	1300	NA
ETHYL BENZENE:	NA	250	NA	1300	NA
XYLENES:	NA	500	NA	2400	NA



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

LABORATORY NO.: 85286
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020302227.061004

DATE RECEIVED: 03/18/92
DATE REPORTED: 03/25/92

Page 2 of 3

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
85286-11	C1	03/18/92	03/23/92
85286-12	RBC3	03/18/92	/ /
85286-13	C3	03/18/92	03/23/92
85286-14	RBCS	03/18/92	/ /
85286-15	CS	03/18/92	03/23/92

Laboratory Number:	85286	85286	85286	85286	85286
	11	12	13	14	15

ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	190	NA	ND<50	NA	ND<50
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	16	NA	ND<0.5	NA	ND<0.5
TOLUENE:	ND<0.5	NA	ND<0.5	NA	ND<0.5
ETHYL BENZENE:	8.5	NA	ND<0.5	NA	ND<0.5
XYLENES:	2.9	NA	ND<0.5	NA	ND<0.5



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

Page 3 of 3
QA/QC INFORMATION
SET: 85286

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-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	03/03/92	200 ng	93/94	1	70-130
Benzene	02/26/92	200 ng	102/104	2	70-130
Toluene	02/26/92	200 ng	105/108	3	70-130
Ethyl Benzene	02/26/92	200 ng	109/112	3	70-130
Total Xylene	02/26/92	200 ng	111/114	3	70-130

Richard Srna, Ph.D.


Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No 85286

Chain-of-Custody-Record

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

Chevron Facility Number 9-0076
Facility Address 4625 Foothill Blvd
Consultant Project Number 020303227.061004
Consultant Name Groundwater Technology
Address 4057 Fort Chicago Hwy
Project Contact (Name) Sandra Lindsey
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) Nancy Vukelich
(Phone) 842-91
Laboratory Name Superior
Laboratory Release Number 450-8080
Samples Collected by (Name) Neven Fero
Collection Date 3-18-92
Signature [Signature]

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			
								STEX + 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)							
Trip Blank	1	1	W	G		HCL	X	X														
RB C8	2	1	W	G			X	X														
C8	3	3	W	G			X	X														
RB C7	4	1	V	G			X															X
C7	5	3	V	G			X	X														
RB C6	6	1	W	G			X															X
C6	7	3	V	G			X	X														
RB C4	8	1	V	G			X															
C4	9	3	W	G			X	X														
RB C1	10	1	V	G			X															
C1	11	3	W	G			X	X														
RB C3	12	1	W	G			X															
C3	13	3	W	G			X	X														

Please initial
 Samples stored in ice _____
 Appropriate containers _____
 Samples preserved _____
 VOA's without headspace _____
 Comments: _____
 _____ X

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>GTI</u>	Date/Time <u>3-18/92</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>GTI</u>	Date/Time <u>3-18-92</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>GTI</u>	Date/Time <u>6:35 3-18-92</u>	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>3-18-92/1235</u>	

COC-3.DWG/03 91/HCH

