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

Operations

March 10, 1993

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

Re: Former Chevron Service Station #9-1153
3126 Fernside Boulevard, Alameda, CA

Dear Ms. Shin:

Enclosed is the quarterly Groundwater Monitoring and Sampling Activities report dated February 4, 1993, prepared by our consultant Groundwater Technology, Inc. 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 only in monitor wells C-1, MW-5, and MW-6 at concentrations of 1500, 48, and 50 ppb, respectively. Depth to groundwater was measured at approximately 1.3 feet to 2.4 feet below grade, and the direction of flow is to the east.**

The shallow borings immediately downgradient of the extraction trench were installed recently to assess ground water quality in this area. A report documenting this work will be forwarded for your review shortly. Chevron is currently evaluating locations for additional wells to further delineate the extent of dissolved hydrocarbons in the ground water.

Chevron will continue to monitor and sample wells at this site and report findings on a quarterly basis. The ground water extraction system will also be evaluated for effectiveness in removing dissolved constituents in the ground water.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB - Bay Area
Mr. Tom Berry - Weiss Associates
Ms. B.C. Owen
File (9-1153 QM2)

Mr. Larry Bolten
State Farm Insurance
2509 Santa Clara Avenue
Alameda, CA 94501

GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387
FAX: (415) 685-9148

February 4, 1993

Project No. 020202803

Mr. Mark Miller
Chevron U.S.A. Inc.
2410 Camino Ramon
San Ramon, CA 94583-0804

SUBJECT: GROUNDWATER MONITORING AND SAMPLING ACTIVITIES
CHEVRON SERVICE STATION NO. 9-1153
3126 FERNSIDE BOULEVARD, ALAMEDA, CALIFORNIA

Dear Mr. Miller:

Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on January 11, 1993. Five groundwater monitoring wells at this site were gauged to determine depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. A separate-phase hydrocarbon sheen was detected in monitoring well C-1. 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 collected were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons (TPH)-as-gasoline. Results of the chemical analyses are summarized in Table 1. Laboratory report and chain-of-custody record are included in Attachment C. Monitoring well purge water was transported by Groundwater Technology, Inc. to the Chevron terminal in Richmond, California for recycling.

Groundwater Technology, Inc. is pleased to assist Chevron on this project. If you have any questions or comments, please call feel free to contact Groundwater Technology Concord office at (510) 671-2387.

Sincerely,
Groundwater Technology, Inc.
Written/Submitted by

SANDRA L. LINDSEY
Project Manager

Groundwater Technology, Inc.
Reviewed/Approved by

DAVID R. KLEESATTEL
Registered Geologist
No. 5136

For:
John S. Gaines, V.P.
General Manager
West Region

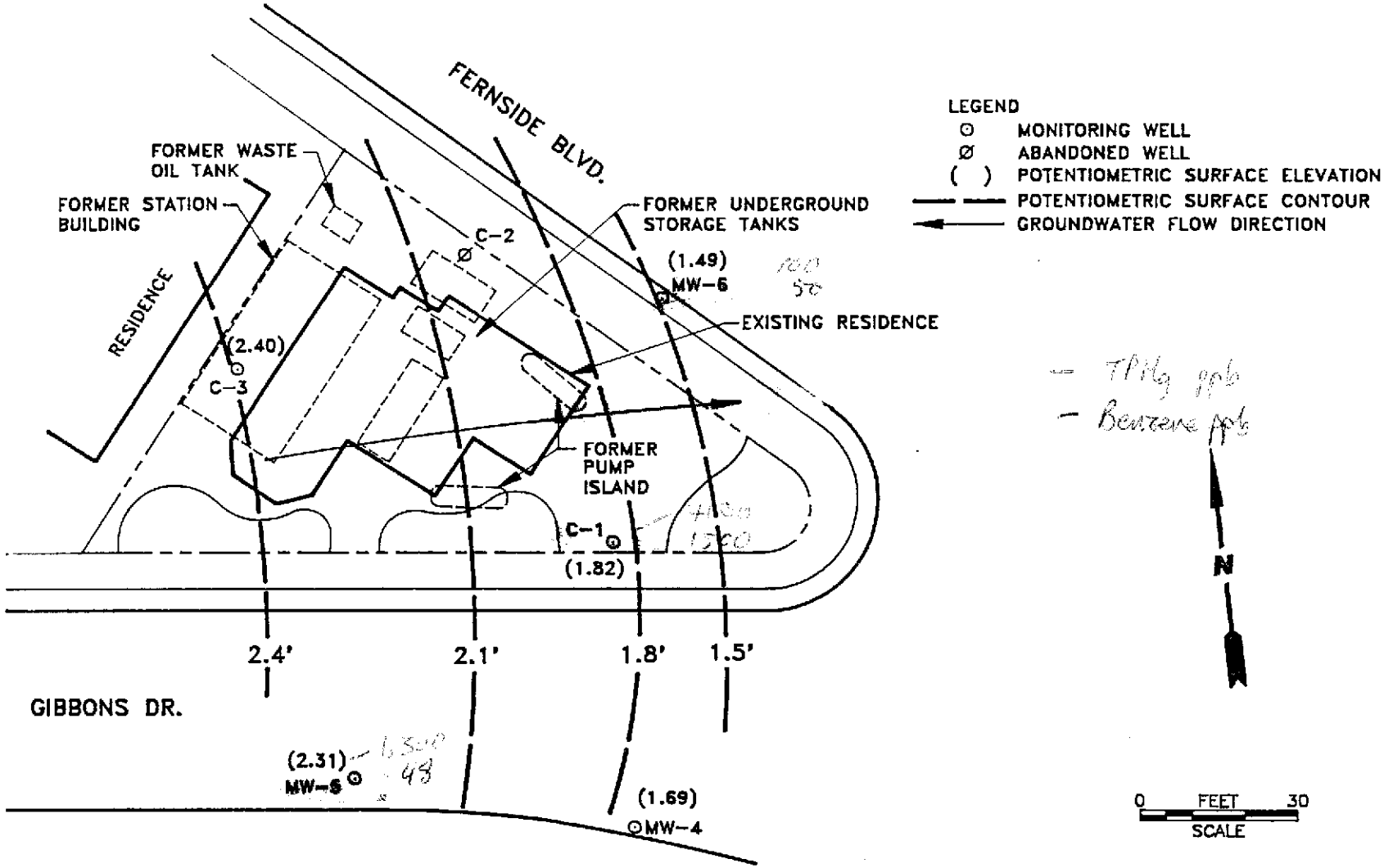
REGISTERED GEOLOGIST
DAVID R. KLEESATTEL
NO. 5136
STATE OF CALIFORNIA

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

LR2803A2.NM

ATTACHMENT A

FIGURE



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387				**POTENTIOMETRIC SURFACE MAP (1/11/93)**		
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153				LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA	REV. NO.: 0	DATE: 2/8/93
PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:	FIGURE:
JAW	DRC	TW	ML	PSM11193/SP692	020202747	1

ATTACHMENT B

TABLE

TABLE 1
HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL RESULTS
CHEVRON SERVICE STATION NO 9-1153
3126 FERNSIDE BOULEVARD, ALAMEDA, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
C-1	08/18/86	—	—	—	—	—	4.10	—	—
	09/04/86	15,000	760	820	1,500[1]	—[1]	—	—	—
	07/22/87	1,100	250	7	40[1]	—[1]	—	—	—
	05/03/89	6,900	3,600	190	229[1]	—[1]	4.46	—	—
	12/04/89	17,000	6,000	490	470[1]	—[1]	4.16	—	—
	02/14/90	19,000	12,000	990	1,050[1]	—[1]	3.64	—	—
	03/07/90	—	4,260	261	430[1]	—[1]	3.36	—	—
	09/06/91	21,000	10,000	100	240	560	4.43	0.00[2]	—
	12/15/91	20,000	4,900	43	110	330	4.78	0.00[2]	—
	03/03/92	13,000	5,800	730	340	1,200	2.39	0.00[2]	—
4.08	06/04/92	34,000	9,400	350	290	1,200	4.08	0.00	0.00
	10/13/92	24,000	11,000	98	280	530	4.75	0.00	-0.67
	01/11/93	7,100	1,500	130	150	700	2.26	SHEEN	1.82
C-2	08/18/86	—	—	—	—	—	—	—	—
	09/04/86	1,100	49	18	84[1]	—[1]	—	—	—
	07/22/87	<50	1.8	<1.0	<4.0[1]	—[1]	—	—	—
	05/03/89	Abandoned	—	—	—	—	—	—	—

GROUNDWATER TECHNOLOGY

TABLE 1
HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL RESULTS
CHEVRON SERVICE STATION NO 9-1153
3126 FERNSIDE BOULEVARD, ALAMEDA, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
C-3	08/18/86	—	—	—	—	—	4.00	—	—
	09/04/86	50	3.2	5.4	5.8[1]	—[1]	—	—	—
	07/22/87	<50	<0.5	<1.0	<4.0[1]	—[1]	—	—	—
	05/03/89	<50	<0.5	<1.0	<2.0[1]	—[1]	4.15	—	—
	12/04/89	<250	<0.5	<0.5	<0.5[1]	—[1]	4.24	—	—
	02/14/90	<50	<0.5	<0.5	<0.5[1]	—[1]	3.57	—	—
	03/07/90	NA	<5	<5	<5[1]	—[1]	3.31	—	—
	09/06/91	<50	<0.5	<0.5	<0.5	<0.5	4.59	0.00[2]	—
	12/15/91	<50	<0.5	<0.5	<0.5	<0.5	4.84	0.00[2]	—
	03/03/92	<50	<0.5	<0.5	<0.5	<0.5	2.17	0.00[2]	—
4.41	06/04/92	<50	<0.5	<0.5	<0.5	<0.5	4.01	0.00	0.40
	10/13/92	<50	<0.5	<0.5	<0.5	<0.5	4.79	0.00	-0.38
	01/11/93	<50	<0.5	<0.5	<0.5	<0.5	2.01	0.00	2.40
MW-4	06/04/92	<50	0.8	<0.5	<0.5	<0.5	3.63	0.00	-0.05
3.58	10/13/92	—	—	—	—	—	—	—	—
	01/11/93	<50	<0.5	<0.5	<0.5	<0.5	1.89	0.00	1.69
MW-5	06/04/92	560	110	0.5	37	2.2	3.25	0.00	0.36
3.61	10/13/92	1,200	150	<2.5	84	8.6	4.20	0.00	-0.59
	01/11/93	1,300	48	1.0	83	33	1.30	0.00	2.31
MW-6	06/04/92	210	54	<0.5	1.9	2.4	3.89	0.00	-0.04
3.85	10/13/92	*10,000	5,300	<10	70	<10	4.56	0.00	-0.71
	01/11/93	100	50	<0.5	<0.5	<0.5	2.36	0.00	1.49

TABLE 1
HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL RESULTS
CHEVRON SERVICE STATION NO 9-1153
3126 FERNSIDE BOULEVARD, ALAMEDA, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
TRIP BLANK	02/14/90	<50	<0.5	1.1	<0.5	<0.5	—	—	—
	09/06/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	12/15/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	03/03/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	06/04/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	10/13/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	01/11/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—

—	=	Not applicable/not sampled/not measured
DTW	=	Depth to water
SPT	=	Separate-phase hydrocarbon thickness
WTE	=	Water table elevation in feet above mean sea level
*	=	Gasoline range concentration reported. The chromatogram shows only a single peak in the gasoline range.
1	=	Ethylbenzene and xylenes were reported together.
2	-	Product thickness was measured with an MMC flexi-dip interface probe.

Prior to June 4, 1992 Top of casing elevations were unknown.
Analytical results in micrograms per liter (ug/L), or parts per billion

ATTACHMENT C

LABORATORY ANALYTICAL REPORT

Superior Precision Analytical, Inc.
P.O. Box 1545 ▪ Martinez, California 94553 ▪ (510) 229-1590 / fax (510) 229-0916

GROUNDWATER TECHNOLOGY, INC.
Attn: Sandra Lindsey

Project 020202803
Reported 01/19/93
Revised 02/04/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
87594- 1	TB-LB	01/11/93	01/13/93	Water
87594- 2	RBMW-5	01/11/93	01/13/93	Water
87594- 3	MW-5	01/11/93	01/13/93	Water
87594- 5	C-3	01/11/93	01/13/93	Water
87594- 7	MW-6	01/11/93	01/13/93	Water
87594- 9	MW-4	01/11/93	01/13/93	Water
87594-11	C-1	01/11/93	01/13/93	Water

RESULTS OF ANALYSIS

Laboratory Number:	87594- 1	87594- 2	87594- 3	87594- 5	87594- 7
Gasoline:	ND<50	ND<50	1300	ND<50	100
Benzene:	ND<0.5	ND<0.5	48	ND<0.5	50
Toluene:	ND<0.5	ND<0.5	1.0	ND<0.5	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	83	ND<0.5	ND<0.5
Xylenes:	ND<0.5	ND<0.5	33	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	87594- 9	87594-11
Gasoline:	ND<50	7100
Benzene:	ND<0.5	1500
Toluene:	ND<0.5	130
Ethyl Benzene:	ND<0.5	150
Xylenes:	ND<0.5	700
Concentration:	ug/L	ug/L

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: 87594

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	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	200	112/103	8	76-111
Benzene:	200	93/87	7	78-110
Toluene:	200	99/95	4	78-111
Ethyl Benzene:	200	105/102	3	78-118
Xylenes:	200	105/99	6	73-113

Richard Srna, Ph.D.
Nancy H. Wilson for
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 87594

Chain-of-Custody-Record

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

Chevron Facility Number: 9-1153
Facility Address: 3126 Fernside Blvd., Alameda
Consultant Project Number: 020202803
Consultant Name: Groundwater Technology, Inc.
Address: 4057 Port Chicago Hwy., Concord, CA
Project Contact (Name): Ms. Sandra L. Lindsey
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name): Mr. Mark Miller
(Phone) 510-842-8134
Laboratory Name: Superior Analytical
Laboratory Release Number: 590-1420
Samples Collected by (Name): ~~Hector Merrio~~ Randy R. Phillips
Collection Date: 1-6-93
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: 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 (KAP or AA)	9 of 9				Remarks
TBLB	87594-1	1	W	G		HCl	yes	X												TBLB Analyze but do not charge.
RBMW-5	2	1						X												
MW-5	3	3						X												
RBC-3	4	1														X				
C-3	5	3						X												
RBMW-6	6	1														X	SH			
MW-6	7	3						X												5 day turnaround
MW-6	~~8~~	3									X									Hold-see attached
RBMW-4	8 9	1				HCL														
MW-4	9 10	3						X												
RBC-1	10 11	1														X				
C-1	11 12	3	W	G		HCl	yes	X												

Please Initial:
Samples Stored in ice.
Appropriate containers
Samples preserved
VOA's without headspace
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	GTI	5:05 1/11/93	[signature]		
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
			R. Vargas		1-11-93 5:00pm

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