Chevron

June 18, 1993

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583

Marketing Department
Phone 510 842 9500

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 May 12, 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 (TPH-G) and BTEX. Benzene was detected only in monitor wells C-1 and MW-5 at concentrations of 7300 and 240 ppb, respectively. Depth to groundwater was measured at approximately 1.2 feet to 3.2 feet below grade, and the direction of flow is to the east-northeast.

Chevron's consultant has completed the work plan for the installation of additional off-site wells and it will be forwarded to you shortly. To date, the ground water extraction system at this site has removed and treated over 70,000 gallons of hydrocarbon impacted ground water.

Chevron will continue to monitor and sample 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.

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 QM3)

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

MAY 17 '93 J.M.M.

GROUNDWATER TECHNOLOGY, INC.

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

May 12, 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 April 14, 1993. Five groundwater monitoring wells at this site were gauged to measure 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 1 and 2, respectively. After the DTW was measured, each monitoring well was purged and sampled. The groundwater samples collected were analyzed for benzene, toluene, ethylbenzene, and xylenes and total petroleum hydrocarbons-as-gasoline. Results of the chemical analyses are summarized in Table 1. The laboratory report and chain-of-custody record are included in Attachment 3. Monitoring-well purge water was transported by Groundwater Technology to the Chevron Terminal in Richmond, California for recycling.

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

Sincerely,
Groundwater Technology, Inc.
Written/Submitted by

Tim Watchers
Project Geologist

Groundwater Technology, Inc.
Reviewed/Approved by

David R. Kleesattel
Registered Geologist
No. 5136

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

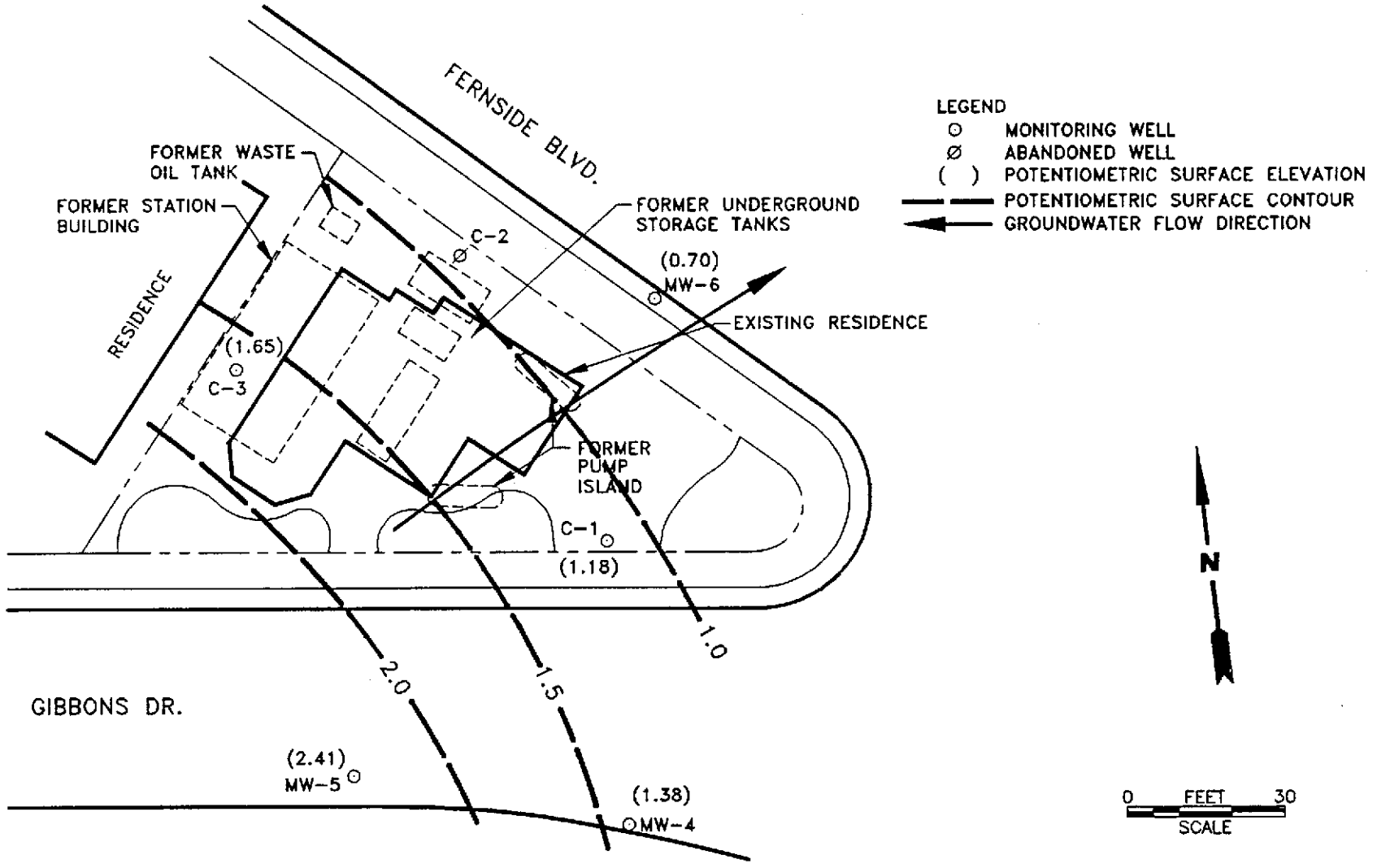
For:
John S. Gaines
Vice President, General Manager
West Region

Attachment 1 Figure
Attachment 2 Table
Attachment 3 Laboratory Report

2803R013

ATTACHMENT 1

FIGURE



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387				**POTENTIOMETRIC SURFACE MAP (4/14/93)**		
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153				LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA	REV. NO.: 0	DATE: 5/13/93
PM: JBW	PE/RG: DRK	DESIGNED: TW	DETAILED: CY	ACAD FILE: PSM593/SP692	PROJECT NO.: 020202747	FIGURE: 1

ATTACHMENT 2

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	3,800	190	229[1]	---[1]	4.46	---	---
	12/04/89	17,000	8,000	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
	04/14/93	29,000	7,300	4,000	640	2,300	2.90	Sheen	1.18
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	---	---	---	---	---	---	---
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
	04/14/93	<50	<0.5	<0.5	<0.5	<0.5	2.76	0.00	1.65
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
	04/14/93	<50	<0.5	<0.5	<0.5	<1.5	2.20	0.00	1.38
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
	04/14/93	2,600	240	6.1	250	170	1.20	0.00	2.41
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
	04/14/93	<50	<0.5	<0.5	<0.5	<0.5	3.15	0.00	0.70

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	—	—	—
	04/14/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—

TPH	=	Total petroleum hydrocarbons
DTW	=	Depth to water
SPT	=	Separate-phase hydrocarbon thickness
WTE	=	Water-table elevation in feet above mean sea level
—	=	Not applicable/not sampled/not measured
*	=	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.

Before June 4, 1992, the top-of-casing elevations were unknown.
Analytical results are in micrograms per liter or parts per billion.

ATTACHMENT 3

LABORATORY REPORT

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

GROUNDWATER TECHNOLOGY, INC.
Attn: SANDRA LINSEY

Project 20202803.061004
Reported 04/21/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
88336- 1	TB-LB	04/14/93	04/15/93	Water
88336- 3	C3	04/14/93	04/15/93	Water
88336- 5	MW4	04/14/93	04/15/93	Water
88336- 7	MW6	04/14/93	04/15/93	Water
88336- 9	MW5	04/14/93	04/19/93	Water
88336-11	C1	04/14/93	04/15/93	Water

RESULTS OF ANALYSIS

Laboratory Number:	88336- 1	88336- 3	88336- 5	88336- 7	88336- 9
Gasoline:	ND<50	ND<50	ND<50	ND<50	2600
Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	240
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.1
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	250
Xylenes:	ND<1.5	ND<1.5	ND<1.5	ND<1.5	170
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	88336-11
Gasoline:	29,000
Benzene:	7,300
Toluene:	4,000
Ethyl Benzene:	640
Xylenes:	2,300
Concentration:	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: 88336

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:	93/89	4%	70-130
Benzene:	98/100	2%	70-130
Toluene:	102/102	0%	70-130
Ethyl Benzene:	107/108	1%	70-130
Xylenes:	106/106	0%	70-130

Richard Srna, Ph.D.
Jeromina V Tanquilig (per)
Laboratory Director

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

8336

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: 020202803.061004
Consultant Name: Groundwater Technology
Address: 4057 Port Chicago Hwy, Concord
Project Contact (Name): Ms. Sandra Lindsey
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name): Mr. Mark Miller
(Phone) 842-8134
Laboratory Name: Superior Analytical
Laboratory Release Number: 590-1420
Samples Collected by (Name): Hector MERINO
Collection Date: 4/14/93
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 (3015)	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)	Hold					Remarks
TB-LB	1	1	W	G		HCl	Yes	X													TB-LB DO NOT BILL If MW-6 shows a single peak run the 8010
RBC3	2	1			10:30			[redacted]								X					
C3	3	3			10:30			X													
RBMW4	4	1			10:40											X					
MW4	5	3			10:40			X													
RBMW6	6	1			10:50											X					
MW6	7	6			10:50			X													5day turnaround
RBMW5	8	1			11:00						↑					X					
MW5	9	3			11:00			X			↑										
RBC1	10	1			11:05						↑					X					
C1	11	3			11:05			X		17	58										

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	GTI	4/15/93	[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
			[signature]		4/15/93 8:45

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