GROUNDWATER TECHNOLOGY, INC.

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

November 20, 1992

Job Number 020203282

Mr. Mark Miller
Chevron USA Products Company
P.O. Box 5004
San Ramon, CA 94583

NOV 25 '92 JST

RE: MONITORING AND SAMPLING REPORT OF VADOSE WELL 2-1
CHEVRON SERVICE STATION No. 9-3600
2200 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

Dear Mr. Miller:

On October 13, 1992, at the request of Chevron U.S.A. Products Company (Chevron) Groundwater Technology, Inc. monitored vadose well (VW-2-1) at the above referenced site. Organic vapor concentrations were measured with a photo-ionization detector (PID), water samples from the well were collected and submitted for analysis. Water samples were analyzed for total petroleum hydrocarbons (TPH)-as-gasoline, benzene, toluene, ethylbenzene, and xylenes (BTEX). The work was performed in accordance with the letter dated September 2, 1992 from Mr. Mark Miller of Chevron.

The PID was calibrated with 100 parts per million isobutylene. The vapors within the well were measured after the well cap was removed. The PID registered 105 parts per million of total petroleum hydrocarbons. The well was then gauged to determine depth to water (DTW), depth to product (DTP), and total depth (TD) of the well. Results of the October 13, 1992, monitoring event indicate DTP is 4.42 feet, DTW is 4.43 feet, and TD is 5.14 feet. The reading of 0.01 foot of product could not be confirmed with a clear acrylic bailer.

Efforts to purge the well were unsuccessful because there was not enough water in the well to bail. Water samples were collected from the standing water in the well with a clean teflon sampler. Water samples were placed into 40 milliliter glass containers and fitted with a plastic cap lined with a teflon stepum. The samples were sealed so that no air remained inside. The samples were labeled and placed in an insulated cooler for transportation to a California certified laboratory for analyses. A chain-of-custody record was filled out and accompanied the samples at all times. After the groundwater samples were collected the well was secured with the cap and the lid to the road box was replaced.

Analytical results of the water samples collected on October 13, 1992, reported detectable concentrations of TPH-as-gasoline and BTEX. The results are summarized below and laboratory report and chain-of-custody record are included in Attachment A.

WELL ID	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYLBENZENE	XYLENE
VW-2-1	42,000	3,300	7,100	540	10,000

Note: Concentrations in parts per billion (ppb)

This concludes Groundwater Technology's letter report for monitoring and sampling of vadose well VW 2-1 at 2200 Telegraph Avenue, Oakland, California. Groundwater Technology appreciates this opportunity to be of service to Chevron. If you have any questions regarding this letter report please contact us at (510) 671-2387.

Sincerely,
GROUNDWATER TECHNOLOGY, INC

Tim Watchers
Project Geologist

Sandra L. Lindsey
Project Manager

LR3262TW.01

GROUNDWATER TECHNOLOGY, INC

David R. Kleesattel, R.G.
District Hydrogeologist

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

GROUNDWATER TECHNOLOGY, INC.

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

September 2, 1992

Mr. Greg Mischel
Groundwater Technology, Inc.
4057 Port Chicago Highway
Concord, CA 94520

Re: Chevron Service Station 9-3600
2200 Telegraph Avenue, Oakland, CA

Dear Mr. Mischel:

Enclosed is a copy of the Site Plan showing locations of the vadose wells at the above referenced site to assist Groundwater Technology, Inc. in performing a preliminary site investigation. The sixteen wells with vapor sensors were installed during the station reconstruction around 1986-87 because BART tracks run directly beneath the site in an underground tunnel. Approximately three weeks ago all sixteen sensors went off simultaneously. The sensors were replaced and currently only one sensor designated 2-1 on the site plan continues to go off.

NO, ONLY → TWO DID

The dealer at this site has reported no recent loss of inventory and the tanks tested tight in 1991. According to the dealer, standing water was observed in well 2-1 when the sensors were replaced. For your reference I have also enclosed information on these sensors which indicates that they are not tolerant of fluids. I believe that the old sensors may have come in contact with water in some form or another and malfunctioned. The one new sensor which continues to go off may be due to the standing water in the well.

I would like Groundwater Technology, Inc. to screen vadose well 2-1 with a PID, bail the well dry, and take a grab sample to be analyzed for TPH-gas and BTEX. Vadose well 2-1 is labelled in white paint with a large "2-1" on the underside of the manhole cover to avoid confusion. Please perform this work within thirty days and submit a report documenting all findings.

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

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

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosures
cc: File (9-3600 RFP1)

WEST GRAND AVENUE

S 11° 55' 00" W

147.48'

2" FRP VENT LINES

114.31'

ELECTRICAL CONDUIT

112.50'

S 77° 18' 22" E

2" FRP PRODUCT PIPE,
3" FRP VAPOR RECOVERY PIPE,
CONTAINED WITHIN FRP LINED TRENCH.

N 78° 04' 08" W

N 11° 13' 30" E

149.01'

22nd STREET

TELEGRAPH AVENUE

0 5 10 20 30 40 50

DRAWING No.SS93600.DWG/08-30-90/HCH

Chevron U.S.A. Inc.
Marketing Operations San Ramon

REVISIONS		
⚠ ADD PIPING AND CONDUIT	08/19/91	HCH
△		
△		
△		
△		

SITE PLAN
DEALER OPERATED 9-3600
TELEGRAPH & WEST GRAND
OAKLAND, CALIFORNIA
SCALE: 1"=10'-0" DATE: 08/30/90
DR. HCH CH. APP.
IF THIS DRAWING IS 11"x17"
SCALE 1"=20'-0"

ATTACHMENT A

LABORATORY REPORT

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

GROUNDWATER TECHNOLOGY, INC.
Attn: Sandra Lindsey

Project "PENDING"
Reported 10/18/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
86915- 1	MW-2-1	10/12/82	10/17/92	Water

RESULTS OF ANALYSIS

Laboratory Number: 86915- 1

Gasoline:	42000
Benzene:	3300
Toluene:	7100
Ethyl Benzene:	540
Xylenes:	10000
Concentration:	ug/L

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

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: 86915

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 ng	103/105	2%	70-130
Benzene:	200 ng	93/95	2%	70-130
Toluene:	200 ng	97/100	3%	70-130
Ethyl Benzene:	200 ng	101/103	2%	70-130
Xylenes:	200 ng	99/102	3%	70-130

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 86915

Chain-of-Custody-Record

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

Chevron Facility Number 9-3600
Facility Address 2200 Telegraph Ave
Consultant Project Number Pending
Consultant Name Groundwater Technology
Address 4057 Port Chicago Hwy
Project Contact (Name) Sandra Lindsey / Tim Walters
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) Mark Miller
(Phone) 842-8134
Laboratory Name Superior
Laboratory Release Number 8212570
Samples Collected by (Name) STEVEN J. STROM
Collection Date 10-13-92
Signature [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
2-1	1	3	W	G		HCL	Yes	X												

Remarks: By: [illegible]

Please initial: S
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	10/13/92 1630			
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] Carroll		10/13/92 16:30

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