



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

92 MAY 11 AM 10:40

Marketing Department

May 11, 1992

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

STIP 1143

Re: Chevron Service Station No. 9-0329
340 Highland Avenue, Piedmont, California

Dear Mr. Seto :

Enclosed is the groundwater monitoring and sampling report dated ~~11/11/91~~ 10/22/91.

Samples from monitoring wells C-3 and C-4 continued to show nondetectable levels of total petroleum hydrocarbon as gasoline (TPH-G), benzene, toluene, ethylbenzene, and xylenes (BTEX). A sheen was observed in well C-2. The dissolved hydrocarbon level for C-2 were as follow : ~~6600 ppb TPH-G, 580 ppb benzene, 33 ppb toluene, 340 ppb ethylbenzene, and 170 ppb xylenes.~~ During this sampling period depth to water ranged from ~~2.06 to 4.26 feet~~.

Inventory reconciliation was performed, and the results were within the acceptable range. The sheen in C-2 could be the result of surface run-off.

If you have any questions or comments, please feel free to contact me at (510) 842-8752.

Sincerely,

Chevron U.S.A., Inc.

Kenneth Kan
Engineer

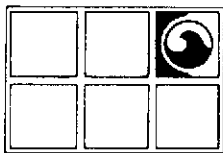
LKAN/MacFile 9-0329R1

Enclosure

→ cc : Mr. Eddie So, RWQCB-San Francisco Bay Area
2101 Webster Street, Suite 500, Oakland, CA 94612

Mr. Steve Willer, Chevron U.S.A., Inc.





GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

May 1, 1992

Project No. 020302249.061022

Mr. Ken Kan
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. 9-0329
340 HIGHLAND AVENUE, PIEDMONT, CALIFORNIA

Dear Mr. Kan:

Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on April 10, 1992. The three 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 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, and 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 removed by Groundwater Technology for transport and recycling at the Chevron, Richmond, California terminal.

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

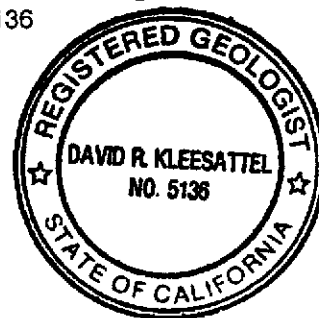
Sincerely,
GROUNDWATER TECHNOLOGY, INC.

Sandra L. Lindsey
Project Manager

David R. Kleesattel
Registered Geologist
No. 5136

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

LR2249A1.SLL



Chevron Service Station No. 9-0329, 340 Highland Ave., Piedmont, CA
Mr. Ken Kan

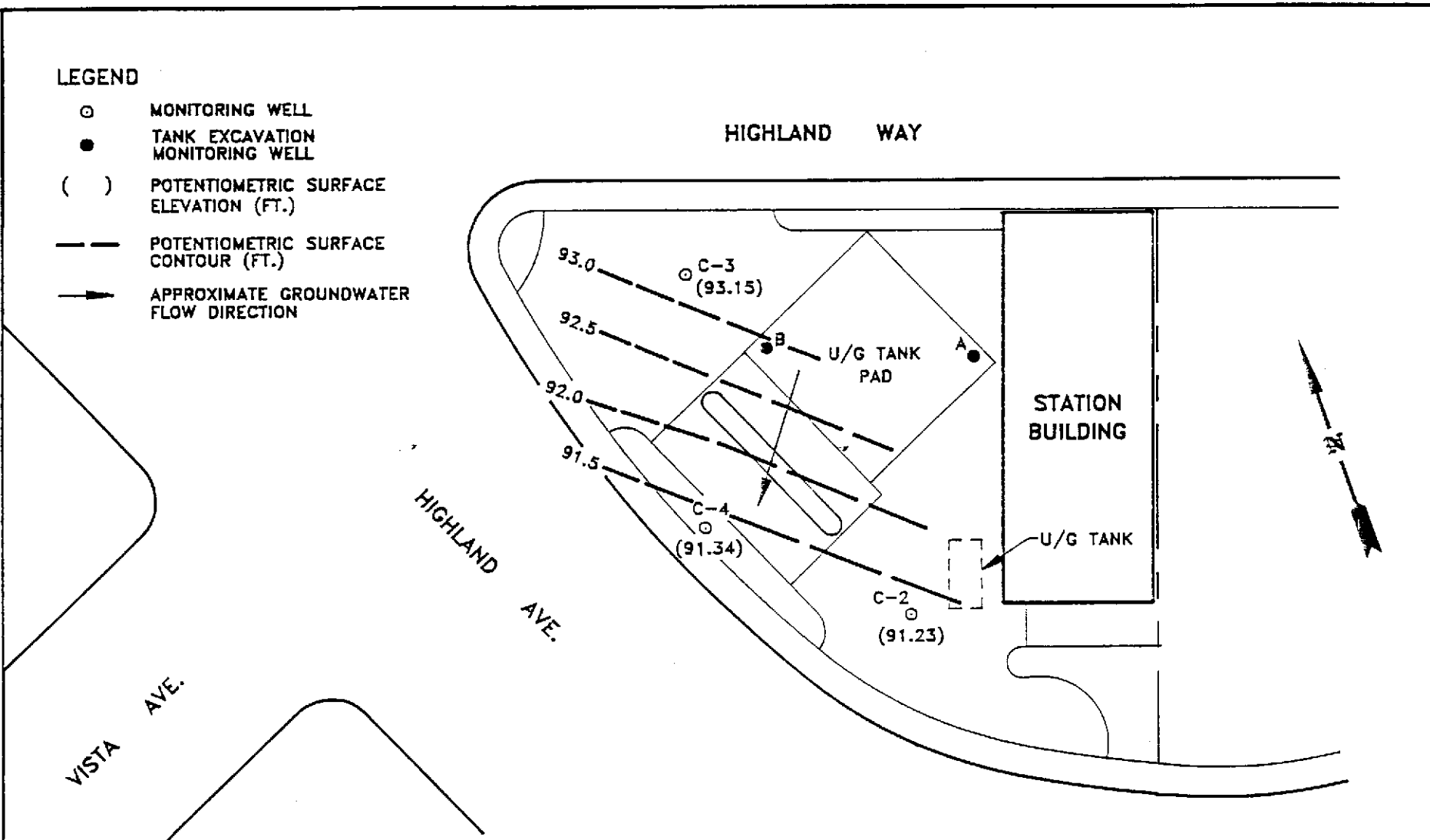
May 1, 1992


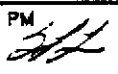
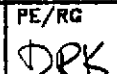
ATTACHMENT A

FIGURE 1

LEGEND

- MONITORING WELL
- TANK EXCAVATION MONITORING WELL
- () POTENTIOMETRIC SURFACE ELEVATION (FT.)
- POTENTIOMETRIC SURFACE CONTOUR (FT.)
- ➔ APPROXIMATE GROUNDWATER FLOW DIRECTION



 GROUNDWATER TECHNOLOGY		1401 HALYARD DR. #140 W. SACRAMENTO, CA. 95691 (916) 372-4700		POTENTIOMETRIC SURFACE MAP (4/10/92)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SEVICE STATION #9-0329			LOCATION: 340 HIGHLAND AVENUE PIEDMONT, CALIFORNIA		REV. NO.: 1	DATE: 5/1/92	
PM 	PE/RG 	DESIGNED SL	DETAILED GWS	ACAD FILE: POT41092	PROJECT NO.: 02030-2249	FIGURE: 1	



Chevron Service Station No. 9-0329, 340 Highland Ave., Piedmont, CA
Mr. Ken Kan

May 1, 1992

ATTACHMENT B

TABLE 1

**TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA**

WELL ID/ ELEVATION	DATE	TPH-AS- GASOLINE	TOG	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (feet)	SPT (feet)	WTE (feet)
C-2 94.19	08/07/89	34,000	12,000	580	60	170	270	2.88	0.0	91.33
	11/15/89	8,100	<5,000	500	36	420	180	2.80	0.0	91.39
	02/01/91	6,800	7,000	490	21	310	86	3.75	0.0	90.41
	04/16/91	9,600	<5,000	810	43	550	270	2.55	0.0	91.64
	10/16/91	7,100	<5,000	320	23	200	60	3.52	0.0	90.67
	01/08/92	2,400	---	190	9	83	22	4.15	SHEEN	90.04
	04/10/92	6,600	---	550	33	340	170	2.96	SHEEN	91.23
C-3 97.65	08/07/89	<50	---	<0.5	<1	<1	<3	4.29	0.0	93.36
	11/15/89	<500	<5,000	<0.5	2.8	<0.5	1.1	5.17	0.0	92.48
	02/01/91	<50	---	<0.5	<0.5	<0.5	<0.5	6.38	0.0	91.27
	04/16/91	<50	---	<0.5	<0.5	<0.5	<0.5	3.72	0.0	93.93
	10/16/91	<50	---	<0.5	<0.5	<0.5	<0.5	8.20	0.0	89.45
	01/08/92	<50	---	<0.5	<0.5	<0.5	<0.5	6.68	0.0	90.97
	04/10/92	<50	---	<0.5	<0.5	<0.5	<0.5	4.50	0.0	93.15
C-4 95.60	08/07/89	---	---	---	---	---	---	DRY	---	---
	11/15/89	1,300	<5,000	2.9	310	0.5	2.9	4.95	0.0	90.65
	02/01/91	72	---	9	<0.5	<0.5	<0.5	4.78	0.0	90.82
	04/16/91	<50	---	<0.5	<0.5	<0.5	<0.5	4.83	0.0	95.60
	10/16/91	<50	---	<0.5	<0.5	<0.5	<0.5	4.23	0.0	91.37
	01/08/92	<50	---	<0.5	<0.5	<0.5	<0.5	4.81	0.0	90.79
	04/10/92	<50	---	<0.5	<0.5	<0.5	<0.5	4.26	0.0	91.34
* A ---	08/07/89	1,000	---	50	6	5	22	2.10	0.0	---
	11/15/89	3,700	<5,000	98	2.1	4.3	55	2.04	0.0	---
	02/01/91	36,000	---	1,100	750	130	6,100	3.05	0.0	---
	04/16/91	8,000	---	370	6	86	750	2.01	0.0	---
	10/16/91	---	---	---	---	---	---	4.15	0.0	---
* B ---	08/07/89	---	---	---	---	---	---	4.12	0.0	---
	11/15/89	---	---	---	---	---	---	---	---	---
	02/01/91	---	---	---	---	---	---	5.03	0.0	---
	04/16/91	---	---	---	---	---	---	4.00	0.0	---
	10/16/91	---	---	---	---	---	---	6.24	0.0	---

- = Not applicable, not sampled, not measured
- * = Backfill wells - Not sampled as of 10/16/91, Not monitored as of 01/08/92.
- DTW = Depth to water
- SPT = Separate-phase hydrocarbon thickness
- WTE = Water table elevation

All elevations are given as feet above mean sea level.

Analytical results in micrograms per liter μ/L , or parts per billion.

Note: The previous report dated 10/30/91 erroneously reported that a sheen was noted in wells C-2 and C-3 for the 8/7/89 sampling event.

Chevron Service Station No. 9-0329, 340 Highland Ave., Piedmont, CA
Mr. Ken Kan

May 1, 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

GROUNDWATER TECHNOLOGIES INC.
Attn: Sandra Lindsey

Project 020302249
Reported 04/17/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
85453- 1	TRIP BLANK	04/10/92	04/14/92 Water
85453- 2	RBC-3	04/10/92	04/15/92 Water
85453- 3	C-3	04/10/92	04/14/92 Water
85453- 5	C-4	04/10/92	04/15/92 Water
85453- 7	C-2	04/10/92	04/15/92 Water

RESULTS OF ANALYSIS

Laboratory Number: 85453- 1 85453- 2 85453- 3 85453- 5 85453- 7

Gasoline:	ND<50	ND<50	ND<50	ND<50	6600
Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	550
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	33
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	340
Xylenes:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	170
Concentration:	ug/L	ug/L	ug/L	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

Page 2 of 2
QA/QC INFORMATION
SET: 85453

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 for Gasoline in Water: 50ug/L

ANALYTE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	200 ng	107/99	9	70-130
Benzene:	200 ng	97/91	6	70-130
Toluene:	200 ng	93/84	10	70-130
Ethyl Benzene:	200 ng	97/89	9	70-130
Xylenes:	200 ng	91/83	9	70-130

Richard Srna, Ph.D.

Delomina V. Janguij (for)
Laboratory Director

