



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

April 9, 1993

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

**Re: Chevron Service Station #9-1583
5509 Martin Luther King Way, Oakland, CA**

Dear Mr. Howell:

Enclosed is the Quarterly Groundwater Monitoring and Sampling Activities report dated February 26, 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 MW-1, MW-2, MW-3 and MW-6 at concentrations of 12000, 140, 5000, and 2.1 ppb, respectively. Depth to groundwater was measured at approximately 7.3 feet to 10.2 feet below grade, and the direction of flow is to the northwest.

Separate-phase hydrocarbons (SPH) were measured and bailed from monitor well MW-3 on a weekly basis from November 11, 1992 through January 5, 1993. Approximately 270 ml of SPH was removed from this well. Bailing was discontinued when the SPH observed in this well was only a sheen.

Concentrations of dissolved phase hydrocarbons showed an increase in monitor wells MW-1 and MW-3 during the past quarter and historical records indicate that the ground water beneath the site is at an all time high. The increase in dissolved hydrocarbons may be associated with the rising ground water coming into contact with residual hydrocarbons trapped in the vadose zone. The concentrations in monitor wells MW-1 and MW-3 will be monitored closely to ascertain the validity of this theory.

Chevron will continue to monitor and sample all wells at this site on a quarterly basis. A work plan is currently being developed for the installation of additional wells to define the extent of the hydrocarbon constituents in the soil and ground water. It is anticipated that this work plan will be submitted to your office no later than June 15, 1993.

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

A handwritten signature in cursive script, appearing to read "Mark A. Miller".

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB - Bay Area
Mr. M.R. Purcell
File (9-1583 QM3)

MAR 1 '93 J.M.M.

GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

February 26, 1993

Project No. 020302228

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

**SUBJECT: GROUNDWATER MONITORING AND SAMPLING ACTIVITIES
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA**

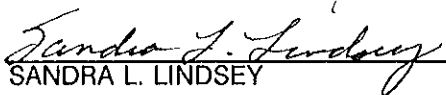
Dear Mr. Miller:


Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on November 11, November 17, November 24, December 1, December 29, 1992, January 5, January 8, and February 2, 1993. At the request of Chevron the thickness of the separate-phase hydrocarbons was measured on a weekly basis and bailed from MW-3. Table 1, (Attachment B) presents the data on the separate-phase hydrocarbons bailed. On January 8, 1993, five of the six groundwater monitoring wells at this site were measured to determine depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons; a car was parked well MW-6. On February 2, 1993, well MW-6 was measured to determine depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not detected in any of the monitoring wells. A potentiometric surface map (Figure 1) and a summary of groundwater monitoring data (Table 2) are presented in Attachments A and C, 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 2. The laboratory report and chain-of-custody record are included in Attachment D. Monitoring well purge water was transported by Groundwater Technology, Inc. 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 call our Concord, California office at (510) 671-2387.

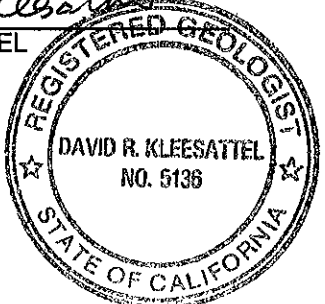
Sincerely,
Groundwater Technology, Inc.
Written/Submitted by

Groundwater Technology, Inc.
Reviewed/Approved by


SANDRA L. LINDSEY
Project Manager


DAVID R. KLEESATTEL
Registered Geologist
No. 5136

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



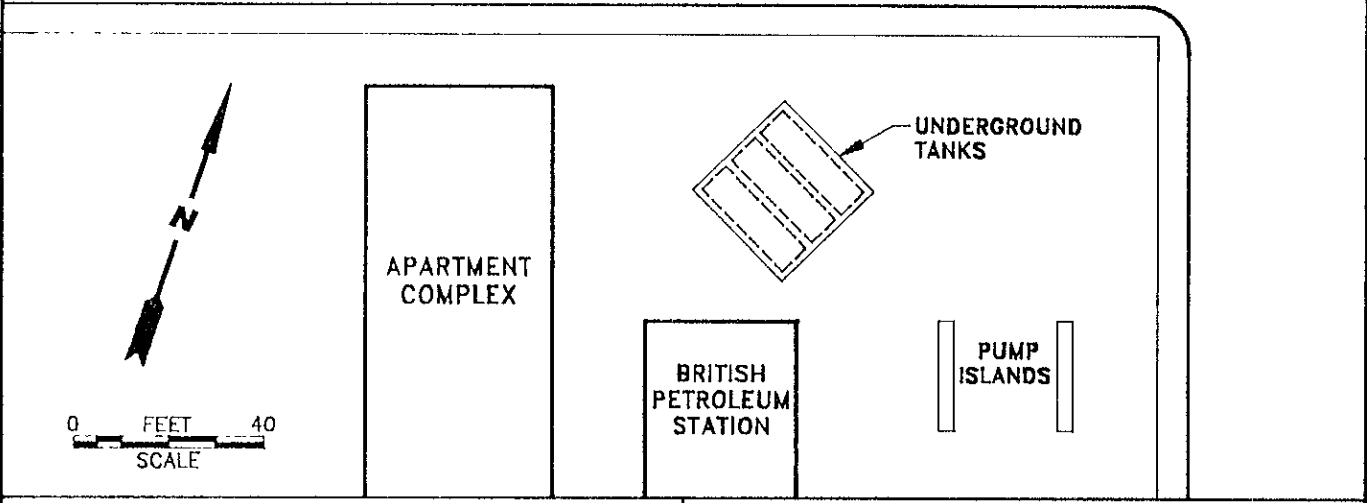
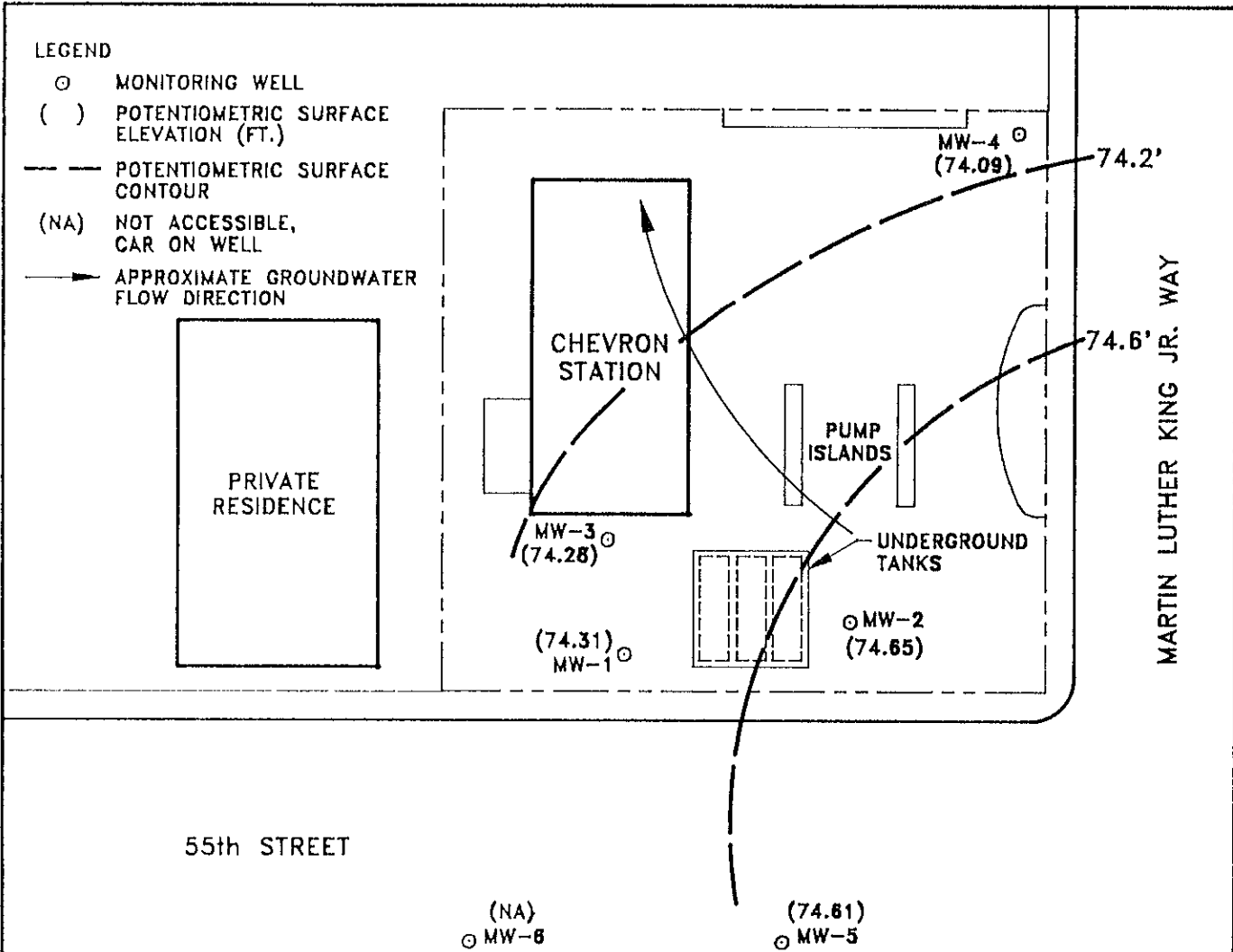
Attachments: Attachment A - Figure 1
Attachment B - Table 1
Attachment C - Table 2
LR2228A4.NM Attachment D - Laboratory Report

ATTACHMENT A

FIGURE

LEGEND

- MONITORING WELL
- () POTENTIOMETRIC SURFACE ELEVATION (FT.)
- - - POTENTIOMETRIC SURFACE CONTOUR
- (NA) NOT ACCESSIBLE, CAR ON WELL
- APPROXIMATE GROUNDWATER FLOW DIRECTION



GROUNDWATER TECHNOLOGY		4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 871-2387		POTENTIOMETRIC SURFACE MAP (1/8/93)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1583			LOCATION: 5509 MARTIN LUTHER KING JR. WAY OAKLAND, CALIFORNIA		REV. NO.: 0	DATE: 2/22/93	
PM <i>JAW</i>	PE/RG <i>DPK</i>	DESIGNED TW	DETAILED ML	ACAD FILE: PSM1893/SP292	PROJECT NO.: 020302228	FIGURE: 1	

ATTACHMENT B

TABLE 1

**TABLE 1
SEPARATE-PHASE HYDROCARBONS BAILED
MONITORING WELL MW-3**

**CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR, WAY, OAKLAND, CALIFORNIA**

DATE	AMOUNT PRODUCT BAILED	TOTAL PRODUCT BAILED
11/11/92	150ml	150ml
11/17/92	40ml	190ml
11/24/92	40ml	230ml
12/01/92	40ml	270ml
12/21/92	SHEEN	---
12/29/92	SHEEN	---
01/05/93	---	---

ATTACHMENT C

TABLE 2

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-1	12/22/83	—	—	—	—	—	10.25	0.00	71.72
	12/30/83	—	—	—	—	—	9.17	0.00	72.80
81.97/	03/12/90	50,000	3,000	7,300	1,900	18,000	10.08	0.00	71.89
82.42	03/25/90	—	—	—	—	—	10.46	0.00	71.51
	10/18/90	—	—	—	—	—	—	—	—
	10/31/90	—	—	—	—	—	—	—	—
	11/16/90	—	—	—	—	—	11.58	0.00	70.84
	02/08/91	100,000	4,200	8,400	16,000	2,600	10.11	0.00	72.31
	05/08/91	31,000	200	66	670	2,000	10.45	0.00	71.97
	08/12/91	17,000	81	7.2	270	710	11.23	0.00	71.19
	11/07/91	7,100	24	6	130	170	10.70	0.00	71.72
	02/05/92	110,000	8,900	14,000	2,700	12,000	10.37	0.00	72.05
	05/13/92	19,000	450	85	480	870	10.58	0.00	71.84
	07/17/92	8,500	170	<10	360	600	11.05	0.00	71.37
	10/05/92	22,000	4,300	5,100	570	2,900	11.41	0.00	71.01
	11/11/92	—	—	—	—	—	—	—	—
	11/17/92	—	—	—	—	—	—	—	—
	11/24/92	—	—	—	—	—	—	—	—
	12/01/92	—	—	—	—	—	—	—	—
	12/29/92	—	—	—	—	—	—	—	—
	01/05/93	—	—	—	—	—	—	—	—
	01/08/93	14,000,000	12,000	79,000	270,000	1,300,000	8.11	0.00	74.31
	02/02/93	—	—	—	—	—	—	—	—

**TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA**

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-2	12/22/83	---	---	---	---	---	10.50	0.00	72.98
	12/30/83	---	---	---	---	---	9.92	0.00	73.56
83.48	03/12/90	800	400	22	18	55	11.02	0.00	72.46
	03/25/90	---	---	---	---	---	11.33	0.00	72.15
	10/18/90	---	---	---	---	---	12.31	0.00	71.17
	10/31/90	---	---	---	---	---	---	---	---
	11/16/90	---	---	---	---	---	---	---	---
	02/08/91	4,600	820	440	720	210	11.05	0.00	72.43
	05/08/91	<50	5	<0.5	<0.5	<0.5	11.36	0.00	72.12
	08/12/91	<50	<0.5	<0.5	<0.5	<0.5	11.97	0.00	71.51
	11/07/91	<50	<0.5	<0.5	<0.5	<0.5	11.50	0.00	71.98
	02/05/92	1,700	390	170	60	200	11.19	0.00	72.29
	05/13/92	74*	9.3	<0.5	<0.5	<0.5	11.49	0.00	71.99
	07/17/92	<50	2.0	<0.5	<0.5	<0.5	11.85	0.00	71.63
	10/05/92	3,500	1,200	530	86	220	12.00	0.00	71.48
	11/11/92	---	---	---	---	---	---	---	---
	11/17/92	---	---	---	---	---	---	---	---
	11/24/92	---	---	---	---	---	---	---	---
	12/01/92	---	---	---	---	---	---	---	---
	12/29/92	---	---	---	---	---	---	---	---
	01/05/93	---	---	---	---	---	---	---	---
	01/08/93	390	140	0.8	7.7	26	8.83	0.00	74.65
	02/02/93	---	---	---	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-3	12/22/83	---	---	---	---	---	11.58	0.00	72.78
	12/30/83	---	---	---	---	---	11.17	0.00	73.19
84.36/	03/12/90	47,000	1,000	9,900	1,700	9,800	12.14	0.00	72.22
84.38	03/25/90	---	---	---	---	---	12.55	0.00	71.81
	10/18/90	---	---	---	---	---	---	---	---
	10/31/90	---	---	---	---	---	---	---	---
	11/16/90	---	---	---	---	---	13.62	0.00	70.76
	02/08/91	58,000	4,900	5,200	9,500	2,000	12.18	0.00	72.20
	05/08/91	50,000	2,100	1,400	2,000	9,400	12.52	0.00	71.86
	08/12/91	15,000	1,300	160	920	1,900	13.27	0.00	71.11
	11/07/91	26,000	1,000	310	1,900	5,900	12.81	0.00	71.57
	02/05/92	35,000	2,800	1,300	1,500	4,700	12.47	0.00	71.91
	05/13/92	47,000	1,500	1,200	1,100	4,800	12.62	0.00	71.76
	07/17/92	15,000	120	11	88	140	13.13	0.00	71.25
	10/05/92	---	---	---	---	---	13.62	0.24	70.95
	11/11/92	---	---	---	---	---	12.89	0.17	71.63
	11/17/92	---	---	---	---	---	12.89	0.06	71.54
	11/24/92	---	---	---	---	---	12.86	0.05	71.56
	12/01/92	---	---	---	---	---	12.92	0.03	71.48
	12/29/92	---	---	---	---	---	11.24	\$HEEN	73.14
	01/05/93	---	---	---	---	---	11.15	\$HEEN	73.23
	01/08/93	250,000	5,000	17,000	5,500	28,000	10.10	0.00	74.28
	02/02/93	---	---	---	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-4/ 84.25	10/18/90	---	---	---	---	---	15.75	0.00	68.50
	10/31/90	<50	<0.5	<0.5	<0.5	1	13.90	0.00	70.35
	11/16/90	---	---	---	---	---	14.25	0.00	70.00
	02/08/91	60	17	2	12	<0.5	12.32	0.00	71.93
	05/08/91	65	<0.5	<0.5	<0.5	<0.5	12.23	0.00	72.02
	08/12/91	<50	<0.5	<0.5	<0.5	<0.5	13.93	0.00	70.32
	11/07/91	<50	<0.5	<0.5	<0.5	<0.5	13.42	0.00	70.83
	02/05/92	<50	<0.5	<0.5	<0.5	<0.5	12.83	0.00	71.42
	05/13/92	<50	<0.5	<0.5	<0.5	<0.5	13.28	0.00	70.97
	07/17/92	<50	<0.5	<0.5	<0.5	<0.5	13.98	0.00	70.27
	10/05/92	<50	<0.5	<0.5	<0.5	<0.5	14.23	0.00	70.02
	11/11/92	---	---	---	---	---	---	---	---
	11/17/92	---	---	---	---	---	---	---	---
	11/24/92	---	---	---	---	---	---	---	---
	12/01/92	---	---	---	---	---	---	---	---
	12/29/92	---	---	---	---	---	---	---	---
	01/05/93	---	---	---	---	---	---	---	---
	01/08/93	<50	<0.5	<0.5	<0.5	<0.5	10.16	0.00	74.09
	02/02/93	---	---	---	---	---	---	---	---

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-5	10/18/90	—	—	—	—	—	10.78	0.00	71.17
	10/31/90	110	<0.5	<0.5	<0.5	<0.5	10.63	0.00	71.32
81.95	11/16/90	—	—	—	—	—	10.68	0.00	71.27
	02/08/91	<50	<0.5	<0.5	<0.5	<0.5	9.17	0.00	72.78
	05/08/91	<50	<0.5	<0.5	<0.5	<0.5	8.68	0.00	73.27
	08/12/91	<50	<0.5	<0.5	<0.5	<0.5	10.33	0.00	71.62
	11/07/91	<50	<0.5	<0.5	<0.5	<0.5	9.76	0.00	72.19
	02/05/92	69*	<0.5	<0.5	<0.5	<0.5	9.47	0.00	72.48
	05/13/92	74*	<0.5	<0.5	<0.5	<0.5	9.70	0.00	72.25
	07/17/92	880	2.6	<1.2	4.6	11	10.21	0.00	71.74
	10/05/92	120	<0.5	<0.5	0.6	4.9	10.61	0.00	71.34
	11/11/92	—	—	—	—	—	—	—	—
	11/17/92	—	—	—	—	—	—	—	—
	11/24/92	—	—	—	—	—	—	—	—
	12/01/92	—	—	—	—	—	—	—	—
	12/29/92	—	—	—	—	—	—	—	—
	01/05/93	—	—	—	—	—	—	—	—
	01/08/93	61*	<0.5	<0.5	<0.5	<0.5	7.34	0.00	74.61
	02/02/93	—	—	—	—	—	—	—	—

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-6	10/18/90	---	---	---	---	---	9.79	0.0	70.81
	10/31/90	<50	<0.5	<0.5	<0.5	3	9.69	0.0	70.91
80.60	11/16/90	---	---	---	---	---	9.74	0.0	70.86
	02/08/91	---	---	---	---	---	---	---	---
	05/08/91	56	<0.5	<0.5	<0.5	<0.5	9.54	0.0	71.06
	08/12/91	<50	<0.5	<0.5	<0.5	<0.5	9.50	0.0	71.10
	11/07/91	<50	<0.5	<0.5	<0.5	<0.5	8.89	0.0	71.71
	02/05/92	<50	<0.5	<0.5	<0.5	<0.5	8.59	0.0	72.01
	05/13/92	---	---	---	---	---	---	---	---
	07/17/92	---	---	---	---	---	---	---	---
	10/05/92	---	---	---	---	---	---	---	---
	11/11/92	---	---	---	---	---	---	---	---
	11/17/92	---	---	---	---	---	---	---	---
	11/24/92	---	---	---	---	---	---	---	---
	12/01/92	---	---	---	---	---	---	---	---
	12/29/92	---	---	---	---	---	---	---	---
	01/05/93	---	---	---	---	---	---	---	---
	01/08/93	---	---	---	---	---	---	---	---
	02/02/93	<50	2.1	<0.5	<0.5	2.2	7.71	0.0	72.89

**TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-1583
5509 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA**

WELL ID/ ELEV	DATE	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
TRIP	03/12/90	<50	<0.3	<0.3	<0.3	<0.6	—	—	—
BLANK	02/08/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	05/08/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	08/12/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	11/07/91	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	02/05/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	05/13/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	07/17/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	10/05/92	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	11/11/92	—	—	—	—	—	—	—	—
	11/17/92	—	—	—	—	—	—	—	—
	11/29/92	—	—	—	—	—	—	—	—
	12/01/92	—	—	—	—	—	—	—	—
	12/29/92	—	—	—	—	—	—	—	—
	01/05/93	—	—	—	—	—	—	—	—
	01/08/93	<50	<0.5	<0.5	<0.5	<0.5	—	—	—
	02/02/93	—	—	—	—	—	—	—	—

— = Not applicable/not sampled/not measured
DTW = Depth to water
SPT = Separate-phase hydrocarbon thickness
WTE = Water table elevation
81.97/82.42 = March 3, 1990 survey/November 30, 1990 survey
* = The laboratory reported that a non-standard gasoline pattern was observed in the chromatogram.

All elevations are given as feet above mean sea level.
Analytical results in micrograms per liter ($\mu\text{g/L}$), or parts per billion

ATTACHMENT D
LABORATORY REPORT



Superior Precision Analytical, Inc.

335 Arnold Drive Suite 111 • Martinez, California 94553 • (510) 229 1512 / fax (510) 229 1526

GROUNDWATER TECHNOLOGY, INC.
Attn: Sandra Lindsey

Project 020302228
Reported 01/19/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
87580- 1	TBLB	01/08/93	01/12/93 Water
87580- 2	RBMW-4	01/08/93	01/12/93 Water
87580- 3	MW-4	01/08/93	01/12/93 Water
87580- 5	MW-5	01/08/93	01/12/93 Water
87580- 7	MW-2	01/08/93	01/12/93 Water
87580- 9	MW-1	01/08/93	01/13/93 Water
87580-11	MW-3	01/08/93	01/12/93 Water

RESULTS OF ANALYSIS

Laboratory Number: 87580- 1 87580- 2 87580- 3 87580- 5 87580- 7

Gasoline:	ND<50	ND<50	ND<50	61*	390
Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	140
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.8
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.7
Xylenes:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	26
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number: 87580- 9 87580-11

Gasoline:	14000000	250000
Benzene:	12000	5000
Toluene:	79000	17000
Ethyl Benzene:	270000	5500
Xylenes:	1300000	28000
Concentration:	ug/L	ug/L

* Gasoline range concentration reported. A non-standard gasoline pattern was observed in the chromatogram.



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: 87580

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:	200ng	85/89	5%	70-130
Benzene:	200ng	79/81	3%	70-130
Toluene:	200ng	80/87	8%	70-130
Ethyl Benzene:	200ng	83/93	11%	70-130
Xylenes:	600ng	85/89	5%	70-130

Richard Srna, Ph.D.

Idemina V. Langulig (for)
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: Yes No 87500

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-1583</u> Facility Address <u>5509 Martin Luther King, Oakland</u> Consultant Project Number <u>020302228</u> Consultant Name <u>Groundwater Technology, Inc.</u> Address <u>4057 Port Chicago Hwy., Concord, CA</u> Project Contact (Name) <u>Ms. Sandra L. Lindsey</u> (Phone) <u>671-2387</u> (Fax Number) <u>685-9148</u>	Chevron Contact (Name) <u>Mr. Mark Miller</u> (Phone) <u>510-842-8134</u> Laboratory Name <u>Superior Analytical</u> Laboratory Release Number <u>496-2420</u> Samples Collected by (Name) <u>Greg Mason</u> Collection Date <u>1-8-93</u> Signature <u>[Signature]</u>
---	---	---

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iod (Yes or No)	Analytes To Be Performed											Remarks				
								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)	V	FOI						
TBLB	1	1	W	D		HCl	Yes	X															TBLB ANALYZE but do NOT CHANGE
RBMW-4	2	1			1			X															
MW-4	3	3			1			X															
RBMW-5	4	1			2																		
MW-5	5	3			2			X															
RBMW-2	6	1			3																		
MW-2	7	3			3			X															
RBMW-1	8	1			4																		
MW-1	9	3			4			X															
RBMW-3	10	1			5																		
MW-3	11	3	✓	✓	5	✓	✓	X															

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>GTT</u>	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice) <input type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input checked="" type="radio"/> As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) <u>[Signature]</u>		Date/Time <u>1-8-93</u>	

1:35 PM



Superior Precision Analytical, Inc.

15000 AG Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

GROUNDWATER TECHNOLOGY, INC.
Attn: GREGORY A. MISCHEL

Project 020302228
Reported 02/18/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
87817- 3	MW-6	02/02/93	02/12/93 Water

RESULTS OF ANALYSIS

Laboratory Number: 87817- 3

Gasoline:	ND<50
Benzene:	2.1
Toluene:	ND<0.5
Ethyl Benzene:	ND<0.5
Xylenes:	2.2
Concentration:	ug/L



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: 87817

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OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
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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:	83/96	14	70-130
Benzene:	90/93	4	70-130
Toluene:	97/106	9	70-130
Ethyl Benzene:	98/104	6	70-130
Xylenes:	96/106	10	70-130

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

