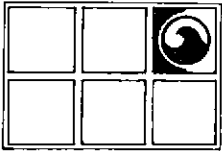


FEB 3 '93 J.M.M.



GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

February 4, 1993

Project No. 020302091

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

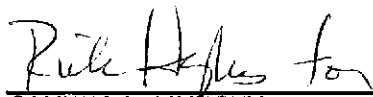
**SUBJECT: GROUNDWATER MONITORING AND SAMPLING ACTIVITIES
CHEVRON SERVICE STATION NO. 9-6991
2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY, CALIFORNIA**

Dear Mr. Miller:


Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on December 30, 1992 and January 27, 1993. The groundwater monitoring wells at this site were gauged to determine depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons on December 30, 1992, and January 27 1993. Separate-phase hydrocarbons were not detected in the monitoring wells. A potentiometric surface map was prepared using the data collected on January 27, 1993 (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 the presence of benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH)-as-gasoline and TPH-as-diesel fuel. Results of the analyses are summarized in Table 1. Laboratory reports and chain-of-custody documents are presented 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 feel free to call our Concord office at (510) 671-2387.

Sincerely,
Groundwater Technology, Inc.
Written/Submitted by

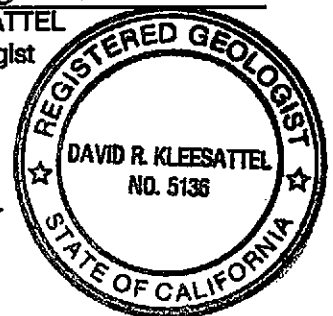

SANDRA L. LINDSEY
Project Manager

Groundwater Technology, Inc.
Reviewed/Approved by


DAVID R. KLEESATTEL
Registered Geologist
No. 5136

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

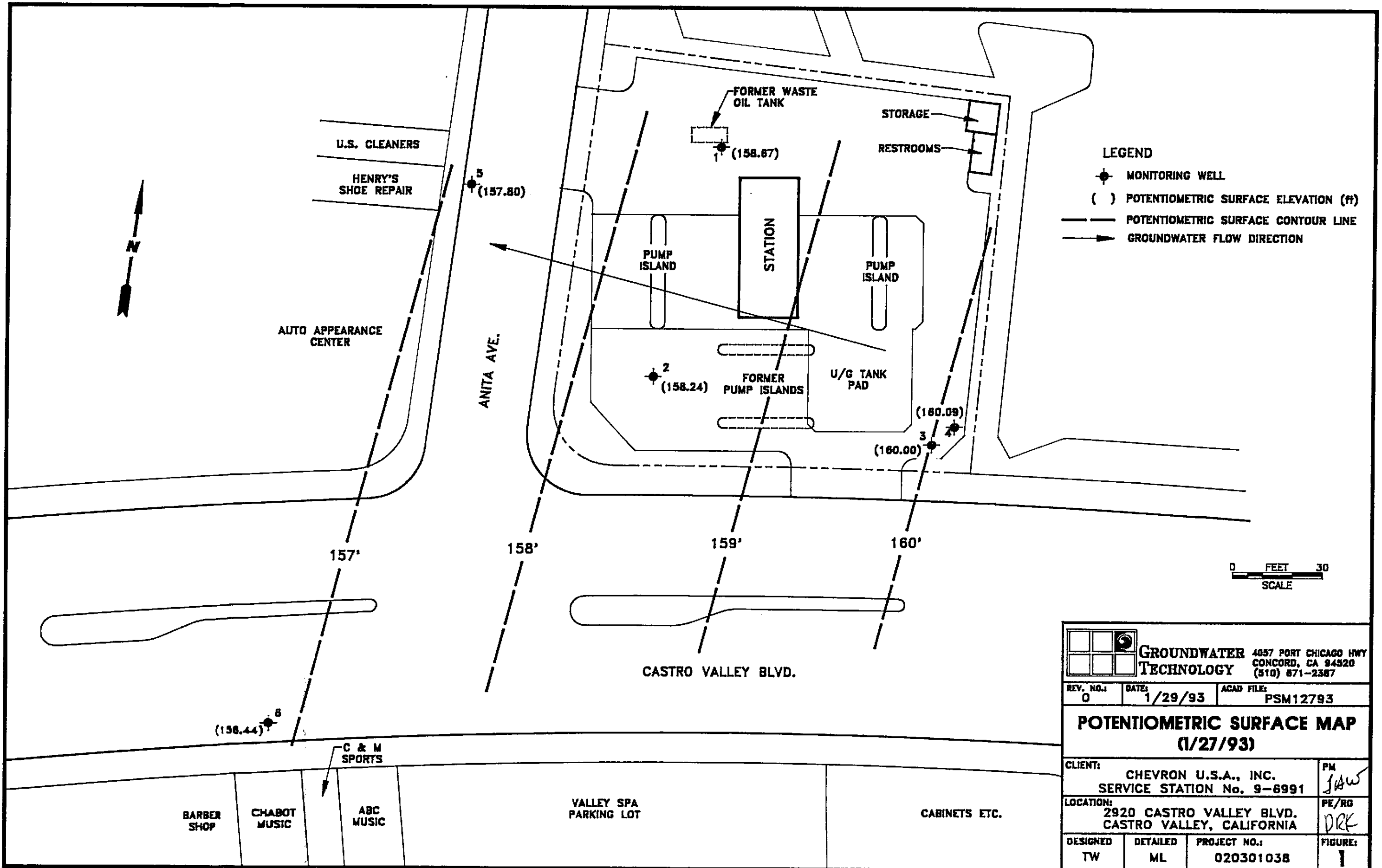
For:
John Gaines
Regional Manager
West Region



LR2091A2.NM

ATTACHMENT A

FIGURE



		4857 PORT CHICAGO HWY CONCORD, CA 94520 (510) 871-2387	
REV. NO.:	DATE:	ACAD FILE:	
0	1/29/93	PSM12793	
POTENTIOMETRIC SURFACE MAP (1/27/93)			
CLIENT:		CHEVRON U.S.A., INC.	PM
		SERVICE STATION No. 9-8991	JAW
LOCATION:		2920 CASTRO VALLEY BLVD.	PE/RO
		CASTRO VALLEY, CALIFORNIA	DRK
DESIGNED	DETAILED	PROJECT NO.:	FIGURE:
TW	ML	020301038	1

ATTACHMENT B

TABLES

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-6991
2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY, CALIFORNIA

WELL ID/ ELEV.	DATE	TOG	TPH- AS- DIESEL	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-1 169.30	10/08/91	<5000	--	230	45	<0.5	0.9	9.1	11.10	0.00	158.20
	11/04/91	--	--	340	120	<0.5	<0.5	6.1	11.03	0.00	158.27
	12/04/91	<5000	170	<50	3.9	<0.5	<0.5	<0.5	11.05	0.00	158.25
	06/05/92	--	<50	100	26	0.6	0.5	1.0	11.04	0.00	158.26
	10/27/92	--	54	<50	11	<0.5	<0.5	<0.5	11.10	0.00	158.20
	12/30/92	--	170	<50	24	<0.5	<0.5	<0.5	--	--	--
	01/27/93	--	--	--	--	--	--	--	10.63	0.00	158.67
MW-2 169.15	10/08/91	--	--	110	5.1	1.1	0.8	26	11.95	0.00	157.20
	11/19/91	--	--	120	11	1.1	<0.5	17	11.75	0.00	157.40
	12/04/91	--	130	440	30	2.5	<0.5	52	11.80	0.00	157.35
	06/05/92	--	130*	80	13	<0.5	<0.5	1.0	11.80	0.00	157.35
	10/27/92	--	110	54	13	<0.5	<0.5	<0.5	12.00	0.00	157.15
	12/30/92	--	92*	180	30	<0.5	<0.5	1.0	--	--	--
	01/27/93	--	--	--	--	--	--	--	10.91	0.00	158.24
MW-3 169.11	10/08/91	--	--	81	1.9	0.7	0.8	2.4	8.27	0.00	160.84
	11/04/91	--	--	60	<0.5	<0.5	<0.5	<0.5	10.85	0.00	158.26
	12/04/91	--	<50	<50	<0.5	<0.5	<0.5	<0.5	11.05	0.00	158.06
	06/05/92	--	170*	<50	<0.5	<0.5	<0.5	<0.5	11.15	0.00	157.96
	10/27/92	--	120	<50	<0.5	<0.5	<0.5	<0.5	11.60	0.00	157.51
	12/30/92	--	170*	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
	01/27/93	--	--	--	--	--	--	--	9.11	0.00	160.00

TABLE 1
HISTORICAL GROUNDWATER ANALYTICAL RESULTS AND MONITORING DATA
CHEVRON SERVICE STATION NO. 9-6991
2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY, CALIFORNIA

WELL ID/ ELEV.	DATE	TOG	TPH- AS- DIESEL	TPH-AS- GASOLINE	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	DTW (ft)	SPT (ft)	WTE (ft)
MW-4 169.18	10/27/92	---	<50	<50	<0.5	0.6	0.5	4.3	11.39	0.00	157.79
	12/30/92	---	<50	<50	<0.5	<0.5	<0.5	<0.5	10.13	0.00	159.05
	01/27/93	---	---	---	---	---	---	---	9.09	0.00	160.09
MW-5 167.41	10/27/92	---	<50	74	<0.5	<0.5	0.6	7.1	9.95	0.00	157.46
	12/30/92	---	<50	<50	<0.5	<0.5	<0.5	<0.5	9.20	0.00	158.21
	01/27/93	---	---	---	---	---	---	---	9.61	0.00	157.80
MW-6 166.46	10/27/92	---	<50	600	22	22	24	130	12.54	0.00	153.92
	12/30/92	---	470*	1,700	170	16	46	160	10.20	0.00	156.26
	01/27/93	---	---	---	---	---	---	---	10.02	0.00	156.44
TRIP BLANK	10/08/91	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	11/04/91	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	12/04/91	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	06/05/92	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	12/30/92	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---

DTW = Depth to water
 SPT = Separate-phase hydrocarbons thickness
 WTE = Water table elevation in feet above mean sea level
 TOG = Total oil and grease
 TPH = Total petroleum hydrocarbons
 --- = Not applicable/not sampled/not measured
 * = The pattern of peaks observed are not typical of diesel
 Results in parts per billion



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 020302091
Reported 01/07/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
13948- 1	MW3	12/30/92	01/06/93 Water
13948- 2	MW2	12/30/92	01/04/93 Water
13948- 3	MW1	12/30/92	01/04/93 Water
13948- 4	MW4	12/30/92	01/04/93 Water
13948- 5	MW5	12/30/92	01/06/93 Water
13948- 6	MW6	12/30/92	01/04/93 Water
13948- 7	TB-LB	12/30/92	01/04/93 Water
13948- 8	RBMW3	12/30/92	01/04/93 Water
13948- 9	MW3	12/30/92	01/04/93 Water
13948-11	MW2	12/30/92	01/04/93 Water

RESULTS OF ANALYSIS

Laboratory Number:	13948- 1	13948- 2	13948- 3	13948- 4	13948- 5
--------------------	----------	----------	----------	----------	----------

Diesel:	170*	92*	170*	ND<50	ND<50
Gasoline:	NA	NA	NA	NA	NA
Benzene:	NA	NA	NA	NA	NA
Toluene:	NA	NA	NA	NA	NA
Ethyl Benzene:	NA	NA	NA	NA	NA
Xylenes:	NA	NA	NA	NA	NA

Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
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Laboratory Number:	13948- 6	13948- 7	13948- 8	13948- 9	13948-11
--------------------	----------	----------	----------	----------	----------

Diesel:	470*	NA	NA	NA	NA
Gasoline:	NA	ND<50	ND<50	ND<50	180
Benzene:	NA	ND<0.5	ND<0.5	ND<0.5	30
Toluene:	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Xylenes:	NA	ND<0.5	ND<0.5	ND<0.5	1.0

Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
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Groundwater Technology Inc.
Attn: Sandra Lindsey

Project 020302091
Reported 01/07/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
13948-13	MW1	12/30/92	01/04/93 Water
13948-15	MW4	12/30/92	01/05/93 Water
13948-17	MW5	12/30/92	01/05/93 Water
13948-19	MW6	12/30/92	01/05/93 Water

RESULTS OF ANALYSIS

Laboratory Number: 13948-13 13948-15 13948-17 13948-19

Diesel:	NA	NA	NA	NA
Gasoline:	ND<50	ND<50	ND<50	1700
Benzene:	24	ND<0.5	ND<0.5	170
Toluene:	ND<0.5	ND<0.5	ND<0.5	16
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	46
Xylenes:	ND<0.5	ND<0.5	ND<0.5	160
Concentration:	ug/L	ug/L	ug/L	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 3 of 3
QA/QC INFORMATION
SET: 13948

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

<u>ANALYTE</u>	<u>MS/MSD RECOVERY</u>	<u>RPD</u>	<u>CONTROL LIMIT</u>
Diesel:	74/77	4%	75-125
Gasoline:	100/98	2%	76-111
Benzene:	94/93	1%	78-110
Toluene:	94/93	1%	78-111
Ethyl Benzene:	94/94	0%	78-118
Xylenes:	95/94	1%	73-113

* Does not match typical Diesel pattern.

Richard Srna, Ph.D.

Richard Srna
Laboratory Director

