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HAZMAT

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Chevron

February 9, 1994

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

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

4249

Marketing Department
Phone 510 842 9500

**Re: Former Chevron Service Station #9-4612
3616 San Leandro Street, Oakland, CA**

Dear Mr. Chan:

Enclosed is the quarterly Groundwater Monitoring and Sampling Activities report dated December 13, 1993, prepared by our consultant Groundwater Technology, Inc. (GTI) for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline and BTEX. Concentrations of these constituents are consistent with historical results. Sampling of MW-3 for TPH-D was inadvertently overlooked during the past sampling round, however this analysis will be performed during subsequent sampling events.

During the initial survey of monitor wells MW-2 and MW-3, the designation for these wells was reversed. The elevations have been corrected and all corrected historical gradient maps are included in the report. Depth to ground water during the past quarter was measured at approximately 13 feet below grade and the direction of flow is to the southeast.

As we discussed by telephone on September 29, 1993, we will instruct our consultant to prepare a work plan for additional soils investigation near the northern former pump island and off-site ground water investigation. Currently we are targeting March 18, 1994, for submittal of the work plan.

Chevron will continue to monitor and sample all wells at this site on a quarterly basis.

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

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

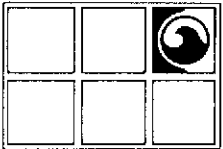
Enclosure

cc: Mr. Rich Hiatt, RWQCB - Bay Area
Ms. B.C. Owen

Mr. Jack Ratto
191 98th Avenue
Oakland, CA 94603

Mr. Vernon C. McIlraith
1809 Golden Rain Road, #5
Walnut Creek, CA 94595

File: 9-4612 QM3



GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

December 13, 1993

Project No. 020204099

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

4249

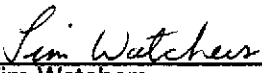
SUBJECT: *Groundwater Monitoring and Sampling Activities*
Chevron Service Station No. 9-4612
3616 San Leandro Street, Oakland, California

Dear Mr. Miller:

Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on November 3, 1993. Three groundwater monitoring wells at this site were gauged to measure depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not detected in the monitoring wells. A potentiometric surface map (Figure 1) and a summary of groundwater monitoring data (Table 1) are presented in Attachments 1 and 2, respectively. **Figures 2, 3, and 4 represent corrected potentiometric surface maps for the three previous quarters. Identification for monitoring wells MW-2 and MW-3 were erroneously switched during the initial wellhead elevation and location survey.** 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 for 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

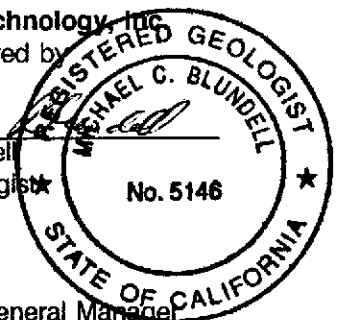
PR 

Attachment 1 Figures
Attachment 2 Table
Attachment 3 Laboratory Report

Groundwater Technology, Inc.
Reviewed/Approved by



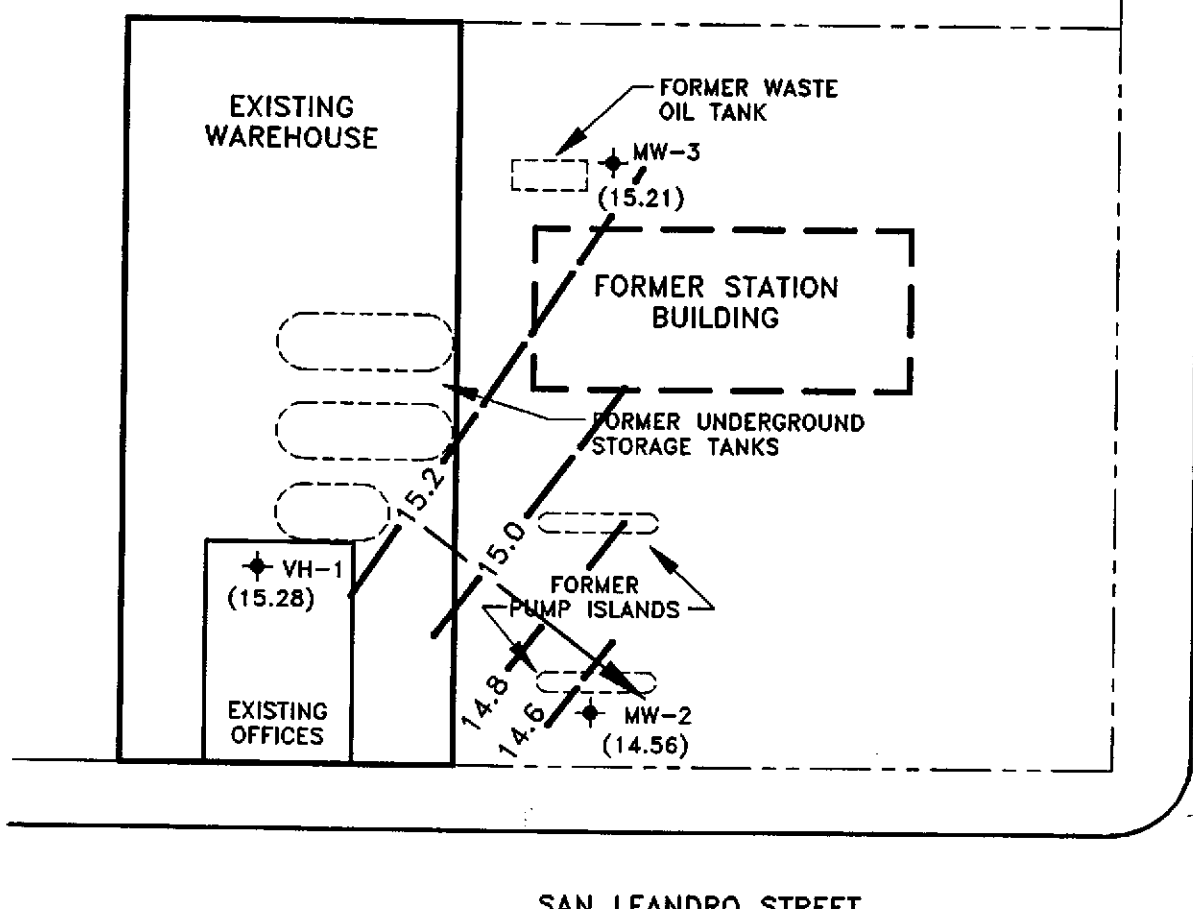
Michael C. Blundell
Registered Geologist
No. 5146



Wendell W. Lattz
Vice President, General Manager
West Region

ATTACHMENT 1

Figures

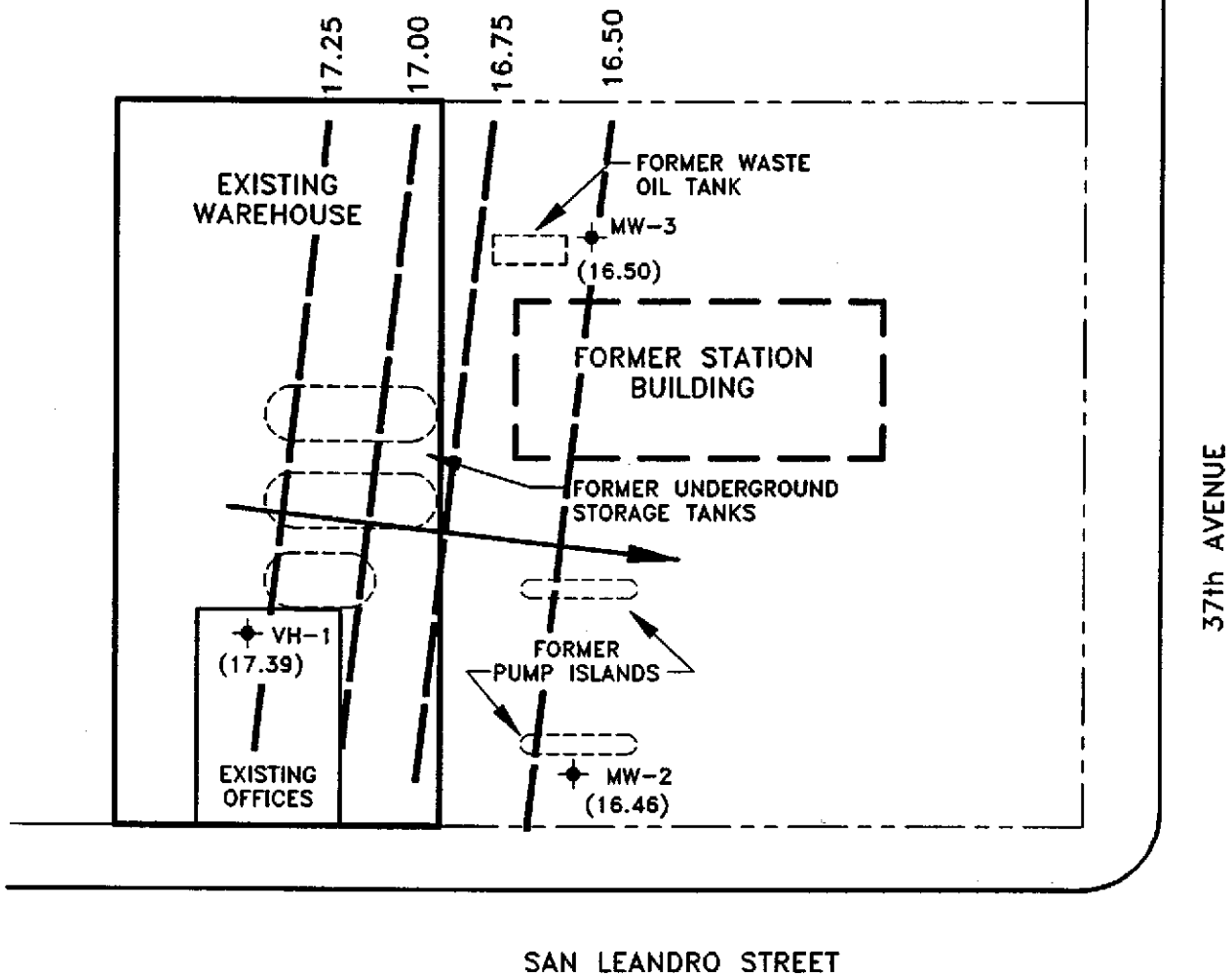


LEGEND

- ◆ MONITORING WELL
- () POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MSL)
- - - POTENTIOMETRIC SURFACE CONTOUR
- ← GROUNDWATER FLOW DIRECTION



		GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (11/3/93)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO SERVICE STATION NO. 9-4612			LOCATION: 3616 SAN LEANDRO AVENUE SAN LEANDRO, CALIFORNIA		REV. NO.: 0	DATE: 12/9/93	
PM: <i>JAW</i>	PE/RG: <i>MB</i>	DESIGNED: TW	DETAILED: CY	ACAD FILE: SPD93	PROJECT NO.: 20202892	FIGURE: 1	



LEGEND

- ◆ MONITORING WELL
- () POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MSL)
- POTENTIOMETRIC SURFACE CONTOUR
- ← GROUNDWATER FLOW DIRECTION

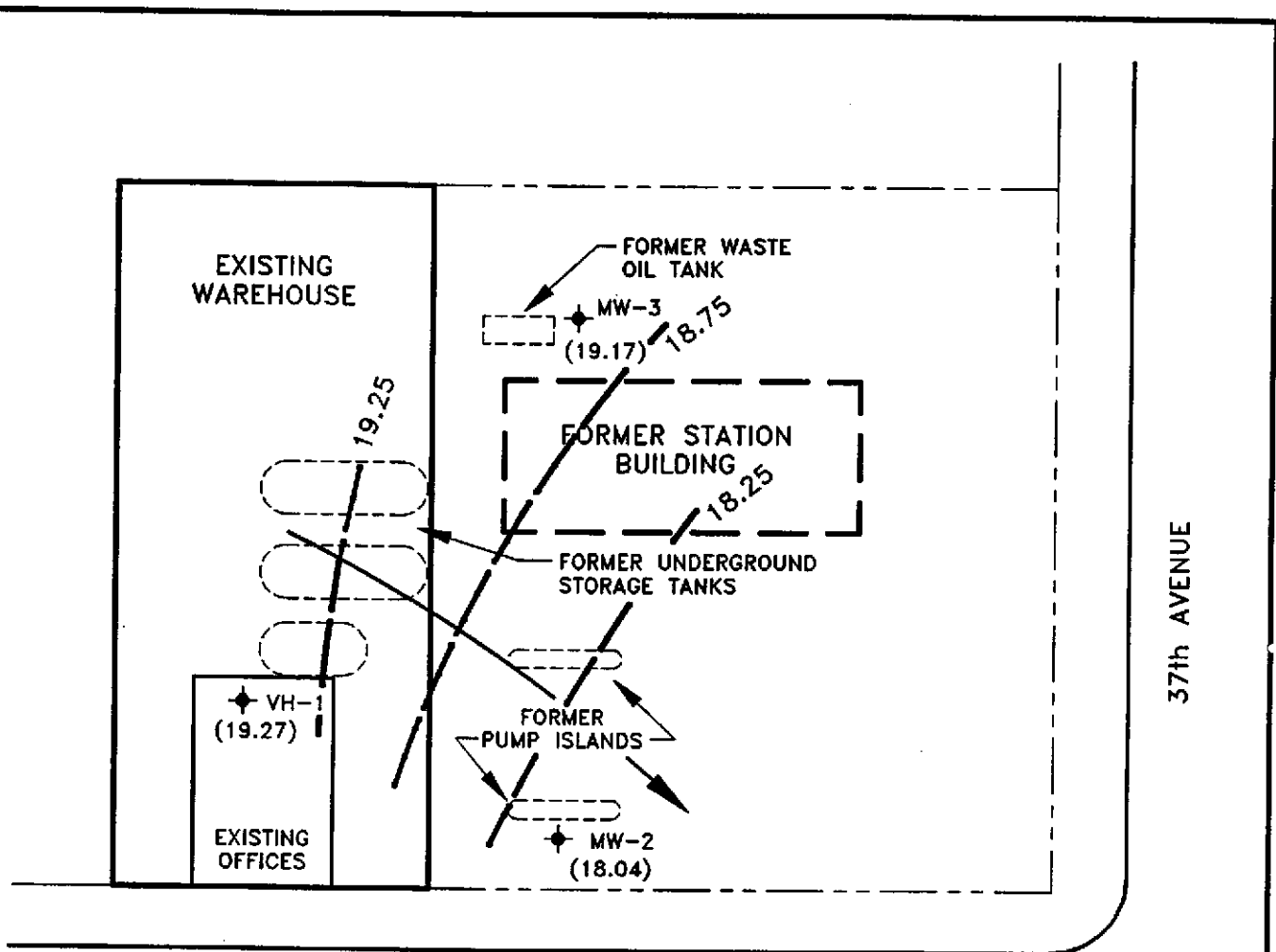


GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY.
CONCORD, CA 94520
(510) 671-2387

POTENTIOMETRIC SURFACE MAP



CLIENT: CHEVRON U.S.A. PRODUCTS CO SERVICE STATION NO. 9-4612		LOCATION: 3616 SAN LEANDRO AVENUE SAN LEANDRO, CALIFORNIA		REV. NO.: 0	DATE: 12/9/93
PM <i>FAW</i>	PE/RG <i>MB</i>	DESIGNED TW	DETAILED CY	ACAD FILE: SPD93	PROJECT NO.: 20202892
					FIGURE: 2



SAN LEANDRO STREET

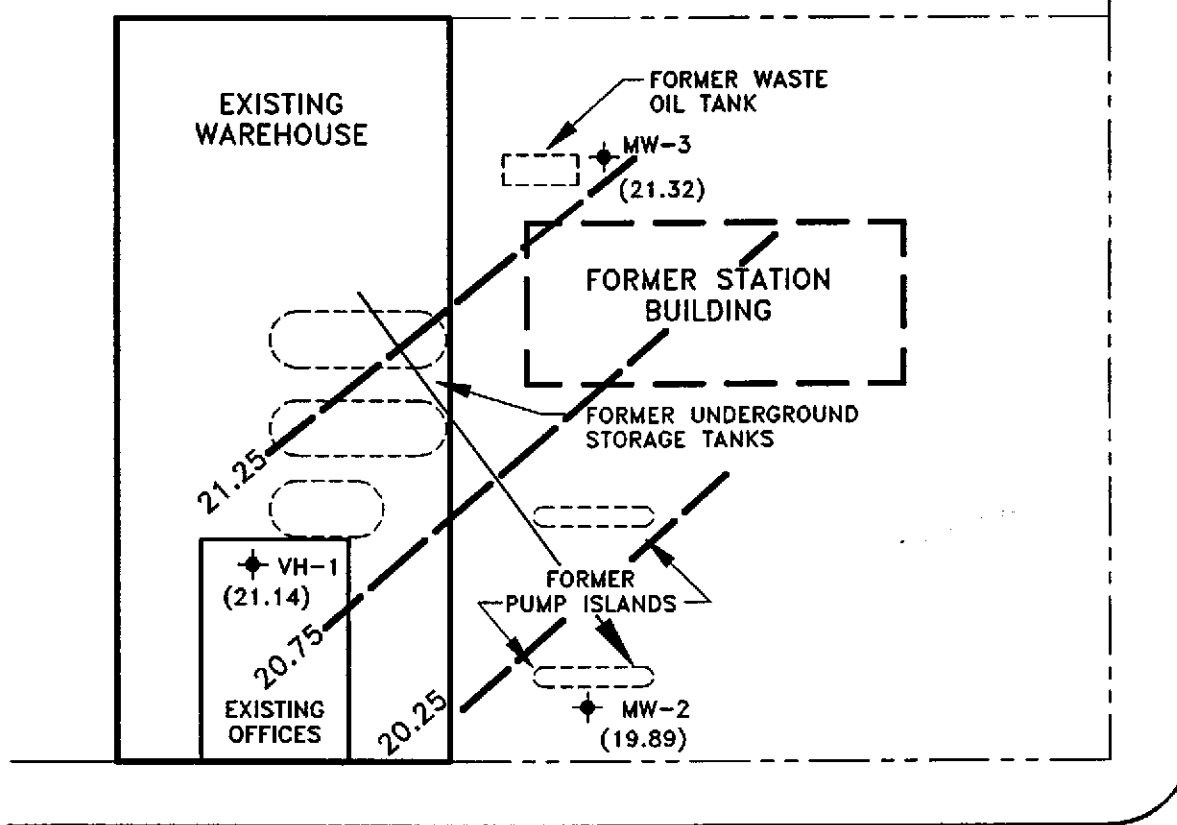
37th AVENUE

LEGEND

- ◆ MONITORING WELL
- () POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MSL)
- - - POTENTIOMETRIC SURFACE CONTOUR
- ← GROUNDWATER FLOW DIRECTION



		GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY. CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (5/27/93)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO SERVICE STATION NO. 9-4612		LOCATION: 3616 SAN LEANDRO AVENUE SAN LEANDRO, CALIFORNIA		REV. NO.: 0	DATE: 12/9/93		
PM <i>JAW</i>	PE/RG <i>WW</i>	DESIGNED TW	DETAILED CY	ACAD FILE: SPD93	PROJECT NO.: 20202892	FIGURE: 3	

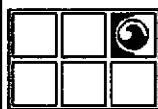


SAN LEANDRO STREET

37th AVENUE

LEGEND

- ◆ MONITORING WELL
- () POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MSL)
- - - POTENTIOMETRIC SURFACE CONTOUR
- ← GROUNDWATER FLOW DIRECTION



GROUNDWATER TECHNOLOGY
 4057 PORT CHICAGO HWY.
 CONCORD, CA 94520
 (510) 671-2387

**POTENTIOMETRIC SURFACE MAP
 (3/26/93)**

CLIENT: CHEVRON U.S.A. PRODUCTS CO SERVICE STATION NO. 9-4612		LOCATION: 3616 SAN LEANDRO AVENUE SAN LEANDRO, CALIFORNIA		REV. NO.: 0	DATE: 12/9/93
PM <i>JAW</i>	PE/RG <i>WPP</i>	DESIGNED TW	DETAILED CY	ACAD FILE: SPD93	PROJECT NO.: 20202892
					FIGURE: 4

ATTACHMENT 2

Table

TABLE 1
MONITORING DATA AND ANALYTICAL RESULTS OF GROUNDWATER
Chevron Station No. 9-4612
3616 San Leandro Street, Oakland, California

Well ID/Elev	Date	TPH-G	Benzene	Toulene	Ethyl-benzene	Xylenes	TPH-D	TOG	HVO	DTW (ft)	SPT (ft)	GWE (ft)
VH-1 27.85	08/10/88	11,000	3,300	200	520	540	---	---	---	13.00	---	---
	06/01/89	15,000	2,200	120	540	310	---	---	---	10.32	---	---
	09/15/89	5,600	1,900	90	350	160	---	---	---	15.69	---	---
	12/08/89	11,000	1,900	69	270	99	---	---	---	14.77	---	---
	03/07/91	4,500	820	39	120	77	---	---	---	11.26	---	---
	09/24/91	3,300	520	19	39	27	---	---	---	12.98	---	---
	01/08/92	5,000	600	34	81	76	---	---	---	13.77	---	---
	04/20/92	7,400	670	60	110	140	---	---	---	8.18	---	---
	03/26/93	4,900	600	40	72	94	---	---	---	6.71	0.00	21.14
	05/27/93	13,000	1,600	120	230	220	---	---	---	8.58	0.00	19.27
	08/18/93	2,700	210	10	8.1	18	---	---	---	10.46	0.00	17.39
11/03/93	4,600	680	42	35	68	---	---	---	12.57	0.00	15.28	
MW-2 27.51	02/16/93	9,200	720	110	250	170	---	---	---	---	---	---
	03/26/93	---	---	---	---	---	---	---	---	---	---	---
	05/27/93	360	5.3	2.1	1.8	2.5	---	---	---	7.62	0.00	19.89
	08/18/93	9,400	1,100	76	110	100	---	---	---	9.47	0.00	18.04
	11/03/93	8,600	390	20	2.7	120	---	---	---	11.05	0.00	16.46
MW-3 28.50	02/16/93	3,500	<0.5	8.1	4.6	7.7	---	---	---	---	---	---
	03/26/93	---	---	---	---	---	---	---	---	---	---	---
	05/27/93	4,200	580	84	150	100	---	---	---	7.18	0.00	21.32
	08/18/93	910	12	3.7	6.2	3.8	1,400	<5,000	ND	9.33	0.00	19.17
	11/03/93	5,300	29	1.9	0.6	27	---	---	---	12.00	0.00	16.50
TRIP BLANK	05/27/93	<50	<0.5	<0.5	<0.5	<1.5	---	---	---	---	---	---
	08/18/93	<50	<0.5	<0.5	<0.5	<1.5	---	---	---	---	---	---
	11/03/93	<50	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---	---

TPH-G = Total petroleum hydrocarbons-as-gasoline
DTW = Depth to water
SPT = Separate-phase hydrocarbons
GWE = Groundwater elevation in feet above mean sea level relative to United States Geological Survey brass disc
HVO = Halogenated volatile organics
--- = Not available, not sampled, not monitored

Data for VH-1 (August 10, 1988 to April 20, 1992) from Pacific Environmental Group Inc. Report, May 18, 1992.
Concentrations are presented in parts per billion (ppb).

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: KEN JOHNSON

Project 20204099
Reported 11/12/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
30042- 1	TB-LB	11/03/93	11/11/93 Water
30042- 2	VH-1	11/03/93	11/10/93 Water
30042- 3	MW-2	11/03/93	11/10/93 Water
30042- 4	MW-3	11/03/93	11/10/93 Water

RESULTS OF ANALYSIS

Laboratory Number: 30042- 1 30042- 2 30042- 3 30042- 4

Gasoline:	ND<50	4600	8600	5300
Benzene:	ND<0.5	680	390	29
Toluene:	ND<0.5	42	20	1.9
Ethyl Benzene:	ND<0.5	35	2.7	0.6
Total Xylenes:	ND<0.5	68	120	27
Concentration:	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: 30042

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

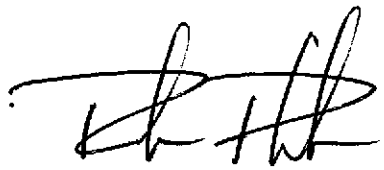
OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

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:	96/88	9%	70-130
Benzene:	100/103	3%	70-130
Toluene:	106/109	3%	70-130
Ethyl Benzene:	110/115	4%	70-130
Total Xylenes:	110/116	5%	70-130

 11/15/13
Senior Chemist

Fax copy of Lab Report and COC to Chevron Contact:

Yes
 No

30042

Chain-of-Custody-Record

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

Chevron Facility Number _____
Facility Address 3616 San Leandro St, Oakland
Consultant Project Number 20264099
Consultant Name Ken Johnson GTI
Address 4057 part chgo. Hwy. Concord, CA
Project Contact (Name) Ken Johnson
(Phone) 671-2387 (Fax Number) _____

Chevron Contact (Name) Wack Miller
(Phone) 842-8134
Laboratory Name Superior
Laboratory Release Number 763-3640
Samples Collected by (Name) Rick McKinney
Collection Date 11/3/93
Signature Rick McKinney

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type C = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										NOTE: Do NOT BILL TB-LB SAMPLES							
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8820)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)								Remarks		
TB-LB		2	U	C	1:30	HE-1	Y	✓																	
VH-1		2			1:35		Y	✓																	
MW-2		2			1:40		Y	✓																	
MW-3		2	W	C	1:47	HE-1	Y	✓																	

Please Initial: _____
 Samples stored in ice _____
 Applied to containers _____
 Samples preserved _____
 VOC's without headspace _____

Relinquished By (Signature) <u>Rick McKinney</u>	Organization <u>GTI</u>	Date/Time <u>11/3/93 16:00</u>	Received By (Signature) <u>Ken Johnson</u>	Organization <u>AGRO</u>	Date/Time <u>11/5/93 10:55</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature) <u>Ken Johnson</u>	Organization <u>AGRO</u>	Date/Time <u>11/5/93 10:55</u>	Received By (Signature) <u>Rick McKinney</u>	Organization <u>AGRO</u>	Date/Time <u>11-5-93 11:40</u>	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	