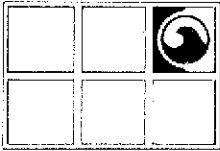


MAR 1 '94 J.M.M.



# GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

February 17, 1994

Project No. 020104092

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. 9-6991  
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, 1994. The 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. After the DTW was measured, each monitoring well was purged and sampled. Field data sheets are presented in Attachment 3. The groundwater samples were analyzed for benzene, toluene, ethylbenzene and xylenes; total petroleum hydrocarbons-as-gasoline; and total petroleum hydrocarbons-as-diesel. Results of the analyses are summarized in Table 1. Laboratory report and chain-of-custody documents are presented in Attachment 4. 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 Manager

PR KS

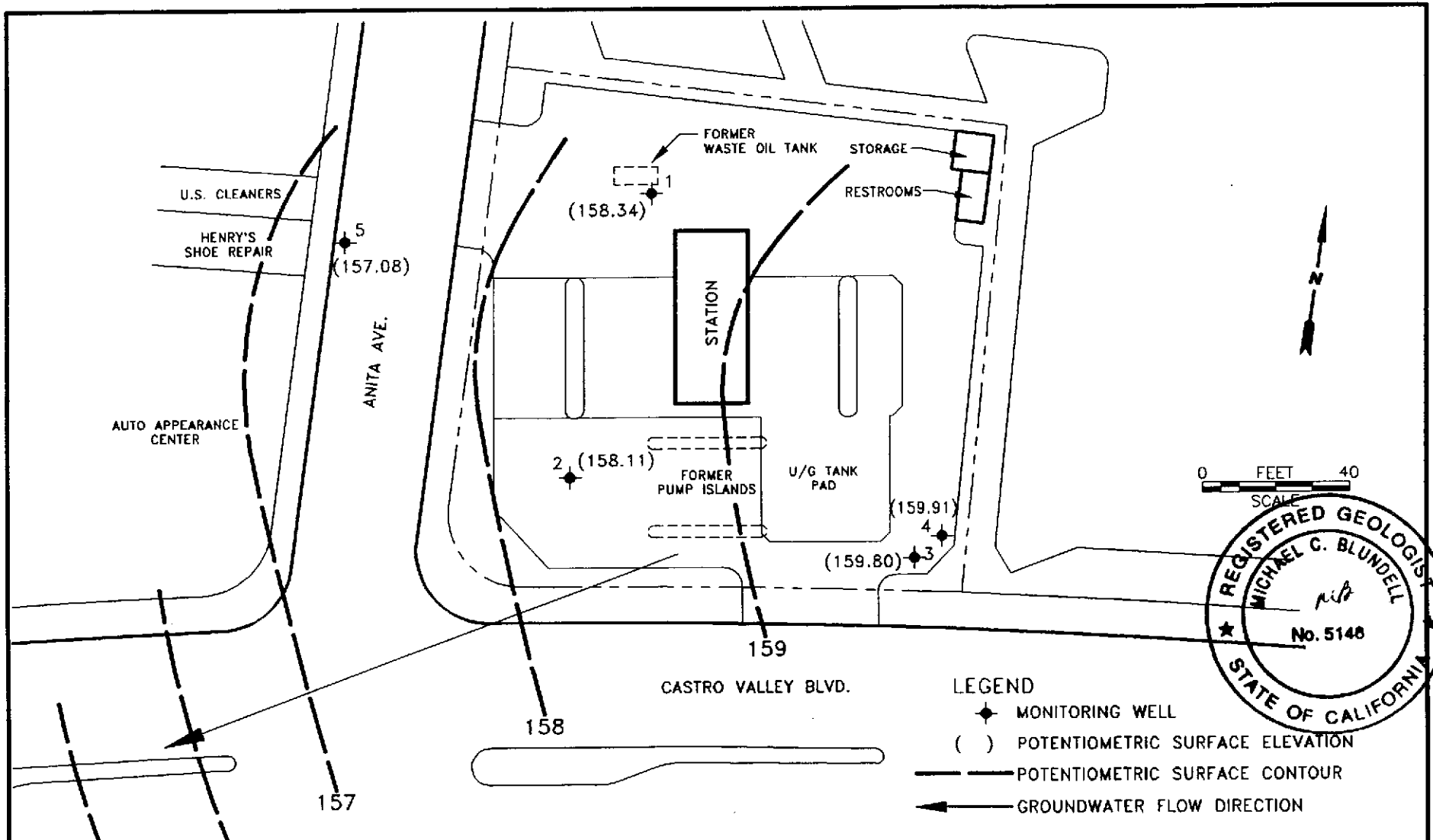
Attachment 1 Figure  
Attachment 2 Table  
Attachment 3 Field Data Sheets  
Attachment 4 Laboratory Report

For:  
Wendell W. Lattz  
Vice President, General Manager  
West Region

4092R023.020

**ATTACHMENT 1**

**Figure**



- LEGEND**
- ◆ MONITORING WELL
  - ( ) POTENTIOMETRIC SURFACE ELEVATION
  - POTENTIOMETRIC SURFACE CONTOUR
  - GROUNDWATER FLOW DIRECTION

<b>GROUNDWATER TECHNOLOGY</b>				4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387		<b>POTENTIOMETRIC SURFACE MAP</b> <b>(12/30/93)</b>			
CLIENT: <b>CHEVRON U.S.A. PRODUCTS CO.</b> SERVICE STATION NO. 9-0515				LOCATION: <b>2920 CASTRO VALLEY BLVD.</b> <b>CASTRO VALLEY, CALIFORNIA</b>		REV. NO.: 0	DATE: 2/10/94		
PM <i>Lofw</i>	PE/RG <i>MB</i>	DESIGNED TW	DETAILED ML	ACAD FILE: PSMD3093/SP793		PROJECT NO.: 020204116		FIGURE: <b>1</b>	

C & M SPORTS		
BARBER SHOP	CHABOT MUSIC	ABC MUSIC

6 (154.81) 155

**ATTACHMENT 2**

**Table**

**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-D	TPH-G	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
	03/05/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/17/93	---	---	---	---	---	---	---	10.71	0.00	158.59
	06/18/93	---	<50	<50	0.6	<0.5	<0.5	<1.5	11.01	0.00	158.29
	09/28/93	---	<50	<50	0.8	<0.5	<0.5	<1.5	11.95	0.00	157.35
	12/30/93	---	<50	<50	8.5	<0.5	<0.5	<0.5	10.96	0.00	158.34
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
	03/05/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/17/93	---	---	---	---	---	---	---	10.89	0.00	158.26
	06/18/93	---	<50	<50	1.4	<0.5	<0.5	<1.5	11.74	0.00	157.41
	09/28/93	---	<50	<50	0.6	<0.5	<0.5	<1.5	11.18	0.00	157.97
	12/30/94	---	<50	<50	0.9	<0.5	<0.5	<0.5	11.04	0.00	158.11

**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-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	DTW (ft)	SPT (ft)	WTE (ft)
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
	03/05/93	---	---	---	---	---	---	---	---	---	---
	03/17/93	---	---	---	---	---	---	---	9.95	0.00	159.16
	06/18/93	---	<50	<50	<0.5	<0.5	<0.5	<1.5	10.89	0.00	158.22
	09/28/93	---	<50	<50	<0.5	<0.5	<0.5	<1.5	9.62	0.00	159.49
	12/30/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	9.31	0.00	159.80
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
	03/05/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/17/93	---	---	---	---	---	---	---	9.90	0.00	159.28
	06/18/93	---	<50	<50	<0.5	<0.5	<0.5	<1.5	10.68	0.00	158.50
	09/28/93	---	<50	<50	<0.5	<0.5	<0.5	<1.5	9.36	0.00	159.82
	12/30/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	9.27	0.00	159.91
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
	03/05/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/17/93	---	---	---	---	---	---	---	9.51	0.00	157.90
	06/18/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	9.85	0.00	157.56
	09/28/93	---	<50	<50	<0.5	<0.5	<0.5	<1.5	9.86	0.00	157.55
	12/30/93	---	<50	<50	<0.5	<0.5	<0.5	<0.5	10.33	0.00	157.08

**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-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes	DTW (ft)	SPT (ft)	WTE (ft)
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
	03/05/93	---	150*	480	76	0.9	3.1	7.1	---	---	---
	03/17/93	---	---	---	---	---	---	---	10.67	0.00	155.79
	06/18/93	---	51	240	37	3.4	2.9	18	11.83	0.00	154.63
	09/28/93	---	120	150	11	1.2	1.3	4.3	11.56	0.00	154.90
	12/30/93	---	290*	680	77	5.1	5.5	13	11.65	0.00	154.81
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	---	---	---
	03/05/93	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	03/17/93	---	---	---	---	---	---	---	---	---	---
	06/18/93	---	---	<50	<0.5	<0.5	<0.5	<1.5	---	---	---
	09/28/93	---	---	<50	<0.5	<0.5	<0.5	<1.5	---	---	---
	12/30/93	---	---	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/27/94	---	<50	---	---	---	---	---	---	---	---

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-G = Total petroleum hydrocarbons-as-gasoline  
TPH-D = Total petroleum hydrocarbons-as-diesel fuel  
--- = Not applicable/not sampled/not measured  
\* = The pattern of peaks observed are not typical of diesel. Lighter than diesel.  
Results in parts per billion

**ATTACHMENT 3**

**Field Data Sheets**



Project Name: Chevron - Castro Valle

Date: 12-30-93

Site Address: 2920 Castro Valley

Page 1 of 1

Project Number: 020104092.0610

Project Manager: Ken Johnson

Well ID: mw - 1

DTW Measurements:

Well Diameter: 7.5

Initial: 10.96 Calc Well Volume: 1.23 gal

Recharge: \_\_\_\_\_ Well Volume: .411 gal

DTB = 21.00 10.09 x .041

Purge Method \_\_\_\_\_ Pump Depth N/A ft.  
 Peristaltic \_\_\_\_\_ Hand Bailed   
 Gear Drive \_\_\_\_\_ Air Lift \_\_\_\_\_  
 Submersible \_\_\_\_\_ Other \_\_\_\_\_

Instruments Used  
 YSI: 3500 Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
	<input checked="" type="checkbox"/> C _____ F					
805	18.0	1.491	6.77	.50	N/A	muddy/Brown
821	18.0	1.343	7.04	1.075	N/A	muddy/Brown
825	18.7	1.350	7.08	1.510	N/A	muddy/Brown
829	18.0	1.375	7.04	1.2	N/A	muddy Brown
						sampled @ 840

Project Name: Chevron - Castro Valle

Date: 10-30-93

Site Address: 2920 Castro Valley

Page 1 of 1

Project Number: 020104092.0610

Project Manager: Ken Johnson

Well ID: mw-2

DTW Measurements: /

Well Diameter: .75

Initial: 11.09 Calc Well Volume: 1.22 gal

Recharge: \_\_\_\_\_ Well Volume: .408 gal

DTB 21.00' 9.96 x .63 = .041

Purge Method \_\_\_\_\_ Pump Depth \_\_\_\_\_ ft.  
 Peristaltic \_\_\_\_\_ Hand Bailed   
 Gear Drive \_\_\_\_\_ Air Lift \_\_\_\_\_  
 Submersible \_\_\_\_\_ Other \_\_\_\_\_

Instruments Used  
 YSI: 3300 Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp C F	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
905	20.7	1.144	6.94	.40	N/A	LIGHT BROWN
909	19.5	1.135	7.03	.10	N/A	LIGHT BROWN
915	19.2	1.156	7.01	1.2	N/A	LIGHT BROWN
						sampled @ 923

Project Name: Chevron - Castro Valle

Date: 2-30-93

Site Address: 2920 Castro Valley

Page 1 of 1

Project Number: 020104092.0610

Project Manager: Ken Johnson

Well ID: mw-3

DTW Measurements:

Initial: 9.31 Calc Well Volume: 1.32 gal

Well Diameter: .75

Recharge: \_\_\_\_\_ Well Volume: .44 gal

DTB 20.00 10.69 x .091

Purge Method \_\_\_\_\_ Pump Depth \_\_\_\_\_ ft.  
 Peristaltic \_\_\_\_\_ Hand Bailed   
 Gear Drive \_\_\_\_\_ Air Lift \_\_\_\_\_  
 Submersible \_\_\_\_\_ Other \_\_\_\_\_

Instruments Used  
 YSI: 3500 Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp C F	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
950	19.7	.992	6.98	.50	N/A	Dark Brown
956	19.7	.979	6.99	1.0	N/A	Dark Brown
1002	19.7	.960	6.95	1.4	N/A	Dark Brown
						Sampled @ 1010

Project Name: Chevron - Castro Val

Date: 12-30-93

Site Address: 2920 Castro Valley

Page 1 of 1

Project Number: 020104092.0610

Project Manager: Ken Johnson

Well ID: mw-4

DTW Measurements: ✓

Well Diameter: 2.0"

Initial: 9.27 Calc Well Volume: 5.16 gal

Recharge: \_\_\_\_\_ Well Volume: 43 1.7 gal

ATB 19.80 10.53 x 1.6

Purge Method \_\_\_\_\_ Pump Depth \_\_\_\_\_ ft.  
 Peristaltic \_\_\_\_\_ Hand Bailed   
 Gear Drive \_\_\_\_\_ Air Lift \_\_\_\_\_  
 Submersible \_\_\_\_\_ Other \_\_\_\_\_

Instruments Used  
 YSI: 3500 Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp		Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
	✓ C	F					
1031	19.9		.903	<del>7.05</del> 6.83	2.0	N/A	LIGHT BROWN
1038	19.8		.879	6.80	4.0	N/A	LIGHT BROWN
1042	20.2		.887	6.76	6.0	N/A	LIGHT BROWN
							Sampled @ 1055
CAP WAS NOT SECURELY PUT BACK ON WELL. H <sub>2</sub> O STANDSTILL @ 1055							

Project Name: Chevron - Castro Vall

Date: 2-30-93

Site Address: 2920 Castro Valley

Page 1 of 1

Project Number: 020104092.0610

Project Manager: Ken Johnson

Well ID: mw-5

DTW Measurements:

Well Diameter: 2.0"

Initial: 10.33 Calc Well Volume: 6.20 gal

Recharge: \_\_\_\_\_ Well Volume: 2.06 gal

DTB = 23.00 12.67 X-163

Purge Method \_\_\_\_\_ Pump Depth \_\_\_\_\_ ft.  
 Peristaltic \_\_\_\_\_ Hand Bailed   
 Gear Drive \_\_\_\_\_ Air Lift \_\_\_\_\_  
 Submersible \_\_\_\_\_ Other \_\_\_\_\_

Instruments Used  
 YSI: 3500 Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
	<input checked="" type="checkbox"/> C _____ F					
1112	21.3	.874	6.44	2.0	N/A	Brown/muddy
1120	20.7	.889	6.47	4.0	N/A	Brown/muddy
1125	20.7	.880	6.46	6.3	N/A	Brown/muddy
						Sample @ 1130

Project Name: Chevron - Castro Val.

Date: 2-30-93

Site Address: 2920 Castro Valley

Page 1 of 1

Project Number: 020104092.0610

Project Manager: Ken Johnson

Well ID: mw-6

DTW Measurements: -

Well Diameter: 2.0"

Initial: 11.65 Calc Well Volume: 6.0 gal

Recharge: \_\_\_\_\_ Well Volume: 2.0 gal

DTB 23.90' 12.25' x .163

Purge Method \_\_\_\_\_ Pump Depth \_\_\_\_\_ ft.  
 Peristaltic \_\_\_\_\_ Hand Bailed   
 Gear Drive \_\_\_\_\_ Air Lift \_\_\_\_\_  
 Submersible \_\_\_\_\_ Other \_\_\_\_\_

Instruments Used  
 YSI: 3500 Other: \_\_\_\_\_  
 Hydac: \_\_\_\_\_  
 Omega: \_\_\_\_\_

Time	Temp	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
	<u>C</u> <u>F</u>					
1201	20.8	1.054	6.70	2.0	N/A	Light Brown/merky
1204	20.2	1.047	6.84	4.0	N/A	Light Brown/merky
1210	20.7	1.053	6.81	6.0	N/A	Light Brown/merky
						sanded @ 1215
						S.

**ATTACHMENT 4**

**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: TIM WATCHERS

Project 9-6991  
Reported 01/04/94

## TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
30174- 1	TB-LB	12/30/93	01/03/94 Water
30174- 2	MW-1	12/30/93	01/03/94 Water
30174- 3	RBMW-1	12/30/93	01/03/94 Water
30174- 4	MW-2	12/30/93	01/03/94 Water
30174- 5	MW-3	12/30/93	01/03/94 Water
30174- 6	MW-4	12/30/93	01/03/94 Water
30174- 7	MW-5	12/30/93	01/03/94 Water
30174- 8	MW-6	12/30/93	01/03/94 Water

## RESULTS OF ANALYSIS

Laboratory Number: 30174- 1 30174- 2 30174- 3 30174- 4 30174- 5

Gasoline:	ND<50	ND<50	ND<50	ND<50	ND<50
Benzene:	ND<0.5	8.5	ND<0.5	0.9	ND<0.5
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Total Xylenes:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number: 30174- 6 30174- 7 30174- 8

Gasoline:	ND<50	ND<50	680
Benzene:	ND<0.5	ND<0.5	77
Toluene:	ND<0.5	ND<0.5	5.1
Ethyl Benzene:	ND<0.5	ND<0.5	5.5
Total Xylenes:	ND<0.5	ND<0.5	13
Concentration:	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 2 of 2  
QA/QC INFORMATION  
SET: 30174

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:	92/86	7%	70-130
Benzene:	78/73	7%	70-130
Toluene:	81/78	4%	70-130
Ethyl Benzene:	92/89	3%	70-130
Total Xylenes:	101/98	3%	70-130

*Michael R. Vernon*  
Senior Chemist

30174

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

Chain-of-Custody-Record

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

Chevron Facility Number 9-6991  
Facility Address 2920 Castro Villy  
Consultant Project Number 020104092.0610  
Consultant Name Groundwater Technology, Inc.  
Address 4057 Port Chicago Hwy, Concord, CA. 94520  
Project Contact (Name) Tim Watchers  
(Phone) 510-671-2387 (Fax Number)

Chevron Contact (Name) M. Miller  
(Phone) 842-8134  
Laboratory Name Superior Labs  
Laboratory Release Number 483-7960  
Samples Collected by (Name) JASON D STINAR  
Collection Date 12-30-93  
Signature Jason D Stinar

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analytes To Be Performed											NOTE: Do NOT BILL TB-LB SAMPLES	
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (6520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)	Hold	Remarks			
TBLB	1	2	W	G		<del>None</del>	Y	X												
mw-1	2	3			8:40	KL														
RBmw-1	3	1			8:40															
mw-2	4	3			9:23															
RBmw-2	Hold 9	1			9:23										X					
mw-3	5	3			10:10															
RBmw-3	Hold 10	1			10:10										X					
mw-4	6	3			10:55															
RBmw-4	Hold 11	1			10:55										X					
mw-5	7	3			11:30															
RBmw-5	Hold 12	1			11:30										X					
mw-6	8	3			12:15															
RBmw-6	Hold 13	1			12:15										X					

Comments:  
Please Initial:  
Samples Stored in ice: KL  
Appropriate containers  
Samples preserved  
NOA's without headspace  
4:50

Relinquished By (Signature) <u>Jason D Stinar</u>	Organization <u>GTE</u>	Date/Time <u>12-30/1330</u>	Received By (Signature) <u>Wanda</u>	Organization <u>GTE</u>	Date/Time <u>12/30/93 1330</u>
Relinquished By (Signature) <u>Wanda</u>	Organization <u>GTE</u>	Date/Time <u>12/30/93 1405</u>	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received for Laboratory By (Signature) <u>Wanda</u>	Organization <u>Superior</u>	Date/Time <u>12/30 2:00 pm</u>

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



# Superior Precision Analytical, Inc.

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

Groundwater Technology Inc.  
Attn: TIM WATCHERS

Project 9-6991  
Reported 02/03/94

## TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
15182- 1	MW-1	01/27/94	02/01/94 Water
15182- 2	MW-2	01/27/94	02/02/94 Water
15182- 3	MW-3	01/27/94	02/02/94 Water
15182- 4	MW-4	01/27/94	02/02/94 Water
15182- 5	MW-5	01/27/94	02/02/94 Water
15182- 6	MW-6	01/27/94	02/02/94 Water
15182- 7	TB-LB	01/27/94	02/02/94 Water

## RESULTS OF ANALYSIS

Laboratory Number:	15182- 1	15182- 2	15182- 3	15182- 4	15182- 5
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Diesel:	ND<50	ND<50	ND<50	ND<50	ND<50
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

Laboratory Number:	15182- 6	15182- 7
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Diesel:	*290	ND<50
Concentration:	ug/L	ug/L

\* Does not match the typical diesel pattern.



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: 15182

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
Diesel:	110/83	28%	33-179

*[Handwritten Signature]* 2/4/94

Senior Chemist  
Account Manager

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

30236

15782

Chain-of-Custody-Record

GILLU

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

Chevron Facility Number: 9-6791  
Facility Address: 2920 Castro Valley Rd, Castro Valley  
Consultant Project Number: 020104092, 0610  
Consultant Name: Groundwater Technology, Inc.  
Address: 4057 Port Chicago Hwy, Concord, CA 94520  
Project Contact (Name): Tim Watchers  
(Phone) 510-671-2387 (Fax Number)

Chevron Contact (Name): Mark Miller  
(Phone): (510) 842-8134  
Laboratory Name: Superior  
Laboratory Release Number: # 483-7960  
Samples Collected by (Name): Leo Taliver  
Collection Date: 1-27-94  
Signature: Leo Taliver

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	Iced (Yes or No)	Analysis To Be Performed											NOTE: Do NOT BILL TB-LB SAMPLES		
								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)						
MW-1	1	1	W	G	1315	None	Y	X													
MW-2	2	1	W	G	1215	None	Y	X													
MW-3	3	1	W	G	1130	None	Y	X													
MW-4	4	1	W	G	10:30		Y	X													
MW-5	5	1	W	G	1358		Y	X													
MW-6	6	1	W	G	1440		Y	X													
TBLB	7	2	W	G	5730		Y	X													

Relinquished By (Signature): <u>Leo Taliver</u>	Organization: <u>GTI</u>	Date/Time:	Received By (Signature): <u>Clayton Jorgensen</u>	Organization: <u>GTI</u>	Date/Time: <u>1-28-94</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days <u>10 Days</u> As Contracted
Relinquished By (Signature): <u>Clayton Jorgensen</u>	Organization: <u>GTI</u>	Date/Time:	Received By (Signature): <u>SVINSON</u>	Organization: <u>AERZO</u>	Date/Time: <u>1/28/94</u>	
Relinquished By (Signature): <u>VINSON</u>	Organization: <u>AERZO</u>	Date/Time: <u>1/28/94</u>	Received for Laboratory By (Signature): <u>Blaney</u>	Organization: <u>AERZO</u>	Date/Time: <u>1-29-94 11:30am</u>	