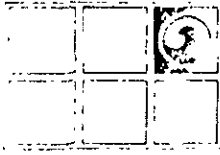


**QUARTERLY STATUS REPORT  
FORMER TEXACO SERVICE STATION  
3940 CASTRO VALLEY BOULEVARD  
CASTRO VALLEY, CALIFORNIA  
MARCH 13, 1991**

**GROUNDWATER TECHNOLOGY, INC.  
CONCORD, CALIFORNIA**



# GROUNDWATER TECHNOLOGY, INC.

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

FAX: (415) 685-9148

**QUARTERLY STATUS REPORT  
FORMER TEXACO SERVICE STATION  
3940 CASTRO VALLEY BOULEVARD  
CASTRO VALLEY, CALIFORNIA  
MARCH 13, 1991**

Prepared for:

Mr. R. R. Zielinski  
Texaco Environmental Services  
108 Cutting Boulevard  
Richmond, CA 91608

Prepared by:

GROUNDWATER TECHNOLOGY, INC.  
4057 Port Chicago Highway  
Concord, California 94520

Gregory A. Mischel  
Project Geologist

Peter A. Fuller  
Project Manager

Allen B. Storm  
Registered Geologist  
No. 4394



R4080J2.TW

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### APPENDIX

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**QUARTERLY STATUS REPORT  
FORMER TEXACO SERVICE STATION  
3940 CASTRO VALLEY BOULEVARD  
CASTRO VALLEY, CALIFORNIA  
MARCH 13, 1991**

**INTRODUCTION**

This Quarterly Status Report presents the results of the groundwater-monitoring and sampling program performed at the former Texaco Service Station located at 3940 Castro Valley Boulevard, Castro Valley, California. The report covers the period from October through December, 1990.

**WORK PERFORMED**

There are four monitoring wells involved in the groundwater monitoring and sampling program for the above-mentioned site. During this reporting period, groundwater monitoring and sampling were performed monthly. The change in frequency of monitoring and sampling events is the result of a request from Alameda County Health Care Services during August 1990 for additional investigations at the site. The results of the groundwater-monitoring and groundwater-sampling analyses are discussed in the following sections.

**GROUNDWATER MONITORING**

The four monitoring wells, MW-1, MW-3, MW-4, and MW-5, were monitored for depth-to-water (DTW) and separate-phase hydrocarbons on October 10, November 15, and December 11, 1990. Groundwater monitoring was accomplished by using a probe which utilizes optical and electrical conductivity sensors to distinguish between groundwater and separate-phase hydrocarbons. The probe allows the DTW and depth-to-separate-phase hydrocarbons (DTP) to be measured accurately to within 0.01 foot. A clean acrylic baller was also used to visually inspect the water for odor, color, sheen, and turbidity. The groundwater monitoring was performed to determine the DTW, the thickness of separate-phase hydrocarbons, if present, the hydraulic gradient, and the local groundwater-flow direction.

## GROUNDWATER SAMPLING

On October 10, November 15, and December 11, 1990, prior to sampling, the four monitoring wells were purged of at least four well volumes of water or until they bailed dry. The purged wells were then allowed to recover to at least 80 percent of the initial water levels before sampling with a U.S. Environmental Protection Agency (EPA)-approved Teflon<sup>®</sup> sampler. For quality control, a rinsate blank of the final rinse water from the cleaned sampler was also collected prior to taking each well sample. Groundwater samples were collected, placed into pre-acidified 40-milliliter glass vials, and sealed with Teflon<sup>®</sup> septum caps in such a way that no air was trapped inside. Each vial was immediately labeled and placed on ice in an insulated cooler for delivery to a State of California-certified laboratory. A Chain-of-Custody Manifest was prepared and accompanied the samples at all times. The samples were analyzed for the presence of benzene, toluene, ethylbenzene, and xylenes (BTEX) and for total petroleum hydrocarbons (TPH)-as-gasoline using EPA Methods 5030, 8020, and modified Method 8015. During each sampling event, a rinsate blank was chosen randomly to be analyzed using these EPA Methods.

## RESULTS

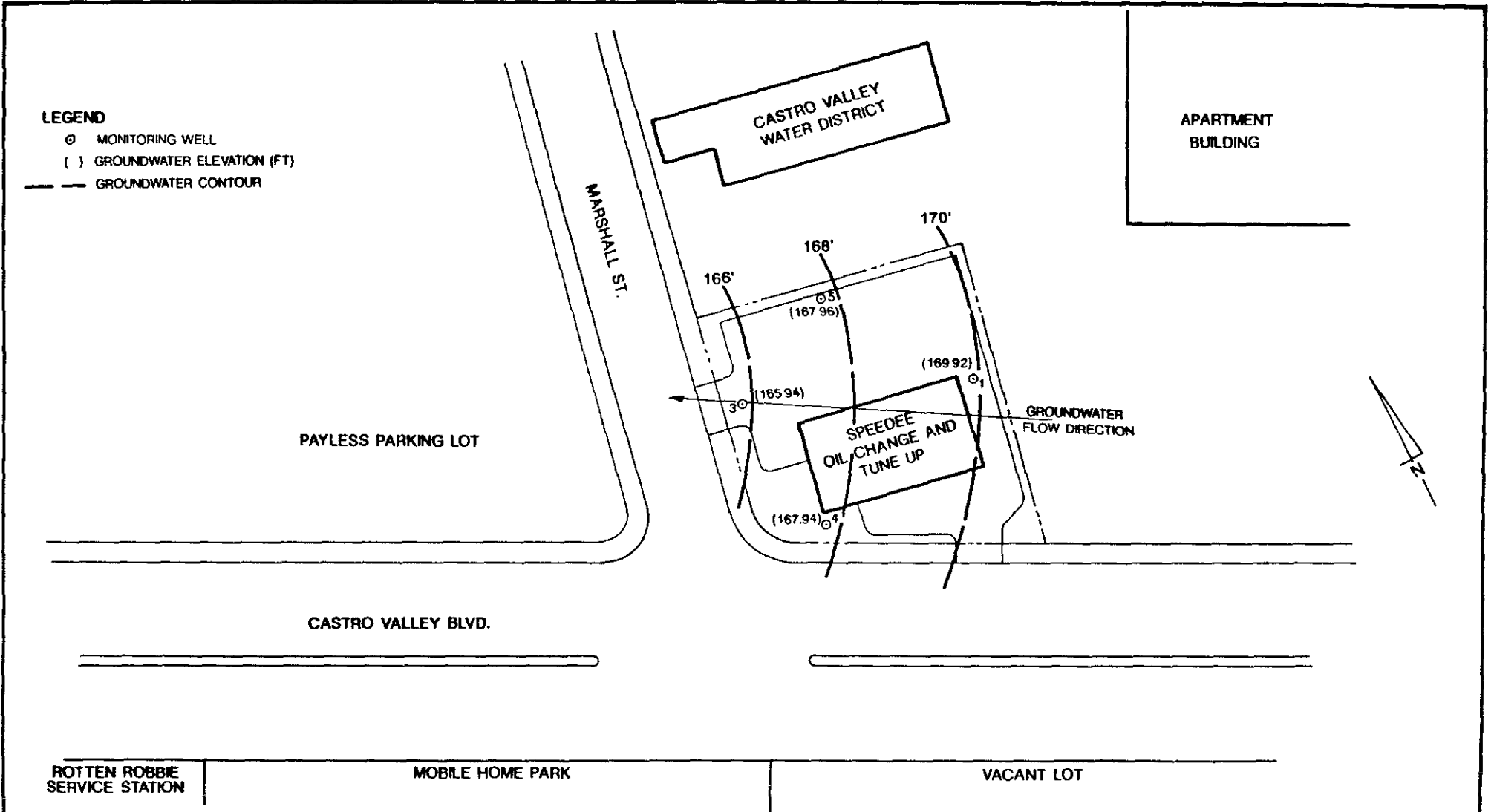
### MONITORING

Monitoring data collected from November 19, 1987, through December 11, 1990, are presented in Appendix A. Groundwater levels ranged from 22.54- to 24.54-feet below grade on December 11, 1990. These measurements indicate that the water table elevation decreased an average of 0.27 foot between October 10, 1990, and December 11, 1990. The data presented in Appendix A indicate that groundwater elevations have been continually decreasing since February 27, 1990. No separate-phase hydrocarbons were observed in the monitoring wells during the monitoring events of this reporting period.

A Potentiometric Surface Map (Figure 1) was prepared using the monitoring data from December 11, 1990. The interpreted groundwater-flow direction, as determined from the monitoring data, is towards the west with a gradient of approximately 0.04 ft/ft.

**LEGEND**

- ⊙ MONITORING WELL
- ( ) GROUNDWATER ELEVATION (FT)
- GROUNDWATER CONTOUR



**FIGURE 1**  
**POTENTIOMETRIC SURFACE MAP**  
**(12/11/90)**

TEXACO ENVIRONMENTAL SERVICES  
CASTRO VALLEY, CALIFORNIA

0 FEET 40



**GROUNDWATER**  
**TECHNOLOGY, INC.**

ME 1/91

## **SAMPLING**

Table 1 summarizes the concentrations of dissolved TPH-as-gasoline and BTEX detected in groundwater samples collected on October 10, November 15, and December 11, 1990. Copies of the laboratory reports and the Chain-of-Custody Manifests are included in Appendix B.

Laboratory analyses performed during this reporting period indicated benzene and TPH-as-gasoline were detected in samples from monitoring wells MW-1 and MW-4. The highest concentrations of benzene (6 parts per billion [ppb]) and TPH-as-gasoline (79 ppb) were detected in the sample collected from monitoring well MW-4 on December 11, 1990. Concentrations of TPH-as-gasoline and BTEX were below the Method Detection Limit (MDL) in the water samples collected from MW-3 and MW-5 on October 10, November 15 and December 11, 1990. Figures 2 and 3 present the distribution of dissolved TPH-as-gasoline and benzene detected in groundwater samples collected on December 11, 1990.

During the December 11, 1990, sampling event, one randomly chosen rinsate blank (RBMW-4) was analyzed for the presence of TPH-as-gasoline and BTEX. This sample was collected from the cleaned surface sampler prior to collecting the sample from monitoring well MW-4. The analytical results showed that the rinsate blank contained no detectable concentrations of TPH-as-gasoline or BTEX.

Table 2 summarizes the concentrations of total BTEX and TPH-as-gasoline detected in groundwater samples collected at the site from December 30, 1987, through December 11, 1990.

## **SUMMARY**

Between October 10 and December 11, 1990, groundwater elevations decreased an average of 0.27 foot in monitoring wells MW-1, MW-3, MW-4 and MW-5. A Potentiometric Surface Map constructed from the December 11, 1990, monitoring data indicate an approximate groundwater-flow direction to the west with a hydraulic gradient of approximately 0.04 ft/ft. The highest concentrations of benzene (6 ppb) and TPH-as-gasoline (79 ppb) were detected in the sample collected from MW-4 on December 11, 1990. Concentrations of BTEX and TPH-as-gasoline were below the MDL in water samples collected from MW-3 and MW-5 on October 10, November 15, and December 11, 1990.

**Table 1 - Dissolved Gasoline  
Hydrocarbon Concentrations**

**October through December 1990**

DATE	CONSTITUENTS	MW-1	MW-3	MW-4	MW-5
10/10/90	Benzene	2	<MDL	4	<MDL
	Toluene	<MDL	<MDL	<MDL	<MDL
	Ethylbenzene	0.6	<MDL	<MDL	<MDL
	Xylenes	1	<MDL	<MDL	<MDL
	Total BTEX	4	<MDL	4	<MDL
	TPH-as-gasoline	40	<MDL	77	<MDL
11/15/90	Benzene	0.8	<MDL	2	<MDL
	Toluene	<MDL	<MDL	<MDL	<MDL
	Ethylbenzene	<MDL	<MDL	0.4	<MDL
	Xylenes	<MDL	<MDL	<MDL	<MDL
	Total BTEX	0.8	<MDL	2	<MDL
	TPH-as-gasoline	18	<MDL	49	<MDL
12/11/90	Benzene	<MDL	<MDL	6	<MDL
	Toluene	<MDL	<MDL	<MDL	<MDL
	Ethylbenzene	<MDL	<MDL	1	<MDL
	Xylenes	<MDL	<MDL	<MDL	<MDL
	Total BTEX	<MDL	<MDL	7	<MDL
	TPH-as-gasoline	<MDL	<MDL	79	<MDL

Concentrations shown in parts per billion

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

<MDL = Less Than Method Detection Limits

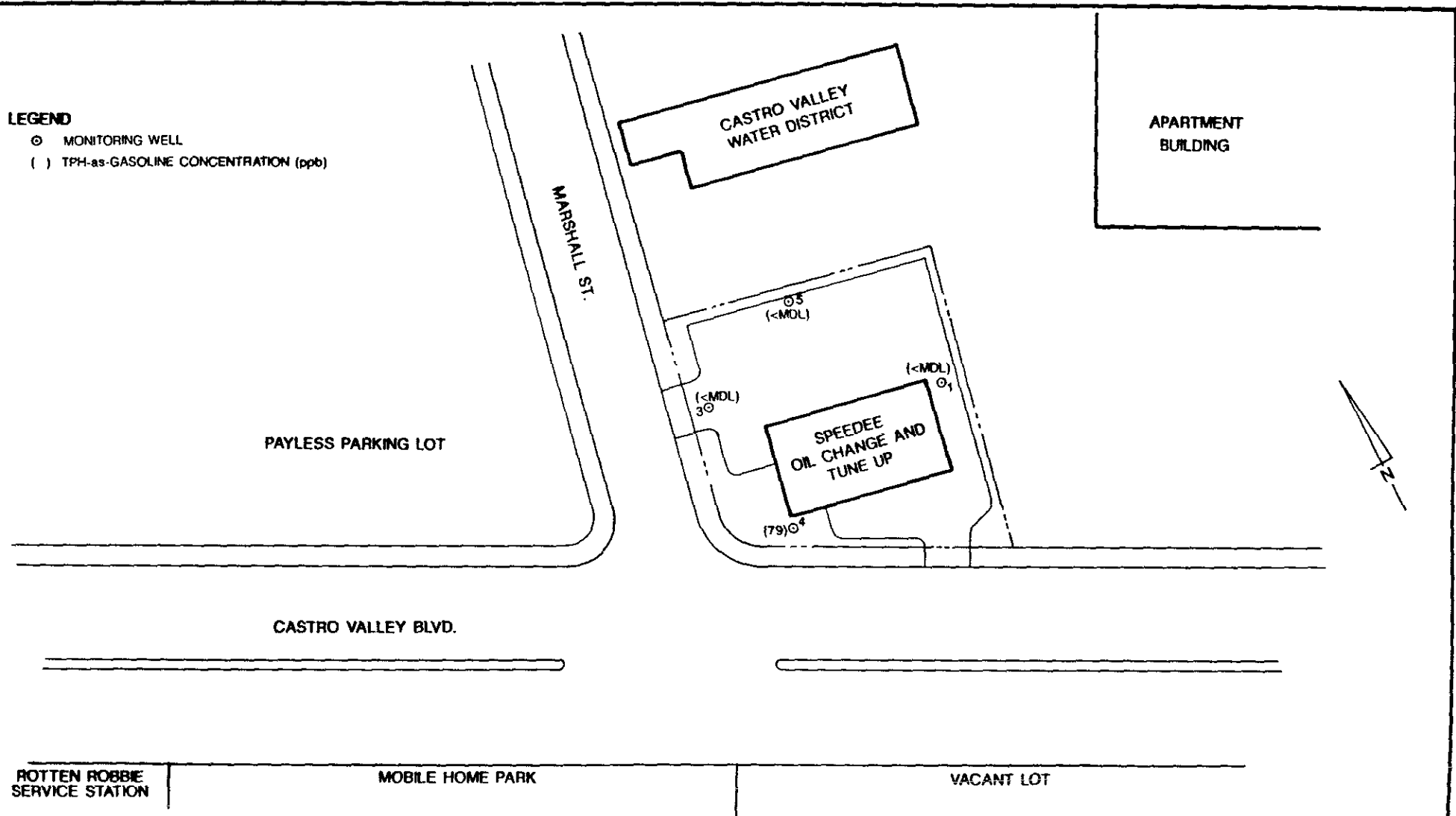
MW = Monitoring Well

TPH = Total Petroleum Hydrocarbons



**LEGEND**

- ⊙ MONITORING WELL
- ( ) TPH-as-GASOLINE CONCENTRATION (ppb)



**FIGURE 2**  
**DISSOLVED TOTAL PETROLEUM HYDROCARBONS**  
**(TPH)-as-GASOLINE CONCENTRATION MAP**  
**(12/11/90)**

TEXACO ENVIRONMENTAL SERVICES  
CASTRO VALLEY, CALIFORNIA



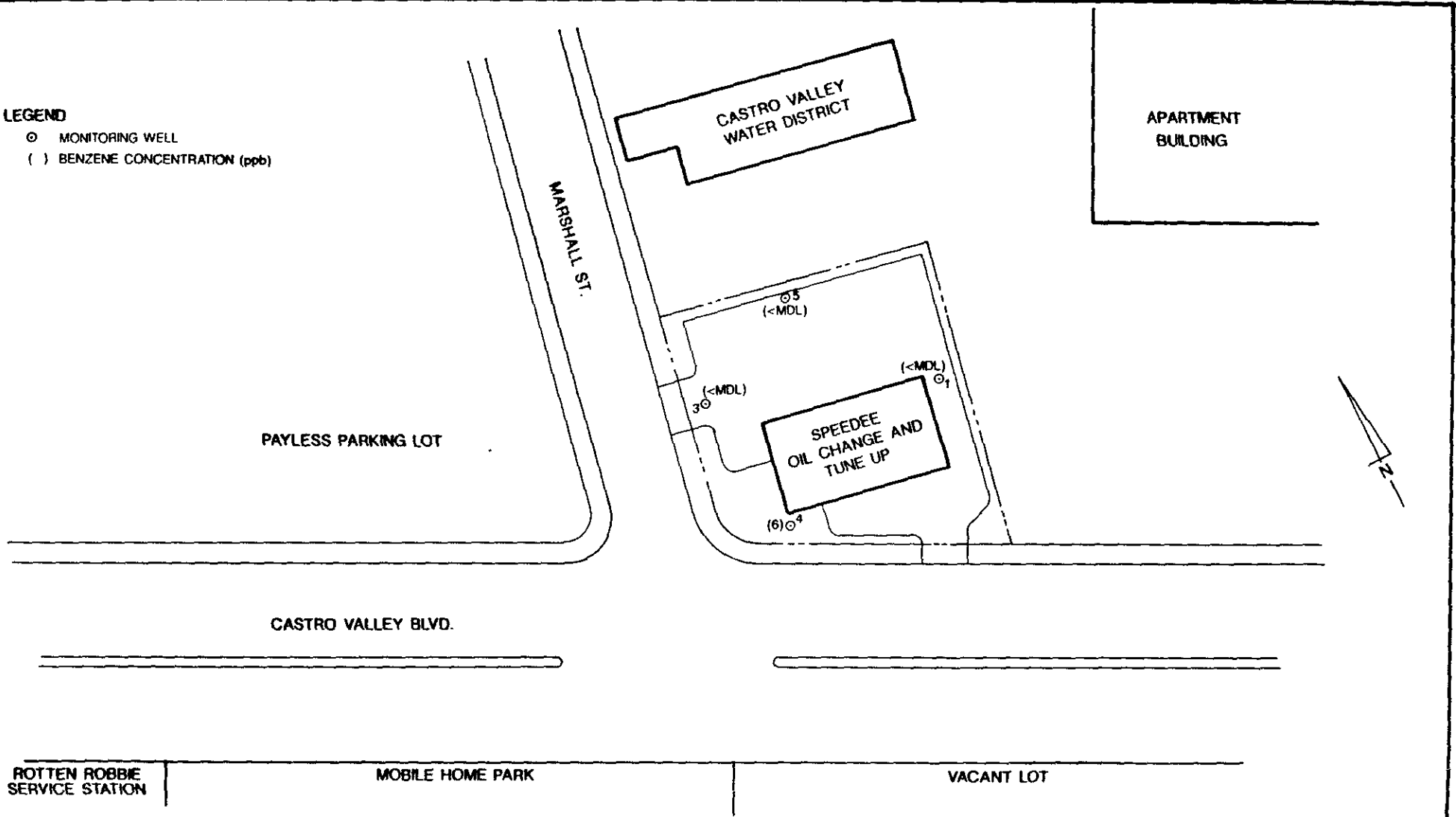
ML 1/91



**GROUNDWATER**  
**TECHNOLOGY, INC.**

**LEGEND**

- ⊙ MONITORING WELL
- ( ) BENZENE CONCENTRATION (ppb)



ROTTEN ROBBIE  
SERVICE STATION

MOBILE HOME PARK

VACANT LOT

TEXACO ENVIRONMENTAL SERVICES  
CASTRO VALLEY, CALIFORNIA

**FIGURE 3**  
**DISSOLVED BENZENE CONCENTRATION MAP**  
(12/11/90)



ML 1/91



**GROUNDWATER  
TECHNOLOGY, INC.**

**Table 2 - Historical Review of Dissolved Gasoline Hydrocarbon Concentrations**

**December 1987 - December 1990**

DATE		MW-1	MW-2	MW-3	MW-4	MW-5
12/30/87	BTEX TPH-AS-GASOLINE	220 2,100	389 2,400	<0.5 <1		
06/07/88	BTEX TPH-AS-GASOLINE	54 290	266 1,200	<PQL <PQL		
12/13/88	BTEX TPH-AS-GASOLINE	30 370	893 4,000	<PQL <PQL		
08/29/89	BTEX TPH-AS-GASOLINE	6 160	ABANDONED	<PQL <PQL		
02/27/90	BTEX TPH-AS-GASOLINE	<PQL <PQL		<PQL <PQL		
04/12/90	BTEX TPH-AS-GASOLINE	NS		NS NS	229 1,500	<MDL <MDL
06/11/90	BTEX TPH-AS-GASOLINE	18 190		<MDL <MDL	19 110	<MDL <MDL
08/22/90	BTEX TPH-AS-GASOLINE	0.3 19		<MDL <MDL	5 50	<MDL <MDL
09/12/90	BTEX TPH-AS-GASOLINE	12 92		<MDL <MDL	8 49	<MDL <MDL

Concentrations in parts per billion

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

<MDL = Less than Method Detection Limits

MW = Monitoring Well

NS = Not Sampled

<PQL = Less than Practical Quantitation Levels per EPA Federal Register, November 13, 1985, Page 46906.

TPH = Total Petroleum Hydrocarbons

**Table 2 - Historical Review of Dissolved  
Gasoline Hydrocarbon Concentrations**

**December 1987 - December 1990**

(continued)

DATE		MW-1	MW-3	MW-4	MW-5
10/10/90	BTEX	4	<MDL	4	<MDL
	TPH-AS-GASOLINE	40	<MDL	77	<MDL
11/15/90	BTEX	0.8	<MDL	2	<MDL
	TPH-AS-GASOLINE	18	<MDL	49	<MDL
12/11/90	BTEX	<MDL	<MDL	7	<MDL
	TPH-AS-GASOLINE	<MDL	<MDL	79	<MDL

Concentrations shown in parts per billion

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

<MDL = Less than Method Detection Limits

MW = Monitoring Well

NS = Not Sampled

<PQL = Less than Practical Quantitation Levels per EPA Federal Register,  
November 13, 1985, Page 46906.

TPH = Total Petroleum Hydrocarbons

**APPENDIX A**  
**GROUNDWATER MONITORING DATA**

**GROUNDWATER MONITORING DATA**

**NOVEMBER 1987 - DECEMBER 1990**

DATE	WELL * ELEV.	TX	MW-1 192.46	MW-2	MW-3 190.48	MW-4 191.63	MW-5 191.55
11/19/87	DTW WATER ELEV.	20.90 -	-	-	-		
12/30/87	DTW WATER ELEV.	NM -	21.92 170.54	22.30 -	22.60 167.88		
06/07/88	DTW WATER ELEV.	21.51 -	23.35 169.11	23.83 -	20.90 169.58		
12/13/88	DTW WATER ELEV.	NM -	23.17 169.29	23.69 -	20.92 169.56		
08/29/89	DTW WATER ELEV.	ABANDONED	23.70 168.76	ABANDONED	21.48 169.00		
02/27/90	DTW WATER ELEV.		23.25 169.21		21.58 168.90		
04/12/90	DTW WATER ELEV.		23.65 168.81		21.70 168.78	22.84 168.79	22.74 168.81
06/11/90	DTW WATER ELEV.		23.74 168.72		21.79 168.69	21.82 169.81	22.83 168.72
07/18/90	DTW WATER ELEV.		23.90 168.56		21.96 168.52	23.09 168.54	23.01 168.54
08/22/90	DTW WATER ELEV.		24.07 168.39		22.10 168.38	23.24 168.39	23.15 168.40
09/27/90	DTW WATER ELEV.		24.21 168.25		22.24 168.24	23.38 168.25	23.29 168.26

DTW = Depth to water (ft.)

MW = Monitoring Well

NM = Not measured

\* = Surveyed to Alameda County datum on April 23, 1990

TX = Monitoring well

**GROUNDWATER MONITORING DATA**  
**NOVEMBER 1987 - DECEMBER 1990**  
 (continued)

DATE	WELL* ELEV.	MW-1 192.46	MW-3 190.48	MW-4 191.63	MW-5 191.55
10/10/90	DTW WATER ELEV.	24.25 168.21	22.28 168.20	24.43 167.20	22.33 169.22
11/15/90	DTW WATER ELEV.	24.45 168.01	22.50 167.98	23.64 167.99	23.54 168.01
12/11/90	DTW WATER ELEV.	22.54 169.92	24.54 165.94	23.69 167.94	23.59 167.96

- DTW = Depth to water (ft.)  
 MW = Monitoring Well  
 NM = Not measured  
 \* = Surveyed to Alameda County datum on April 23, 1990  
 TX = Monitoring well

**APPENDIX B**  
**GROUNDWATER ANALYTICAL RESULTS**





# GTEL

ENVIRONMENTAL  
LABORATORIES, INC.

**Northwest Region**

4080-C Pike Lane  
Concord, CA 94520  
(415) 685-7852  
*(800) 544-3422 from inside California*  
*(800) 423-7143 from outside California*  
(415) 825-0720 (FAX)

Client Number: 203-199-4080  
Project ID: 3940 Castro Valley  
Blvd.  
Castro Valley, CA  
Work Order Number: CO-10-304

October 20, 1990

Pete Fuller  
Groundwater Technology, Inc.  
4080-D Pike Lane  
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 10/10/90, under chain of custody number 72-4094.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
GTEL Environmental Laboratories, Inc.

Emma P. Popek  
Laboratory Director

Client Number: 203-199-4080.  
 Project ID: 3040 Castro Valley Blvd.  
 Castro Valley, CA  
 Work Order Number: CO-10-304

**Table 1**  
**ANALYTICAL RESULTS**  
 Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water  
 EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		01	02	03	04
Client Identification		MW-3	MW-5	MW-4	MW-1B
Date Sampled		10/10/90	10/10/90	10/10/90	10/10/90
Date Analyzed		10/16/90	10/16/90	10/16/90	10/16/90
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	< 0.3	< 0.3	4	< 0.3
Toluene	0.3	< 0.3	< 0.3	< 0.3	< 0.3
Ethylbenzene	0.3	< 0.3	< 0.3	< 0.3	< 0.3
Xylene, total	0.6	< 0.6	< 0.6	< 0.6	< 0.6
BTEX, total	-	-	-	4	-
TPH as Gasoline	1	< 1	< 1	77	< 1
Detection Limit Multiplier		1	1	1	1

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.

Client Number: 203-199-4080.  
 Project ID: 3940 Castro Valley  
 Blvd.  
 Castro Valley, CA  
 Work Order Number: CO-10-304

**Table 1 (Continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water**

EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		05			
Client Identification		MW-1			
Date Sampled		10/10/90			
Date Analyzed		10/16/90			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	2			
Toluene	0.3	<0.3			
Ethylbenzene	0.3	0.6			
Xylene, total	0.6	1			
BTEX, total	-	4			
TPH as Gasoline	1	40			
Detection Limit Multiplier		1			

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.



4080- Pike Lane  
Concord, CA 94520  
415-685-7852

800-544-3422 (In CA)  
800-423-7143 (Outside CA)

**CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST** **72-4094**

**CUSTODY RECORD**

Project Manager:

*Pat Fuller*

Phone #: *671-2387*

FAX #:

Address:

*GTE Concord*

Site location:

*3940 Castro Valley Blvd, Castro V.*

Project Number:

*203 199 4080*

Project Name:

*GTE Concord*

I attest that the proper field sampling procedures were used during the collection of these samples.

Sampler Name (Print):

*Hector Merino*

**ANALYSIS REQUEST**

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# CONTAINERS	Matrix				Method Preserved				Sampling		
				WATER	SOIL	AIR	SLUDGE OTHER	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE	NONE OTHER	DATE	TIME
MW 3RB			1	X					X				<i>10:10</i>	<i>1:10</i>
MW-3	<i>01</i>	<i>N</i>	2	X									<i>1:10</i>	<i>1:10</i>
MW 5RB			1	X									<i>1:15</i>	<i>1:15</i>
MW-5	<i>02</i>	<i>N</i>	2	X									<i>1:15</i>	<i>1:15</i>
MW-4RB			1	X									<i>1:25</i>	<i>1:25</i>
MW-4	<i>03</i>	<i>N</i>	2	X									<i>1:25</i>	<i>1:25</i>
MW-1B	<i>04</i>	<i>N</i>	1	X									<i>1:30</i>	<i>1:30</i>
MW-1	<i>05</i>	<i>N</i>	2	X									<i>1:30</i>	<i>1:30</i>

BTEX 602 <input type="checkbox"/> 8020 <input type="checkbox"/> with MTBE <input type="checkbox"/>	BTEX/TPH Gas 602/8015 <input type="checkbox"/> 8020/8015 <input type="checkbox"/> MTBE <input type="checkbox"/>	TPH as <input type="checkbox"/> Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Jet Fuel <input type="checkbox"/>	Product I.D. by GC (SIMDIS) <input type="checkbox"/>	Total Oil & Grease. 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/> 503A <input type="checkbox"/>	Total Petroleum Hydrocarbons: 418.1 <input type="checkbox"/> 503E <input type="checkbox"/>	EPA 601 <input type="checkbox"/> 8010 <input type="checkbox"/> DCA only <input type="checkbox"/>	EPA 602 <input type="checkbox"/> 8020 <input type="checkbox"/>	EPA 608 <input type="checkbox"/> 8080 <input type="checkbox"/> PCBs only <input type="checkbox"/>	EPA 610 <input type="checkbox"/> 8310 <input type="checkbox"/>	EPA 624 <input type="checkbox"/> 8240 <input type="checkbox"/> NBS +15 <input type="checkbox"/>	EPA 625 <input type="checkbox"/> 8270 <input type="checkbox"/> NBS +25 <input type="checkbox"/>	EPTOX: Metals <input type="checkbox"/> Pesticides <input type="checkbox"/> Herbicides <input type="checkbox"/>	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-VOA <input type="checkbox"/>	EPA Priority Pollutant Metals <input type="checkbox"/> HSL <input type="checkbox"/>	LEAD 7420 <input type="checkbox"/> 7421 <input type="checkbox"/> 2392 <input type="checkbox"/> 6010 <input type="checkbox"/> Org. Lead <input type="checkbox"/>	CAM Metals <input type="checkbox"/> STLC <input type="checkbox"/> TTLC <input type="checkbox"/>	Corrosivity <input type="checkbox"/> Flashpoint <input type="checkbox"/> Reactivity <input type="checkbox"/>
----------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------	----------------------------------------------------------------	---------------------------------------------------------------------------------------------------	----------------------------------------------------------------	-------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------

**F-Box**

Received by:	Time	Date
	<i>3:35</i>	<i>10-10-90</i>
Received by:	Time	Date
	<i>3:35</i>	<i>10/10</i>

**SPECIAL HANDLING**

- 24 HOURS
- EXPEDITED 48 Hours
- SEVEN DAY
- OTHER \_\_\_\_\_ (#) BUSINESS DAYS
- QA/QC CLP Level  Blue Level
- FAX

**SPECIAL DETECTION LIMITS (Specify)**

**SPECIAL REPORTING REQUIREMENTS (Specify)**

REMARKS: *acidified*  
*normal turnaround*  
*BTEX / TPH-as-gasoline*

Lab Use Only \_\_\_\_\_ Storage Location \_\_\_\_\_  
Lot #: \_\_\_\_\_ Work Order #: \_\_\_\_\_

Relinquished by Sampler: *[Signature]*  
Relinquished by: \_\_\_\_\_  
Relinquished by: \_\_\_\_\_

Way by: *[Signature]*



# GTEL

ENVIRONMENTAL  
LABORATORIES, INC.

**Northwest Region**

4080-C Pike Lane  
Concord, CA 94520  
(415) 685-7852  
(800) 544-3422 from inside California  
(800) 423-7143 from outside California  
(415) 825-0720 (FAX)

Client Number: 203-199-4080.  
Project ID: 3940 Castro Valley Blvd  
Castro Valley, CA  
Work Order Number: CO-11-427

November 27, 1990

Pete Fuller  
Groundwater Technology, Inc.  
4080-D Pike Lane  
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 11/16/90, under chain of custody number 72-9790.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
GTEL Environmental Laboratories, Inc.

Emma P. Popek  
Laboratory Director

Client Number: 203-199-4080.  
 Project ID: 3940 Castro Valley Blvd  
 Castro Valley, CA  
 Work Order Number: CO-11-427

**Table 1**  
**ANALYTICAL RESULTS**  
 Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water  
 EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		01	02	03	04
Client Identification		MW 5	MW 3	RB 4	MW 4
Date Sampled		11/15/90	11/15/90	11/15/90	11/15/90
Date Analyzed		11/20/90	11/20/90	11/20/90	11/20/90
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	< 0.3	< 0.3	< 0.3	2
Toluene	0.3	< 0.3	< 0.3	< 0.3	<0.3
Ethylbenzene	0.3	< 0.3	< 0.3	< 0.3	0.4
Xylene, total	0.6	< 0.6	< 0.6	< 0.6	<0.6
BTEX, total	-	--	--	--	2
TPH as Gasoline	1	< 1	< 1	< 1	49
Detection Limit Multiplier		1	1	1	1

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.

Client Number: 203-199-4060.  
 Project ID: 3940 Castro Valley Blvd  
 Castro Valley, CA  
 Work Order Number: CO-11-427

**Table 1 (Continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water**

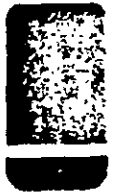
EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		05			
Client Identification		MW 1			
Date Sampled		11/15/90			
Date Analyzed		11/20/90			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	0.8			
Toluene	0.3	<0.3			
Ethylbenzene	0.3	<0.3			
Xylene, total	0.6	<0.6			
BTEX, total	--	0.8			
TPH as Gasoline	1	18			
Detection Limit Multiplier		1			

<sup>a</sup>. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.







# GTEL

ENVIRONMENTAL  
LABORATORIES, INC.

**Northwest Region**

4080 Pike Lane  
Concord, CA 94520  
(415) 685-7852  
(800) 544-3422 from inside California  
(800) 423-7143 from outside California

Client Number: 203-199-4080.  
Project ID: 3940 Castro Valley  
Blvd.  
Work Order Number: CO-12-249

December 18, 1990

Pete Fuller  
Groundwater Technology, Inc.  
4080-D Pike Lane  
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 12/12/90, under chain of custody number 72-12006.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
GTEL Environmental Laboratories, Inc.

*Emma P. Popek/ra*  
Emma P. Popek  
Laboratory Director

**Table 1**  
**ANALYTICAL RESULTS**  
 Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water  
 EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>

GTEL Sample Number		01	02	03	04
Client Identification		MW 3	MW 5	RBMW 4	MW 4
Date Sampled		12/11/90	12/11/90	12/11/90	12/11/90
Date Analyzed		12/15/90	12/15/90	12/15/90	12/15/90
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	< 0.3	< 0.3	< 0.3	6
Toluene	0.3	< 0.3	< 0.3	< 0.3	<0.3
Ethylbenzene	0.3	< 0.3	< 0.3	< 0.3	1
Xylene, total	0.6	< 0.6	< 0.6	< 0.6	<0.6
BTEX, total	--	--	--	--	7
TPH as Gasoline	1	< 1	< 1	< 1	79
Detection Limit Multiplier		1	1	1	1

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.

**Table 1 (Continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics and  
 Total Petroleum Hydrocarbons as Gasoline in Water**

**EPA Methods 5030, 8020, and Modified 8015<sup>a</sup>**

GTEL Sample Number		05			
Client Identification		MW 1			
Date Sampled		12/11/90			
Date Analyzed		12/15/90			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	< 0.3			
Toluene	0.3	< 0.3			
Ethylbenzene	0.3	< 0.3			
Xylene, total	0.6	< 0.6			
BTEX, total	--	--			
TPH as Gasoline	1	< 1			
Detection Limit Multiplier		1			

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.



4080- Pike Lane  
Concord, CA 94520  
415-685-7852

800-544-3422 (In CA)  
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD  
AND ANALYSIS REQUEST

72-12006

CUSTODY RECORD

ANALYSIS REQUEST

**CO12249**  
**F1 BOX**

Project Manager:  
**Pete Fuller**

Phone #:

FAX #:

Address:  
**GTI Concord**

Site location:

**3940 Castro Valley Blvd.**

Project Number:  
**203-199-4080**

Project Name:

**Tex/CASTRO VALLEY**

I attest that the proper field sampling procedures were used during the collection of these samples.

Sampler Name (Print):

**Hector Merino**

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# CONTAINERS	Matrix					Method Preserved					Sampling				
				WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE	NONE	OTHER	DATE	TIME		
RBW3	Monitoring Wells	01	1	X					X			X			12	2:30		
MW3			2													10	2:31	
RBW5			1														10	2:40
MW5			2													90	2:40	
RBW4			1															2:50
MW4			2															2:50
RBW1	Monitoring Wells	05	1						X			X				2:58		
MW1			2	X					X			X					2:59	
SIE Blank				X					X			X				2:25		

BTEX 602	<input type="checkbox"/>	8020	<input type="checkbox"/>	with MTBE	<input type="checkbox"/>
BTEX/TPH Gas	602/8015	<input type="checkbox"/>	8020/8015	MTBE	<input type="checkbox"/>
TPH as Gas	<input type="checkbox"/>	Diesel	<input type="checkbox"/>	Jet Fuel	<input type="checkbox"/>
Product I.D. by GC (SIMDIS)	<input type="checkbox"/>				
Total Oil & Grease	413.1	<input type="checkbox"/>	413.2	503A	<input type="checkbox"/>
Total Petroleum Hydrocarbons	418.1	<input type="checkbox"/>	503E	<input type="checkbox"/>	
EPA 601	<input type="checkbox"/>	8010	<input type="checkbox"/>	DCA only	<input type="checkbox"/>
EPA 602	<input type="checkbox"/>	8020	<input type="checkbox"/>		
EPA 608	<input type="checkbox"/>	8080	<input type="checkbox"/>	PCBs only	<input type="checkbox"/>
EPA 610	<input type="checkbox"/>	8310	<input type="checkbox"/>		
EPA 624	<input type="checkbox"/>	8240	<input type="checkbox"/>	NBS +15	<input type="checkbox"/>
EPA 625	<input type="checkbox"/>	8270	<input type="checkbox"/>	NBS +25	<input type="checkbox"/>
EPTOX: Metals	<input type="checkbox"/>	Pesticides	<input type="checkbox"/>	Herbicides	<input type="checkbox"/>
TCLP Metals	<input type="checkbox"/>	VOA	<input type="checkbox"/>	Semi VOA	<input type="checkbox"/>
EPA Priority Pollutant Metals	<input type="checkbox"/>	HSL	<input type="checkbox"/>		
LEAD 7420	<input type="checkbox"/>	7421	<input type="checkbox"/>	239.2	<input type="checkbox"/>
CAM Metals	<input type="checkbox"/>	STLC	<input type="checkbox"/>	TLC	<input type="checkbox"/>
Corrosivity	<input type="checkbox"/>	Flashpoint	<input type="checkbox"/>	Reactivity	<input type="checkbox"/>

**HOLD**

Received by:	Time	Date
Received by:	Time	Date
Received by Laboratory:	Time	Date

Way bill #  
**12-21-85 / Castro Valley**

SPECIAL HANDLING

- 24 HOURS
- EXPEDITED 48 Hours
- SEVEN DAY
- OTHER \_\_\_\_\_ (#) BUSINESS DAYS
- QA/QC CLP Level  Blue Level
- FAX

SPECIAL DETECTION LIMITS (Specify)

**report detection limits**  
**not CQL**

SPECIAL REPORTING REQUIREMENTS (Specify)

**yes**

REMARKS:

**normal turnaround**  
**acidified**

Lab Use Only

Lot #:

Storage Location

Work Order #:

Relinquished by Sampler:

Relinquished by:

Relinquished by: