



Texaco USA

10 Universal City Plaza
PO Box 3756
Los Angeles CA 90051-1756

CALIFORNIA REGIONAL WATER *01*

August 10, 1988

AUG 15 1988

QUALITY CONTROL BOARD

Mr. Greg Zentner
California Regional Water
Quality Control Board
San Francisco Bay Region
1111 Jackson St., Rm. 6040
Oakland, CA 94607

Dear Greg:

Texaco
Enclosed is our Biannual Environmental Assessment Status Report dated ~~July, 1988~~ for our former service station site located at 3940 Castro Valley ~~CA~~.
Bivd., Castro Valley

We will continue biannual monitoring of water levels and laboratory water analyses to document the natural degradation of hydrocarbons at this site.

Please advise if you do not concur.

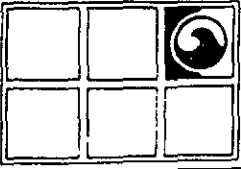
Very truly yours,

R. ROBLES
Environmental Protection
Coordinator

RR:dlc
1009.1-4N

Encls.

cc: Craig Mayfield
Alameda County Flood Control
Control and Water Conservation District
Water Resources Management, Zone 7
5997 Parkside Drive
Pleasanton, CA 94566



**GROUNDWATER
TECHNOLOGY, INC.**

4080 Pike Lane, Suite D, Concord, CA 94520 (415) 671-2387

Fax: (415) 685-9148

July 27, 1988

Job No. 203 150 4080

Mr. Robert R. Robles
Texaco Refining and Marketing Inc.
10 Universal City Plaza
Universal City, CA 91608

SUBJECT: Former Texaco Service Station
3940 Castro Valley Boulevard
Castro Valley, California

Dear Mr. Robles:

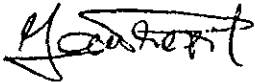
Please find enclosed the Biannual Status Report prepared by Groundwater Technology, Inc. (GTI) for the Texaco Service Station located at 3940 Castro Valley Boulevard in Castro Valley, California. The report covers the period from January to June 1988.

Based on the results and findings presented in this report, GTI recommends continuing the biannual monitoring and sampling program to document the natural degradation of concentrations of hydrocarbons underlying the site. The hydrocarbon concentration decreases observed over this period are possibly related to a combination of low groundwater levels and natural hydrocarbon degradation.

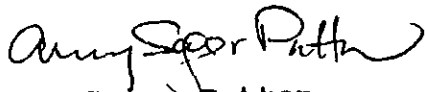
Mr. Robert Robles
July 27, 1988
Page 2

If you have any questions or require additional information,
please contact us at our Concord office at your convenience.

Sincerely,
GROUNDWATER TECHNOLOGY, INC.



Jan Prasil
Project Geologist



Amy Sager Patton
Project Hydrogeologist



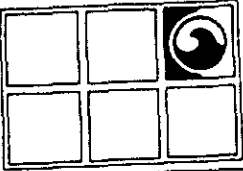
Lynn E. Pera
Registered Civil Engineer
No. 33431



JP:ASP:LEP:tls

Enclosure

L4080C.JP



**GROUNDWATER
TECHNOLOGY, INC.**

4080 Pike Lane, Suite D, Concord, CA 94520 (415) 671-2387

Fax: (415) 685-9148

**BIANNUAL STATUS REPORT
FORMER TEXACO SERVICE STATION
3940 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA**

July 27, 1988

Prepared for:

Mr. Robert R. Robles
Texaco Refining and
Marketing Inc.
10 Universal City Plaza
Universal City, CA 91608

Mr. John F. Love
Texaco Refining and
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Texaco Refining and
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3015 Bradshaw Road
Sacramento, CA 95827

Prepared by:

GROUNDWATER TECHNOLOGY, INC.
4080 Pike Lane, Suite D
Concord, CA 94520

Jan Prasil

Jan Prasil
Project Geologist

Amy S. Patton

Amy S. Patton
Project Hydrogeologist

Lynn E. Pera

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Registered Civil Engineer
No. 33431

R 203 150 4080 B



BIANNUAL STATUS REPORT
FORMER TEXACO SERVICE STATION
3940 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA
JULY, 1988

JULY 27, 1988

GROUNDWATER TECHNOLOGY, INC.
CONCORD, CALIFORNIA

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**BIANNUAL STATUS REPORT
FORMER TEXACO SERVICE STATION
3940 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA**

July 27, 1988

INTRODUCTION

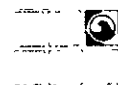
This report presents the most recent results of the biannual monitoring and sampling program for the former Texaco Service Station located at 3940 Castro Valley Boulevard in Castro Valley, California. The report covers the period from January through June 1988.

WORK PERFORMED

The work performed during this reporting period included the monitoring and sampling of groundwater monitoring wells MW-1, MW-2 and MW-3 for laboratory analyses on June 7, 1988. The previous monitoring and sampling round was implemented on December 30, 1987.

GROUNDWATER MONITORING AND GROUNDWATER GRADIENT

The June 1988 monitoring data (Appendix I) indicated that the present water table is approximately 21- to 24-feet below grade. The water table elevations in June 1988 reflected a decline of approximately 1.5 feet in wells MW-1 and MW-2, and an



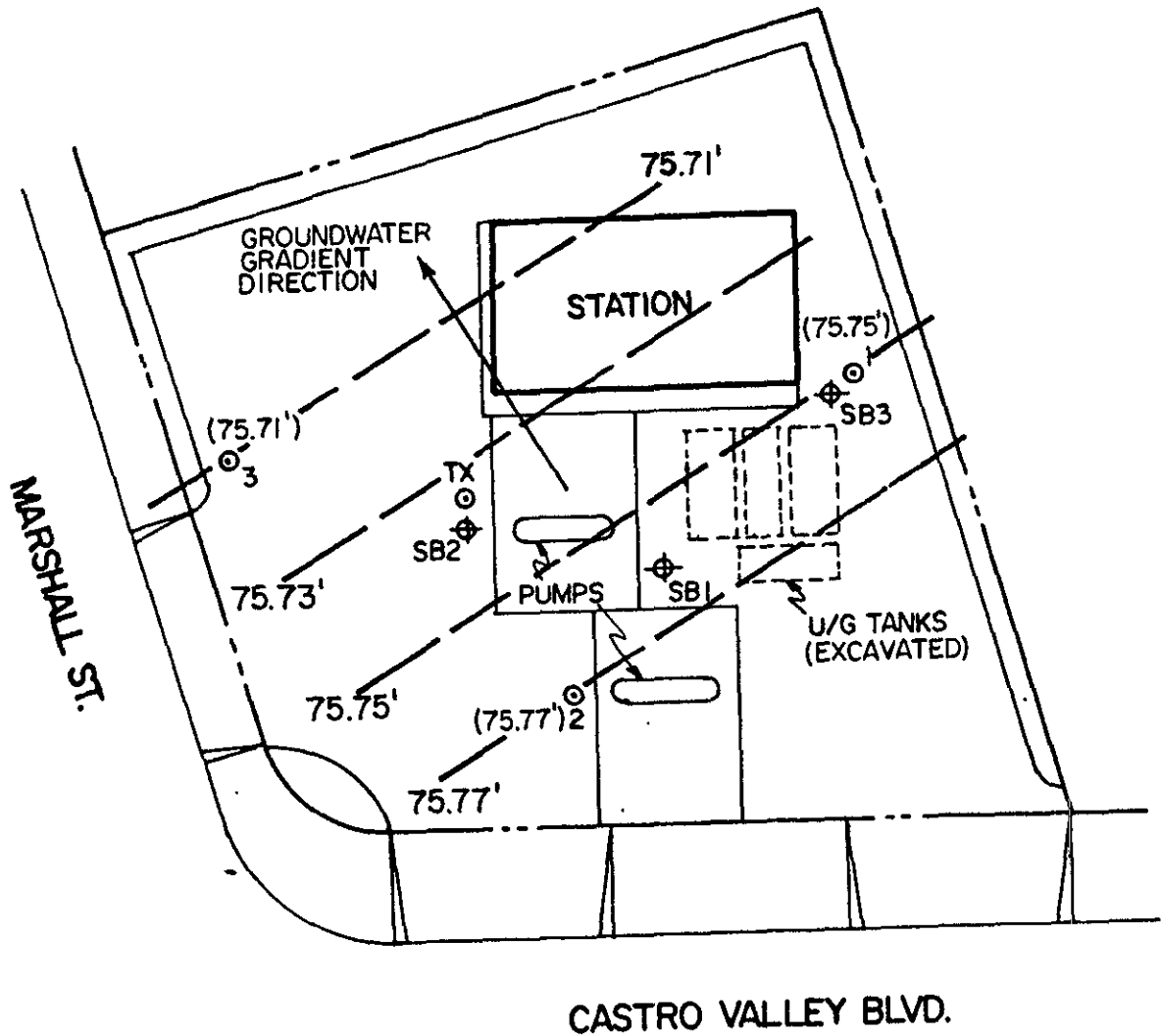
**GROUNDWATER
TECHNOLOGY, INC.**

increase of approximately 1.5 feet in well MW-3. Well TX remained dry during this period and was not available for sampling. As determined by the June 7, 1988 monitoring data, the groundwater flow across the site is to the north at a gradient of approximately 0.1 percent (Figure 1). The previous monitoring data, from December 1987, indicated a gradient of approximately 5 percent in a northwest direction.

GROUNDWATER SAMPLING AND ANALYSES

On June 7, 1988, groundwater samples were collected, subsequent to purging, from the three monitoring wells MW-1, MW-2, and MW-3 on site. Rinsate-blanks, containing a sample of the distilled rinsate water from the cleaned surface sampler, were collected prior to each sampling as part of a Quality Assurance/ Quality Control (QA/QC) Program. The water samples were placed in 40-milliliter glass vials with Teflon^R septum caps, then labeled and transported on ice to a state-certified laboratory and accompanied by a chain-of-custody manifest at all times. All well samples and a randomly chosen rinsate-blank (MW-2B) were analyzed using U.S. Environmental Protection Agency (EPA) Methods 5030/8015/8020 for total petroleum hydrocarbons (TPH)-as-gasoline with benzene, toluene, ethylbenzene, and xylenes distinctions (Appendix II).

A comparison of the December 1987 water sample analyses with the recent June 1988 results (Figure 2 and Table 1) shows a decrease in TPH-as-gasoline concentrations in well MW-1 from 2,100 parts per billion (ppb) to 290 ppb, and in well MW-2 from 2,400 ppb to 1,200 ppb. The June 1988 TPH-as-gasoline concentration in well MW-3 remained below Practical Quantitation Levels (PQL) as it was in December 1987.



LEGEND

- ⊙ MONITORING WELL
- ⊕ SOIL BORING
- - - GROUNDWATER CONTOUR
- () RELATIVE GROUNDWATER ELEVATION (FT.)

FIGURE 1
GROUNDWATER GRADIENT MAP
 6/7/88

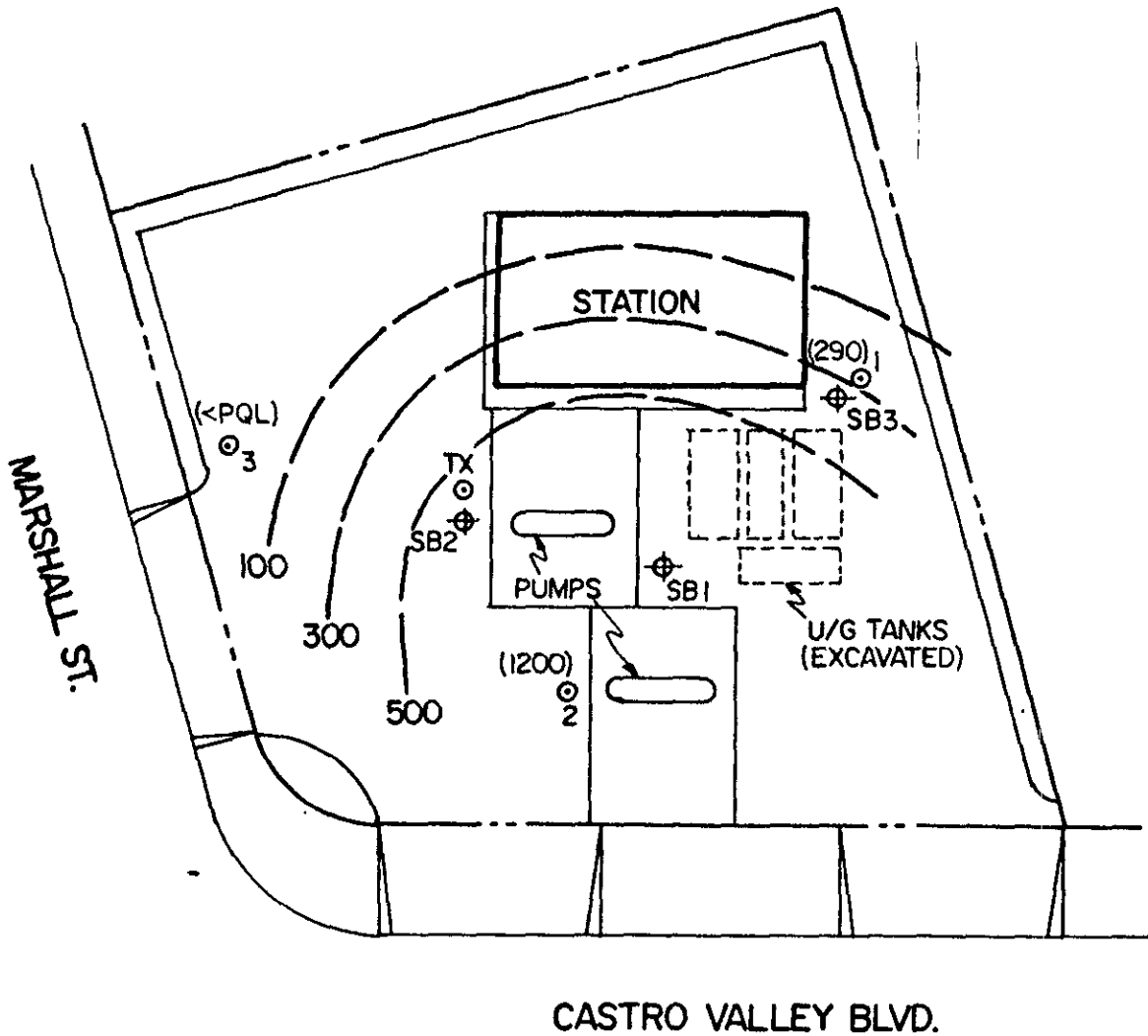


0 FEET 30



GROUNDWATER TECHNOLOGY

TEXACO REFINING & MARKETING INC.
CASTRO VALLEY, CALIFORNIA



LEGEND

- ⊙ MONITORING WELL
- ⊕ SOIL BORING
- () TPH CONCENTRATION IN WATER (ppb)
- CONCENTRATION CONTOUR

FIGURE 2
TPH-AS-GASOLINE CONCENTRATION MAP (ppb)
6/7/88



0 FEET 30



GROUNDWATER TECHNOLOGY

TEXACO REFINING & MARKETING INC.
CASTRO VALLEY, CALIFORNIA

TABLE 1
DISSOLVED TOTAL PETROLEUM HYDROCARBONS-AS-GASOLINE
CONCENTRATIONS (ppb)

December 1987 - June 1988

Date Sampled	MW ^a -1	MW-2	MW-3
12/30/87	2,100	2,400	<PQL ^b
06/07/88	290	1,200	<PQL

^aMW = Monitoring Well

^b<PQL = Less Than Practical Quantitation Levels

SUMMARY

The June 7, 1988 groundwater monitoring data indicated that the direction of groundwater flow at the site is to the north at a gradient of approximately 0.1 percent. The extent of subsurface hydrocarbons appears to be limited to the area of the former underground tanks and pump islands. The concentrations of dissolved hydrocarbons have decreased significantly since December 1987. Dissolved hydrocarbons were not detected in MW-3.

CLOSURE

We are pleased to have been of service to Texaco Refining and Marketing Inc. We trust this report provides the information needed at this time.

APPENDIX I

GROUNDWATER MONITORING DATA

PROJECT: TEXACO/CASTRO VALLEY
JOB NUMBER: 203 150 4080
DATE: JULY, 1988

		MW-1	MW-2	MW-3
DATE	ELEV. (FT)	99.10	99.60	96.80
12/30/87	DTW	21.82	22.30	22.60
	DTP	-	-	-
	PT	0	0	0
06/07/88	DTW	23.35	23.83	21.09
	DTP	-	-	-
	PT	0	0	0

DTW = Depth To Water
DTP = Depth To Product
PT = Product Thickness
ELEV = Relative Elevation of Well Head
MW = Monitoring Well
MD4080B

APPENDIX II
LABORATORY REPORT
AND
CHAIN-OF-CUSTODY MANIFEST

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

CLIENT: Jan Prasil
 Groundwater Technology, Inc.
 4080 Pike Lane
 Concord, CA 94520

PROJECT#: 203-199-4080-8

LOCATION: 3940 Castro Valley Road
 Castro Valley, CA

SAMPLED: 06/07/88 **BY:** J. Prasil
RECEIVED: 06/08/88 **BY:** J. Floro
ANALYZED: 06/15/88 **BY:** E. Popek

MATRIX: Water
UNITS: ppb

TEST RESULTS

COMPOUNDS	LAB #	24768	24769	24770	24771
	I.D.#	MW-1	MW-2	MW-2 B	MW-3
Benzene		37	220	<PQL	<PQL
Toluene		<PQL	<PQL	<PQL	<PQL
Ethylbenzene		<PQL	32	<PQL	<PQL
Xylenes		17	46	<PQL	<PQL
Total BTEX		54	300	<PQL	<PQL
Total Petroleum Hydrocarbons as Gasoline		290	1200	<PQL	<PQL

PQL = Less than Practical Quantitation Levels as per EPA Federal Register, November 13, 1985, p. 46906.
 Results rounded to two significant figures.
 METHOD:
 Modified EPA 5030/8020/8015.

Safy Khalifa /Emf
 SAFY KHALIFA, Ph.D., Director

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

PROJECT NO. 203 199 4080 - 8		SPECIFY ANALYSIS REQUESTED													
PROJECT NAME		GTI - Concord													
SAMPLE I.D. NUMBER	# OF CONTAINERS	WATER	SOIL	SED.	COMP	DATE	TIME	ACIDIFIED	ICED	EPA METHOD (Specify #s)	GASOLINE HYDROCARBONS BY BIEX	METALS	OTHER	SPECIAL DETECTION LIMIT	REMARKS
											<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
mw1	2	X				7/1/88	4:45	X	X		X				24768
mw1-Blank	1	X				7/1/88	4:45	X	X		Hold				hold (blank)
mw2	2	X				7/1/88	4:55	X	X		X				24769
mw2-Blank	1	X				7/1/88	4:55	X	X		X				24770
mw3	2	X				7/1/88	4:35	X	X		X				24771
mw3-Blank	1	X				7/1/88	4:35	X	X		Hold				hold (blank)
TRIP BLANK	1	X				7/1/88		X	X		Hold				hold (blank)



Western Region
 4080-C Pike Ln., Concord, CA 94520
 (415) 685-7852
 In CA: (800) 544-3422
 Outside CA: (800) 423-7143

Relinquished by:	Date	Time	Received by:	SPECIAL REPORTING REQUIREMENTS <input checked="" type="checkbox"/>
Jean Pratil	June 7	8:15 AM		(see attached)
Relinquished by:	Date	Time	Received by:	JOB SITE LOCATION: 3940 Castro Valley Rd. Castro Valley, CA L. Whitehead
				SAMPLER: SIGNATURE
Relinquished by:	Date	Time	Received by laboratory:	PROJECT MANAGER: Jean Pratil
	6/1/88	8:40		ADDRESS: GTI Concord
				PHONE NO. 671-2357