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TEXACO REFINING AND MARKETING INC. 100 CUTTING BOULEVARD RICHMOND CA 94804

February 14, 1989

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

Dear Mr. Zentner:

Enclosed is a copy of our hiannual status report dated February 1, 1989 for our former Texaco service station located at 3940 castro Valley Boulevard, fastro Valley, California. This report covers the period from June 7, 1988 through December 13, 1988.

Please call me at (415) 236-1770 if you have any questions.

Yours very truly,

R.R. ZIELINSKI

Field Environmental

Supervisor

RRZ:cz

Enclosure

cc: Mr. Craig Mayfield
Alameda County Flood Control
and Water Conservation District
Water Resources Management
Zone 7
5997 Parkside Drive

Pleasanton, CA 94566

RR

SGH 2/28/89

BV

BIANNUAL STATUS REPORT
FORMER TEXACO SERVICE STATION
3940 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA
FEBRUARY 1, 1989

GROUNDWATER TECHNOLOGY, INC. CONCORD, CALIFORNIA



BIANNUAL STATUS REPORT FORMER TEXACO SERVICE STATION 3940 CASTRO VALLEY BOULEVARD CASTRO VALLEY, CALIFORNIA FEBRUARY 1, 1989

Prepared for:

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GROUNDWATER

TECHNOLOGY, INC.

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BIANNUAL STATUS REPORT FORMER TEXACO SERVICE STATION 3940 CASTRO VALLEY BOULEVARD CASTRO VALLEY, CALIFORNIA FEBRUARY 1, 1989

INTRODUCTION

This report presents the results of the most recent biannual monitoring and sampling for the former Texaco service station site located at 3940 Castro Valley Boulevard, Castro Valley, California. The report covers the period from June 7, through December 13, 1988.

WORK PERFORMED

Monitoring and sampling of the site groundwater monitoring wells (MW) was conducted on December 13, 1988. The previous monitoring and sampling round was performed on June 7, 1988.

GROUNDWATER MONITORING AND GROUNDWATER GRADIENT

The depth to groundwater (DTW) was measured in each of the three available monitoring wells (MW-1, MW-2, MW-3) on December 13, 1988. These DTW measurements indicated that the water table was approximately 21- to 24-feet below grade. Well TX remained dry during this period and was not available for sampling. The water table elevations in December 1988 reflected a rise of approximately 0.2 foot since June 1988. The groundwater gradient



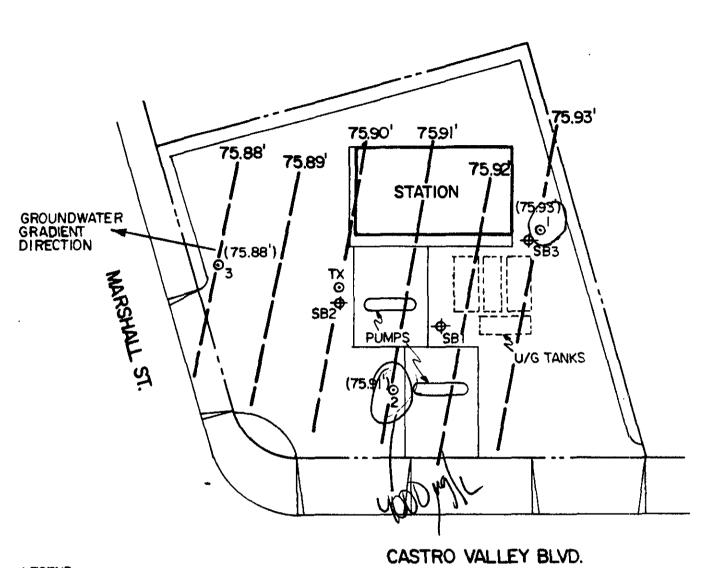
direction, as determined from the December 13, 1988 monitoring data, was to the northwest (Figure 1) at a gradient of 0.001 foot/foot (ft/ft). The previous monitoring data from June 7, 1988, indicated a gradient of 0.001 ft/ft in a northern direction, while the December 30, 1987 monitoring data indicated a north-northwest groundwater flow across the site at a gradient of approximately 0.047 ft/ft.

GROUNDWATER SAMPLING AND ANALYSES

Groundwater samples were collected from MW-1, MW-2 and MW-3 on December 13, 1988, for laboratory analysis. Prior to sampling, each well was purged a minimum of four well volumes with an acrylic bailer. Rinsate blanks containing a sample of a distilled-water rinsate from the cleaned surface sampler were collected prior to each sampling as part of a Quality Assurance/ Quality Control (QA/QC) program. The groundwater samples were placed in 40-milliliter glass vials with TeflonR septum caps, then labeled and transported on ice to a state-certified laboratory. The groundwater samples were accompanied by a Chain-of-Custody Manifest at all times. All groundwater samples, plus a randomly chosen rinsate blank (MW-3B), were analyzed using modified U.S. Environmental Protection Agency (EPA) Methods 5030/8020/8015 for total petroleum hydrocarbons (TPH)-as-gasoline with benzene, toluene, ethylbenzene, and xylenes (BTEX) distinctions (Appendix B).

The highest concentrations of dissolved hydrocarbons were found in the groundwater sample collected from MW-2, where 4,000 parts per billion (ppb) of TPH-as-gasoline and 890 ppb of BTEX were detected. The groundwater sample from MW-1 contained 370 ppb of TPH-as-gasoline and 30 ppb of BTEX. No hydrocarbons were





LEGEND

- **MONITORING WELL**
- SOIL BORING
- () GROUNDWATER ELEVATION
- _ _ GROUNDWATER CONTOUR

Figure 1. Groundwater Gradient Map-12/13/88

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detected at Practical Quantitation Levels (PQL) in MW-3. Figure 2 depicts the distribution of TPH-as-gasoline concentrations across the site.

A comparison of the June 1988 groundwater sample analyses with the December 1988 results shows that concentrations of TPH-as-gasoline slightly increased in MW-1 from 290 ppb to 370 ppb between June and December 1988 and increased in well MW-2 from 1,200 ppb to 4,000 ppb. As shown in Table 1, dissolved hydrocarbons in MW-3 have always been below PQL.

TABLE 1
DISSOLVED TOTAL PETROLEUM HYDROCARBONS
December 1987 - December 1988
parts per billion (ppb)

DATE SAMPLED	MW-1	MW-2	MW-3
12/30/87	2,100	2,400	<pql< th=""></pql<>
06/07/88	290	1,200	<pql< td=""></pql<>
12/13/88	370	4,000	<pql< td=""></pql<>

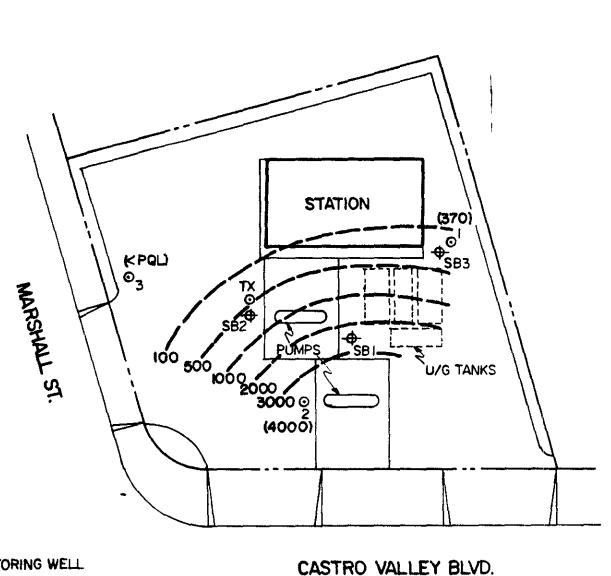
MW = Monitoring Well

<PQL = Less Than Practical Quantitation Levels

SUMMARY

The December 13, 1988 groundwater monitoring data indicate that the direction of groundwater flow across the site remains generally toward the north-northwest at a very shallow gradient (less than 0.001 ft/ft). Groundwater elevations rose slightly,

GROUNDWATER
TECHNOLOGY, INC.



LEGEND

- MONITORING WELL
- SOIL BORING
- () TPH-AS-GASOLINE CONCENTRATION (PPB)
- TPH CONTOUR
- <PQL LESS THAN PRACTICAL QUANTITATION LEVEL

Figure 2 - Dissolved Total Petroleum Hydrocarbon Concentration (ppb) 12/13/88

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compared with those monitored in June 1988. Concentrations of dissolved hydrocarbons increased slightly since June 1988. Dissolved hydrocarbons remain undetected at PQL in downgradient well MW-3.



APPENDIX A GROUNDWATER MONITORING DATA



PROJECT: TEXACO/CASTRO VALLEY

JOB NUMBER: 203 150 4080

DATE: DECEMBER 1987 - DECEMBER 1988

		MW-1	MW-2	MW-3
DATE	ELEV. (ft.)	99.10	99.60	96.80
12/30/87	DTW DTP PT	21.82 - 0	22.30	22.60 - 0
06/07/88	DTW DTP PT	23.35 - 0	23.83 - 0	21.09 - 0
12/13/88	DTW DTP PT	23.17 - 0	23.69 - 0	20.92

MW = Monitoring Well
ELEV. = Relative Elevation of Wellhead

DTW = Depth to Water (ft)
DTP = Depth to Product (ft)
PT = Product thickness (ft)



APPENDIX B ANALYTICAL RESULTS





Western Region

(415) 685-7852

12/27/88MT

WORK ORD#:8812178 CLIENT:

Jan Prasil

Groundwater Technology, Inc.

4080 Pike Lane Concord, CA 94520

PROJECT#: 203-199-4080-10

LOCATION: 3940 Castro Valey Blvd.

Page 1 of 1

Castro Valley, CA

SAMPLED: 12/13/88 BY: S. Kranyak RECEIVED: 12/14/88 BY: K. Biava ANALYZED: 12/20/88 BY: R. Condit

MATRIX: Water UNITS: ug/L (ppb)

TEST RESULTS

4080-C Pike Lane, Concord, CA 94520

(800) 544-3422 from inside California

(800) 423-7143 from outside California

BOOMETED	ISAMPLE # !	01A	02A I	03A	Ø4A I	1
PARAMETER		· MW-1	MM-5 1	MW-3	MW-3B 1	
Benzene		(30)	(640)	(POL	(PQL	
Toluene		(POL	23	(PQL	(PQL	
Ethylbenzene		(PQL	120	(PQL	(PQL	
Xylenes		(PQL	110	(PQL	(PQL	
Total BTEX		30	890	(PQL	(PQL	
Total Petroleum		370	4000	(PQL	(PQL	
Hydrocarbons as Gasoline	•)		

PQL = Less than Practical Quantitation Levels per EPA Federal Register, November 13, 1985, page 46906. Results rounded to two significant figures.

METHOD:

Modified EPA Method 5030/8020/8015

GTEL
Environmental
Laboratories D

4080-C Pike Lane Concord, CA 94520 415-485-7852

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

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