Texaco Refining
and Marketing Inc

108 Cutting Boulevard
Richmond CA 94804

August 4, 1994

ENV - STUDIES, SURVEYS, & REPORTS
2200 E. 12th Street
Oakland, California

Mr. Richard Hiett
CRWQCB - San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Dear Mr. Hiett:

This letter presents the results of groundwater monitoring and sampling conducted by Blaine Tech Services, Inc. on May 31, 1994, at the site referenced above (see Plate 1, Site Vicinity Map). Based on groundwater level measurements, the areal hydraulic gradient was estimated to be west-northwest (see Plate 2, Groundwater Gradient Map). TPHg and benzene concentrations are shown on Plate 3. Tables 1 and 2 list historical groundwater monitoring data and analytical results, respectively.

The certified analytical report, chain-of-custody, field data sheets, and bill of lading are in the Appendix. Blaine Tech Services' Field Procedures and Protocols Summary may be found in Texaco's first quarter, 1994 monitoring report.

If you have any questions or comments regarding this site, please call the Texaco Environmental Services' site Project Coordinator, Karen Petryna at (510) 236-9139.

Best Regards,

Rebecca B. Digerness
Groundwater Monitoring Coordinator

Karen E. Petryna
Engineer
Texaco Environmental Services

RBD:hs
P:\GWMP\QMR\2200E12\QMR.LET

Enclosures

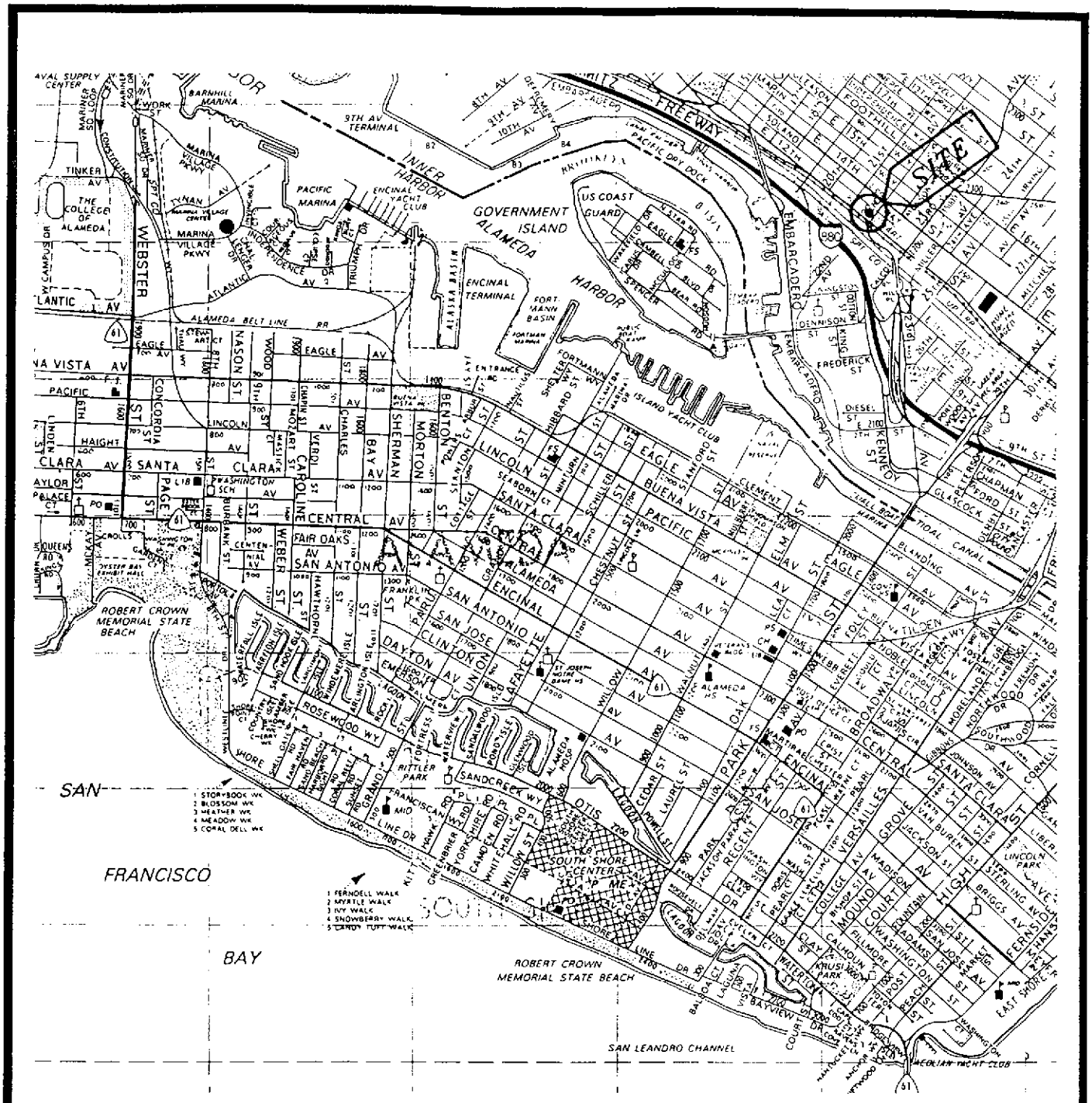
CC: Mr. Thomas Peacock
Alameda County Environmental
Health Department
80 Swan Way, Room 200
Oakland, CA 94621

Mr. Michael Faber
Exxon Company, U. S. A.
2300 Clayton Rd., Suite 1250
Concord, CA 94524

RAOFile-UCPFile (w/enclosures) RACoughlin -RRZielinski (w/o enclosures)

PR: KEP

Groundwater Monitoring and Sampling
Second Quarter, 1994
at the
Former Texaco Station
2200 East 12th Street
Oakland, CA



SOURCE:
1993 THE THOMAS GUIDE
ALAMEDA COUNTY, PAGE 11 (E1)

N

0 1/4 1/2 3/4 1
MILE
1" = 2200'

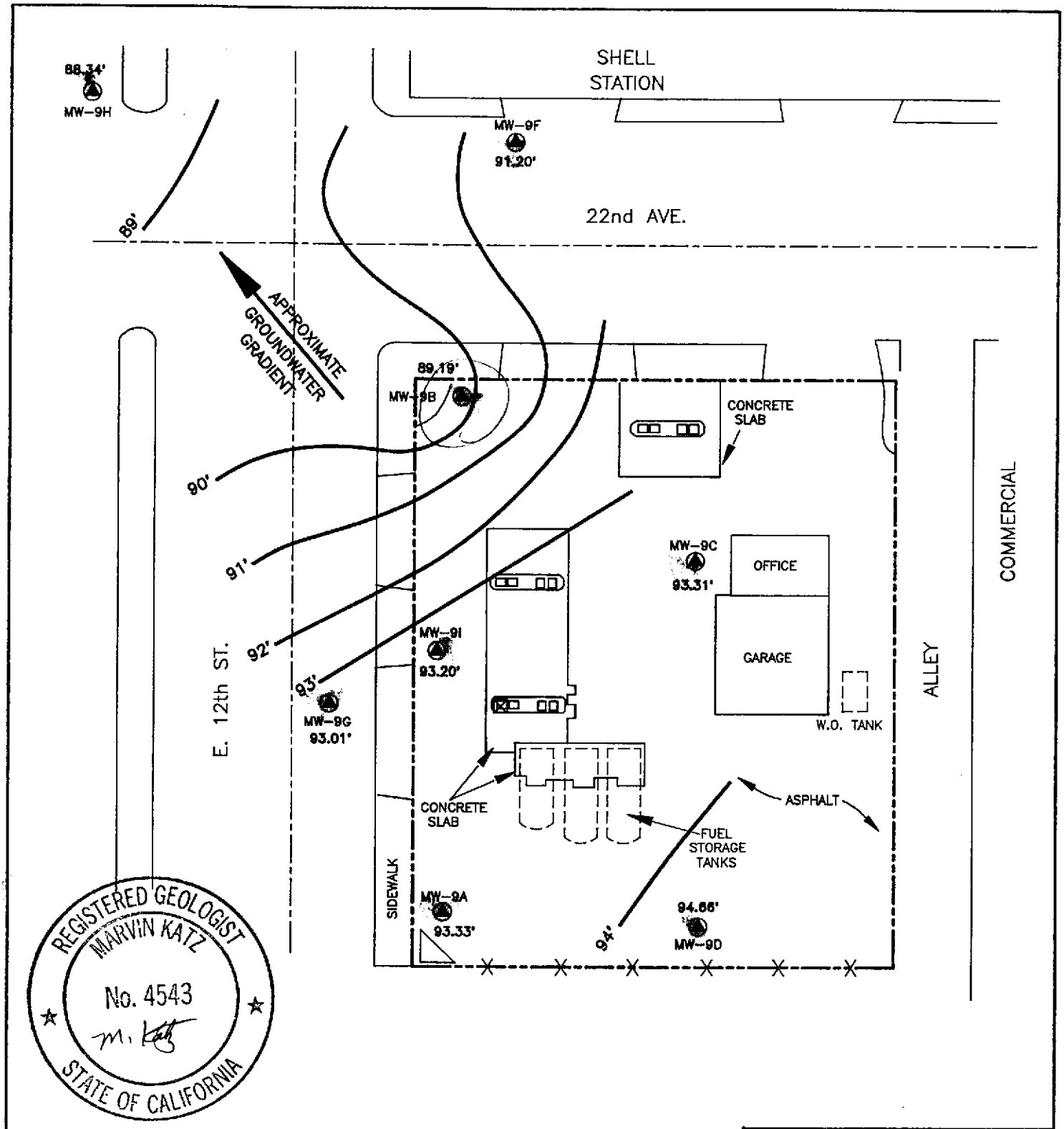
TEXACO
REFINING AND MARKETING, INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 1

SITE VICINITY MAP

FORMER TEXACO SERVICE STATION

2200 E. 12th ST. / 22nd AVE.,
OAKLAND, CALIFORNIA



REGISTERED GEOLOGIST
MARVIN KATZ
No. 4543
STATE OF CALIFORNIA

LEGEND :

MW-9A — MONITORING WELL LOCATION, AND WELL NUMBER

93.01' — GROUNDWATER CONTOUR LINE; GROUNDWATER ELEVATION (ABOVE MSL)

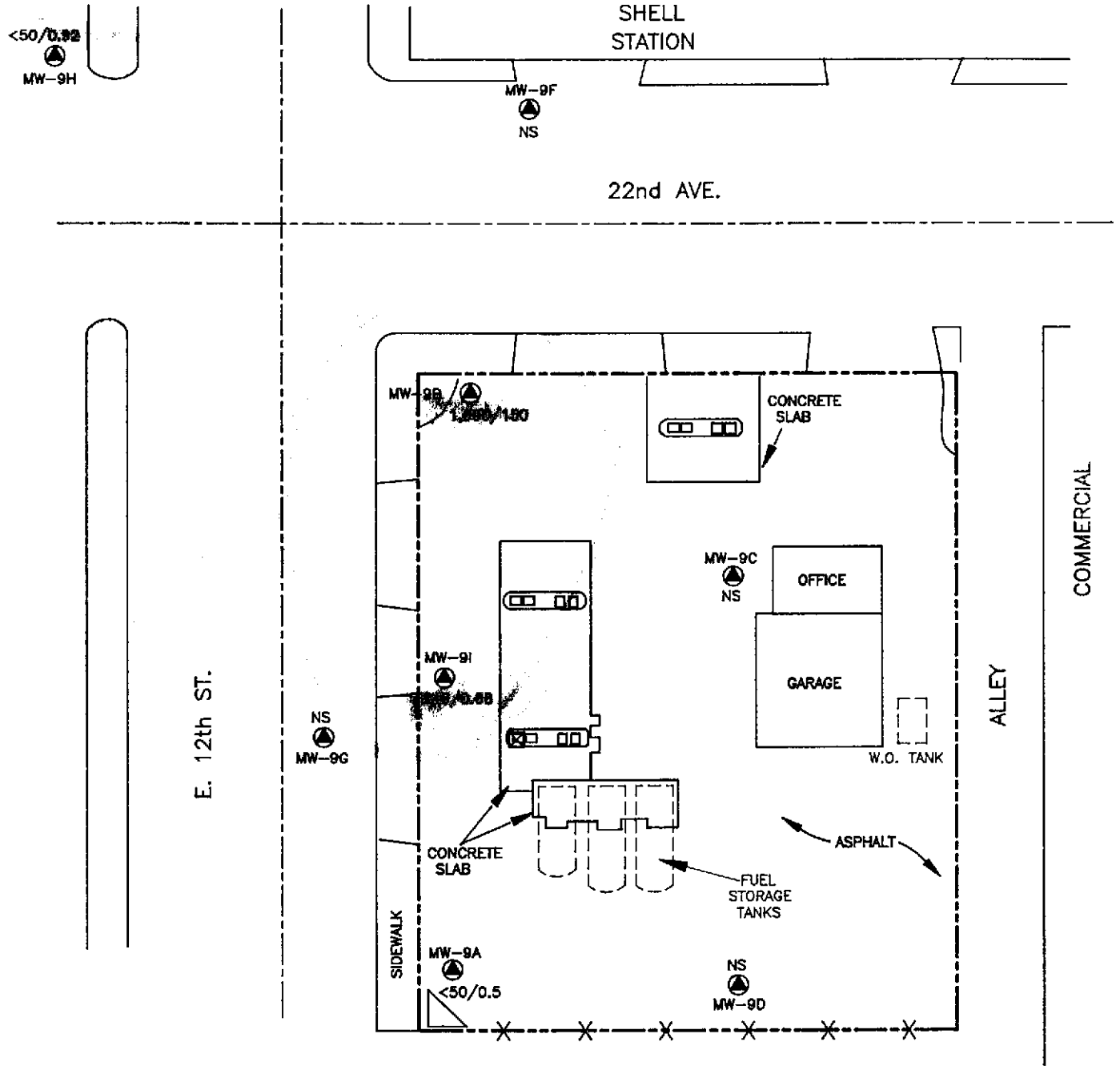
0 40
FEET

TEXACO
REFINING AND MARKETING,INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 2 : GROUNDWATER GRADIENT MAP
(05/31/1994)

FORMER TEXACO SERVICE STATION
2200 E. 12th ST. / 22nd AVE.,
OAKLAND, CALIFORNIA

SCALE	1"=40'-0"	LOCATION #	62-488-0068
DRAWN BY	AMA	DATE	07/21/1994
CHECKED BY	RBD	DATE	7/26/94
DRAWING NO.	(OAKLAND) 12-22-OK.DWG		



LEGEND :

MW-9A	MONITORING WELL LOCATION, AND WELL NUMBER
<50/0.5	TPHg/BENZENE CONCENTRATION IN GROUNDWATER (ppb)
NS	NOT SAMPLED

0 40

FEET

TEXACO
REFINING AND MARKETING,INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 3 : TPHg/BENZENE CONCENTRATION IN GROUNDWATER
(05/31/1994)

FORMER TEXACO SERVICE STATION

2200 E. 12th ST. / 22nd AVE.,
OAKLAND, CALIFORNIA

SCALE	1"=40'-0"	LOCATION #	62-488-0088
DRAWN BY	AMA	DATE	07/21/1994
CHECKED BY	RBD	DATE	7/26/94
DRAWING NO.	(OAKLAND) 12-22-OK.DWG		

Table 1
Groundwater Elevation Data
2200 East 12th Street
Oakland, CA

Well Number	Date Sampled	Elevation of Wellhead * (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)
MW-9A				
	10/12/89	100.07		
	2/5/92		6.93	93.14
	5/5/92		6.95	93.12
	9/14/92		7.65	92.42
	11/16/92		7.35	92.72
	2/3/93		7.85	92.22
	5/18/93		6.95	93.12
	8/26/93		7.14	92.93
	11/4/93		7.23	92.84
	2/4/94		6.70	93.37
	5/31/94		6.74	93.33
MW-9B				
	10/12/89	98.41		
	2/5/92		5.95	92.46
	5/5/92		5.92	92.49
	9/14/92		6.60	91.81
	11/16/92		6.35	92.06
	2/3/93		6.50	91.91
	5/18/93		6.42	91.99
	8/26/93		6.28	92.13
	11/4/93		6.23	92.18
	2/4/94		5.92	92.49
	5/31/94		9.22	89.19
MW-9C				
	10/12/89	99.73		
	2/5/92		6.44	93.29
	5/5/92		6.50	93.23
	9/14/92		7.00	92.73
	11/16/92		6.72	93.01
	2/3/93		5.75	93.98
	5/18/93		6.72	93.01
	8/26/93		6.84	92.89
	11/4/93		6.90	92.83
	2/4/94		6.28	93.45
	5/31/94		6.42	93.31

Table 1
Groundwater Elevation Data
2200 East 12th Street
Oakland, CA

Well Number	Date Sampled	Elevation of Wellhead* (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)
MW-9D				
	10/12/89	101.46		
	2/5/92		7.78	93.68
	5/5/92		7.90	93.56
	9/14/92		8.45	93.01
	11/16/92		8.10	93.36
	2/3/93		7.07	94.39
	5/18/93		7.85	93.61
	8/26/93		8.30	93.16
	11/4/93		8.33	93.13
	2/4/94		7.66	93.80
	5/31/94		6.80	94.66
MW-9E				
	10/12/89	98.41	5.70	92.71
	9/20/90		5.84	92.57
	10/19/90		5.78	92.63
	11/2/90			Well Abandoned
MW-9F				
	10/12/89	96.96		
	2/5/92		5.81	91.15
	5/5/92		5.86	91.10
	9/14/92			Not Measured
	11/16/92		5.82	91.14
	2/3/93		5.55	91.41
	5/18/93		5.86	91.10
	8/26/93		5.86	91.10
	11/5/93		5.96	91.00
	2/4/94		5.68	91.28
	5/31/94		5.76	91.20
MW-9G				
	10/12/89	98.51		
	2/5/92		5.59	92.92
	5/5/92		5.60	92.91
	9/14/92			Not Measured
	11/16/92		5.78	92.73
	2/3/93		5.05	93.46
	5/18/93		5.62	92.89
	8/26/93		5.86	92.65
	11/5/93		5.96	92.55
	2/4/94		5.48	93.03
	5/31/94		5.50	93.01

Table 1
Groundwater Elevation Data
2200 East 12th Street
Oakland, CA

Well Number	Date Sampled	Elevation of Wellhead* (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)
MW-9H				
	10/12/89	97.14		
	2/5/92		7.70	89.44
	5/5/92		8.12	89.02
	9/14/92			Not Measured
	11/16/92			Not Measured
	2/3/93		7.72	89.42
	5/18/93		8.12	89.02
	8/26/93		8.14	89.00
	11/5/93		8.15	88.99
	2/4/94		7.98	89.16
	5/31/94		8.80	88.34
MW-9I				
	11/15/90	98.66		
	2/5/92		5.56	93.10
	5/5/92		5.60	93.06
	9/14/92		6.12	92.54
	11/16/92		5.82	92.84
	2/3/93		4.92	93.74
	5/18/93		5.60	93.06
	8/26/93		5.91	92.75
	11/4/93		6.03	92.63
	2/4/94		5.37	93.29
	5/31/94		5.46	93.20

* = Elevation relative to temporary benchmark with an arbitrary elevation of 100.0 feet.
MSL = Mean Sea Level
TOC = Top of Casing

Table 2
Groundwater Analytical Data
2200 East 12th Street
Oakland, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-9A						
	2/5/92	<50	1.1	1.8	0.6	1.3
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5
	11/16/92	<50	1.1	<0.5	<0.5	<0.5
	2/3/93	140	17	19	1.6	20
	5/18/93	<50	0.8	<0.5	1.3	7
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5
	5/31/94	<50	<0.5	<0.5	<0.5	<0.5
MW-9B						
	2/5/92	60	14	<0.5	2.9	2.5
	5/5/92	620	180	2.4	8.4	2.2
	9/14/92	110	9.6	<0.5	<0.5	<0.5
	11/16/92	200	33	<0.5	4.2	1.4
	2/3/93	12,000	320	13	35	110
	5/18/93	180	1.1	<0.5	2.6	5.9
	8/26/93	180	36	<0.5	3	1.7
	11/4/93	98	13	<0.5	1.4	<0.5
	2/4/94	790	170	1.3	12	0.8
	5/31/94	1,000	150	2.5	8.0	2.1
MW-9C						
	2/5/92	<50	<0.5	<0.5	<0.5	<0.5
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5
	2/3/93	<50	<0.5	<0.5	<0.5	<0.5
	5/18/93	<50	<0.5	<0.5	<0.5	<0.5
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5
	5/31/94	Not Sampled				
MW-9D						
	2/5/92	<50	<0.5	<0.5	<0.5	<0.5
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5
	2/3/93	<50	<0.5	<0.5	<0.5	<0.5
	5/18/93	<50	<0.5	<0.5	<0.5	<0.5
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5
	5/31/94	Not Sampled				

Table 2
Groundwater Analytical Data
2200 East 12th Street
Oakland, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-9E						
	10/24/88	NA	1.3	<1.0	<2.0	<1.0
	10/13/89	NA	15	<0.5	2.1	<3.0
	10/19/90	<50	4	<0.5	0.9	<0.5
	11/2/90	Well Abandoned				
MW-9F						
	2/5/92	<50	<0.5	<0.5	<0.5	<0.5
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5
	9/14/92	Not Sampled				
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5
	2/3/93	<50	<0.5	<0.5	<0.5	<0.5
	5/19/93	<50	<0.5	<0.5	1.2	6.8
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5
	11/5/93	<50	<0.5	<0.5	<0.5	<0.5
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5
	5/31/94	Not Sampled				
MW-9G						
	2/5/92	<50	<0.5	<0.5	<0.5	<0.5
	5/5/92	<50	1.5	3.8	1	4.7
	9/14/92	Not Sampled				
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5
	2/3/93	64	<0.5	<0.5	<0.5	<0.5
	5/19/93	<50	<0.5	<0.5	<0.5	<0.5
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5
	11/5/93	<50	<0.5	<0.5	<0.5	<0.5
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5
	5/31/94	Not Sampled				
MW-9H						
	2/5/92	<50	<0.5	<0.5	<0.5	<0.5
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5
	9/14/92	Not Sampled				
	11/16/92	Not Sampled				
	2/3/93	280	<0.5	<0.5	<0.5	<0.5
	5/19/93	<50	<0.5	<0.5	1.1	6.4
	8/26/93	<50	0.8	<0.5	<0.5	<0.5
	11/5/93	<50	<0.5	<0.5	<0.5	<0.5
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5
	5/31/94	<50	0.92	1.1	<0.5	0.86

Table 2
Groundwater Analytical Data
2200 East 12th Street
Oakland, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-9I						
	2/5/92	<50	<0.5	<0.5	<0.5	<0.5
	5/5/92	<50	0.9	<0.5	<0.5	0.7
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5
	2/2/93	240	46	1.1	2.3	2.1
	5/18/93	79	<0.5	<0.5	<0.5	<0.5
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5
	5/31/94	[illegible]	[illegible]	0.63	<0.5	1.4
ppb	parts per billion					
TPHg	Total petroleum hydrocarbons analyzed as gasoline.					
<	Less than the detection limit for the specified method of analysis.					

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

ANALYTICAL REPORT

LOG NO: G94-06-019

Received: 01 JUN 94

Mailed: JUN 15 1994

Purchase Order: 94-1446346+4370

Requisition: AL;Partial Pymt
Project: FKEP1016L

Ms. Rebecca Digerness
Texaco Environmental Services
108 Cutting Boulevard
Richmond, CA 94804

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed	Dilution Factor Times 1	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L
RDL			1	50	0.5	0.5	0.5	0.5
1*MW-9A	05/31/94	06/10/94	1	<50	<0.5	<0.5	<0.5	<0.5
2*MW-9B	05/31/94	06/10/94	1	1000	150	2.5	3.0	2.1
3*MW-9H	05/31/94	06/10/94	1	<50	0.92	1.1	<0.5	0.86
4*MW-9I	05/31/94	06/10/94	1	240	0.66	0.63	<0.5	1.4
5*EB	05/31/94	06/09/94	1	<50	<0.5	<0.5	<0.5	<0.5
6*TB	05/31/94	06/09/94	1	<50	<0.5	0.97	<0.5	<0.5

624880088, KAREN PETRYNA
2200 E 12TH ST., OAKLAND

James C. Hein, Laboratory Director

AMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
406019*1	MW-9A	GAS.BTX.TESNC	06.10.94	8015M.TX	536-23	94522	8042
406019*2	MW-9B	GAS.BTX.TESNC	06.10.94	8015M.TX	536-23	94522	8042
406019*3	MW-9H	GAS.BTX.TESNC	06.10.94	8015M.TX	536-23	94522	8042
406019*4	MW-9I	GAS.BTX.TESNC	06.10.94	8015M.TX	536-23	94522	8042
406019*5	EB	GAS.BTX.TESNC	06.09.94	8015M.TX	536-23	94522	8042
406019*6	TB	GAS.BTX.TESNC	06.09.94	8015M.TX	536-23	94522	8042

**

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

ORDER QC REPORT: Definitions and Terms

Accuracy	The ability of a procedure to determine the "true" concentration of an analyte.
Precision	The reproducibility of a procedure demonstrated by the agreement between analyses performed on either duplicates of the same sample or a pair of duplicate spikes.
Batch	A group of twenty samples or less, of similar matrix type, prepped together or analyzed together if no sample preparation is required, under the same conditions and with the same reagents. The batch must include a method blank, LCS and matrix QC.
Laboratory Control Standard (LCS)	A blank that is spiked with a known amount of analyte and subjected to the same procedures as the samples. The LCS indicates the accuracy of the analytical method. It also serves to double-check the calibration because it is prepared from a different source than the standard used to calibrate the instrument.
Matrix QC	Quality control performed on actual client samples. The matrix spike is a client's sample spiked with a known amount of analyte. For most analyses, the laboratory performs matrix spikes in duplicate (duplicate spikes).
Method Blank	A sample that contains no analyte. For water analysis, organic-free or deionized water is used. For solids analysis, analyte-free solvent is used. The method blank serves to measure contamination associated with laboratory storage, preparation or instrumentation.
Batch Number	Numeric designation for a batch of samples and the associated QC. The batch number sequence is unique for each determination.
LC Result	Laboratory result of an LCS analysis.
LT Result	Expected result, or true value, of the LCS analysis.
Percent Recovery	The percentage of analyte recovered. For LCS, the percent recovery calculation is: $LC/LT \times 100$
LC1, LC2 Result	Result of analyzing two separately prepared LCSs; used to determine precision.
R1, R2 Result	Result of analyzing replicate aliquots of a sample, with R1 indicating the first analysis of the sample and R2 its corresponding duplicate; used to determine precision.
S1, S2 Result	Result of the analysis of replicate spiked aliquots, with S1 indicating one spike of the sample and S2 the second spike; used to determine precision and accuracy.
Relative Percent Difference (RPD)	Calculated using one of the following: $\frac{\lvert LC1 - LC2\rvert \times 100}{(LC1 + LC2) \div 2}$ $\frac{\lvert R1 - R2\rvert \times 100}{(R1 + R2) \div 2}$ $\frac{\lvert S1 - S2\rvert \times 100}{(S1 + S2) \div 2}$
S1, S2 Recovery	The percentage of analyte recovered. The percent recovery calculation is: S1 Recovery: $\frac{(S1 - R1) \times 100}{(True - R1)}$ S2 Recovery: $\frac{(S2 - R1) \times 100}{(True - R1)}$
True Value	The theoretical, or expected, result of a spike sample analysis.
NC Flag	Indicates that the spike recovery was not calculated due to high sample concentration relative to the amount of spike added.
Q Flag	Indicates that the quality control measurement is outside the specified control limits.
Blank Result	Laboratory result of analysis of the method blank.
Reporting Detection Limit (RDL)	BCA-assigned limit based on; but not the same as, method detection limits (MDLs) determined using EPA guidelines. Sample RDLs may differ from the blank RDL if the samples were diluted.

BC ANALYTICAL

ORDER QC REPORT FOR G9406019

ATE REPORTED : 06/15/94

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

ARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
. TPH-gas/BTEX (CADHS/80 C406964*1						
Date Analyzed	06.10.94	94522	06/10/94	06/10/94	Date	N/A
Benzene	06.10.94	94522	25.0	24.3	ug/L	103
Toluene	06.10.94	94522	92.1	90.0	ug/L	102
Ethylbenzene	06.10.94	94522	18.7	17.9	ug/L	104
Total Xylene Isomers	06.10.94	94522	107	110	ug/L	97
TPH-gas	06.10.94	94522	1520	1000	ug/L	152
. TPH-gas/BTEX (CADHS/80 C406965*1						
Date Analyzed	06.10.94	94522	06/10/94	06/10/94	Date	N/A
Benzene	06.10.94	94522	23.5	24.3	ug/L	97
Toluene	06.10.94	94522	86.7	90.0	ug/L	96
Ethylbenzene	06.10.94	94522	17.3	17.9	ug/L	97
Total Xylene Isomers	06.10.94	94522	102	110	ug/L	93
TPH-gas	06.10.94	94522	1280	1000	ug/L	128
. TPH-gas/BTEX (CADHS/80 C4061005*1						
Date Analyzed	06.10.94	94522	06/10/94	06/10/94	Date	N/A
Benzene	06.10.94	94522	23.5	24.3	ug/L	97
Toluene	06.10.94	94522	86.7	90.0	ug/L	96
Ethylbenzene	06.10.94	94522	17.3	17.9	ug/L	97
Total Xylene Isomers	06.10.94	94522	102	110	ug/L	93
TPH-gas	06.10.94	94522	1280	1000	ug/L	128

BC ANALYTICAL

ORDER QC REPORT FOR G9406019

ATE REPORTED : 06/15/94

ADDITIONAL LCS PRECISION (DUPLICATES)
BATCH QC REPORT

ARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	LC1 RESULT	LC2 RESULT	UNIT	RELATIVE % DIFF
. TPH-gas/BTEX (CADHS/80							
Date Analyzed		06.10.94	94522	06/10/94	06/10/94	Date	N/A
Benzene		06.10.94	94522	25.0	23.5	ug/L	6
Toluene		06.10.94	94522	92.1	86.7	ug/L	6
Ethylbenzene		06.10.94	94522	18.7	17.3	ug/L	8
Total Xylene Isomers		06.10.94	94522	107	102	ug/L	5
TPH-gas		06.10.94	94522	1520	1280	ug/L	17

BC ANALYTICAL

ORDER QC REPORT FOR G9406019

ATE REPORTED : 06/15/94

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

ARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
. TPH-gas/BTEX (CADHS/80 9406019*3							
Date Analyzed		06.10.94	94522	06/10/94	06/10/94	Date	N/A
Benzene		06.10.94	94522	23.2	22.1	ug/L	5
Toluene		06.10.94	94522	87.6	89.5	ug/L	2
Ethylbenzene		06.10.94	94522	17.6	17.8	ug/L	1
Total Xylene Isomers		06.10.94	94522	103	105	ug/L	2
TPH-gas		06.10.94	94522	1430	1080	ug/L	28 Q

BC ANALYTICAL

ORDER QC REPORT FOR G9406019

ATE REPORTED : 06/15/94

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

ARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
. TPH-gas/BTEX (CADHS/80 9406019*3							
Benzene		06.10.94	94522	92	87	25.2	ug/L
Toluene		06.10.94	94522	96	98	91.1	ug/L
Ethylbenzene		06.10.94	94522	98	99	17.9	ug/L
Total Xylene Isomers		06.10.94	94522	93	95	111	ug/L
TPH-gas		06.10.94	94522	143	108	1000	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9406019

ATE REPORTED : 06/15/94

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

ARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
. TPH-gas/BTEX (CADHS/80 B406685*1						
Date Analyzed	06.09.94	94522	06/09/94	NA	Date	8015M.TX
Benzene	06.09.94	94522	0	0.5	ug/L	8015M.TX
Toluene	06.09.94	94522	0	0.5	ug/L	8015M.TX
Ethylbenzene	06.09.94	94522	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	06.09.94	94522	0	0.5	ug/L	8015M.TX
TPH-gas	06.09.94	94522	0	50	ug/L	8015M.TX
. TPH-gas/BTEX (CADHS/80 B406713*1						
Date Analyzed	06.09.94	94522	06/09/94	NA	Date	8015M.TX
Benzene	06.09.94	94522	0	0.5	ug/L	8015M.TX
Toluene	06.09.94	94522	0	0.5	ug/L	8015M.TX
Ethylbenzene	06.09.94	94522	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	06.09.94	94522	0	0.5	ug/L	8015M.TX
TPH-gas	06.09.94	94522	0	50	ug/L	8015M.TX

SURROGATE SUMMARY :
BC ANALYTICAL : GLEN LAB : 13:56:04 15 JUN 1994 - P. 1 :

)ETERM	SUBDET	REPORTED	TRUE	%RECOVERY	FLAG
406019*1					
AS.BTX.TESNC	|a,a,a-TFTol.R	49.3	50.0	99	
406019*2					
AS.BTX.TESNC	|a,a,a-TFTol.R	37.1	50.0	74	
406019*3					
AS.BTX.TESNC	|a,a,a-TFTol.R	52.3	50.0	105	
406019*4					
AS.BTX.TESNC	|a,a,a-TFTol.R	49.8	50.0	100	
406019*5					
AS.BTX.TESNC	|a,a,a-TFTol.R	49.6	50.0	99	
406019*6					
AS.BTX.TESNC	|a,a,a-TFTol.R	51.4	50.0	103	

ETERM	SUBDET	REPORTED	TRUE	%RECOVERY	FLAG
406019*3*R1					
AS.BTX.TESNC	|a,a,a-TFTol.R	52.3	50.0	105	
406019*3*S1					
AS.BTX.TESNC	|a,a,a-TFTol.R	46.7	50.0	93	
406019*3*S2					
AS.BTX.TESNC	|a,a,a-TFTol.R	45.5	50.0	91	
406019*3*T					
AS.BTX.TESNC	|a,a,a-TFTol.R	50.0	50.0	100	

BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

CHAIN OF CUSTODY 940531-E1

CLIENT Texaco Environmental Services

SITE Location # 6240800088

2200 E 12th ST.

Oakland, Ca.

CONDUCT ANALYSIS TO DETECT

LAB BC Analytical DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

☐ EPA ☐ RWQCB REGION ____
☐ LIA
☐ OTHER

EA94-06-019

SPECIAL INSTRUCTIONS

Report & Invoice to:
Texaco Environmental Services
108 Cutting Blvd.
Richmond, CA 94804
ATTN: Rebecca Digerness
(510) 236-3541

SAMPLE I.D.	DATE	TIME	MATRIX S = SOIL W = H2O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	TPH-G, BTEX	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
W-9A	5/31/94	1225	W	3	X	X -1				
W-9B		1350				-2				
W-9H		1255				-3				
W-9I		1330				-4				
EB		1235				-5				
TB		—		2		-6				

SAMPLING COMPLETED DATE 5/31/94 TIME 1350

SAMPLING PERFORMED BY Kent Brown

RESULTS NEEDED NO LATER THAN Per Contract

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Kent Brown	5/31/94	1420	Bill Lyons	6-1-94	120
Bill Lyons	6-1-94	3:25	Maria Adriano	6-1-94	1530

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

WELL GAUGING DATA

Project # 940531-E1 Date 5/31/94 Client 624880088

Site 2200 E 12th Street Oakland, Ca.

Well I.D.	Well Size (in.)	Sheen/ Odor	Depth to Immiscible Liquid (feet)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to Water (feet)	Depth to Well Bottom (feet)	Survey Point: TOB or TOC
MW-9A	2"					6.74	17.58	TOC
MW-9B	2"					9.22	17.66	
MW-9C	2"					6.42	16.08	
MW-9D	4"					6.80	14.38	
MW-9F	4"					5.76	13.74	
MW-9G	4"					5.50	14.08	
MW-9H	4"					8.80	13.60	
MW-9I	4"					5.46	13.92	↓

TEXACO WELL MONITORING DATA SHEET

Project #: 94053I-E1	Facility # 6248800088
Sampler: VEB	Date Sampled: 5/31/94
Well I.D.: MW-9A	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 17.58 After	Depth to Water: Before 6.44 After
Depth to Free Product:	Thickness of Free Product (inches):
Measurements referenced to: (PVC) Grade	Other --

1.7 (1 Case Volume) x 3 (Specified Volumes) = 5.2 gallons

Purging: Bailer — B/S Dedicated
Middleburg
Electric Submersible
Suction Pump
Type of Installed Pump ____

Sampling: Bailer — B/S Dedicated
Middleburg
Electric Submersible
Suction Pump
Installed Pump

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1214	71.0	8.4	830	>200	2.	
1219	69.6	7.4	900	>200	4.	
1224	70.2	7.0	860	>200	6.	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6

Sampling Time: 1225

Sample I.D.: MW-9A Laboratory: BC

Analyzed for: TPH-G, BTEX

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Wellhead Condition: SECURE? (Yes) No If No explain:

Wellhead Maintenance Performed:

TEXACO WELL MONITORING DATA SHEET

Project #: 940531-E1	Facility # 624/880088
Sampler: KEB	Date Sampled: 5/31/94
Well I.D.: MW-9B	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 17.66 After	Depth to Water: Before 9.22 After
Depth to Free Product:	Thickness of Free Product (inches):
Measurements referenced to: (PVC) Grade Other --	

1.4	x	3	=	4.1
1 Case Volume		Specified Volumes		gallons

Purging: Bailer✓ Middleburg Electric Submersible Suction Pump Type of Installed Pump _____

Sampling: Bailer✓ Middleburg Electric Submersible Suction Pump Installed Pump

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1341	72.2	6.0	1000	7200.	1.5	STRONG ODOR
1343	72.0	6.2	1000	7200	3.0	
1345	71.6	6.2	1000	7200	4.5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 4.5

Sampling Time: 1350

Sample I.D.: MW9B Laboratory: BC

Analyzed for: TPH-G, BTEX

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Wellhead Condition: SECURE? (Yes) No If No explain:

Wellhead Maintenance Performed:

TEXACO WELL MONITORING DATA SHEET

Project #: 940531-E1	Facility # 624880088
Sampler: KEB	Date Sampled: 5/31/94
Well I.D.: MW-9H	Well Diameter: (circle one) 2 3 (4) 6 ____
Total Well Depth: Before 13.60 After	Depth to Water: Before 8.80 After
Depth to Free Product:	Thickness of Free Product (inches):
Measurements referenced to: (PVC) Grade	Other --

3.1	x	3	=	9.3
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Middleburg
Electric Submersible ✓
Suction Pump
Type of Installed Pump _____

Sampling: Bailer ✓
Middleburg
Electric Submersible
Suction Pump
Installed Pump

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1247	75.2	7.0	1200	38.8	3.5	
1249	73.0	6.6	610	29.5	7.0	
1251	72.8	6.6	630	26.6	9.6	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 9.5

Sampling Time: 1255

Sample I.D.: MW-9H Laboratory: BC

Analyzed for: TPH-G, BTEX

Duplicate I.D.: Cleaning Blank I.D.: EB After MW9H

Analyzed for: 1235 TPH-G, BTEX

Wellhead Condition: SECURE? (Yes) No If No explain:

Wellhead Maintenance Performed:

TEXACO WELL MONITORING DATA SHEET

Project #: 94053I-E1	Facility # 6248800888
Sampler: KEB	Date Sampled: 5/31/94
Well I.D.: MW-9I	Well Diameter: (circle one) 2 3 (4) 6 ____
Total Well Depth: Before 13.92 After	Depth to Water: Before 5.46 After
Depth to Free Product:	Thickness of Free Product (inches):
Measurements referenced to: (PVC) Grade Other --	

8.5	x	3	=	25.38
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Middleburg
Electric Submersible ✓
Suction Pump
Type of Installed Pump _____

Sampling: Bailer ✓
Middleburg
Electric Submersible
Suction Pump
Installed Pump

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1320	78.8	6.4	600	79.2	9.	
1323	76.8	6.0	1400	8.10	18	
1326	74.4	6.0	1400	4.60	25.5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 25.5

Sampling Time: 1330

Sample I.D.: MW9I Laboratory: BC

Analyzed for: TPH6, BTEX

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Wellhead Condition: SECURE? (Yes) No If No explain:

Wellhead Maintenance Performed:

TEXACO TYPE **A** BILL OF LADING

SOURCE RECORD BILL OF LADING

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT TEXACO FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGEWATER WHICH HAS BEEN RECOVERED FROM GROUNDWATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED TO THE DESTINATION DESIGNATED BY TEXACO ENVIRONMENTAL SERVICES (TES).

The contractor performing this work is BLAINE TECH SERVICES, INC., 985 Timothy Drive, San Jose, CA 95133 (phone [408] 995-5535). Blaine Tech Services, Inc. is authorized by TEXACO ENVIRONMENTAL SERVICES to recover, collect, apportion into loads, and haul the Non-Hazardous Well Purgewater that is drawn from wells at the TEXACO facility indicated below and to deliver that purgewater to an appropriate destination designated by TEXACO ENVIRONMENTAL SERVICES in either Redwood City, California or in Richmond, California. Transport routing of the Non-Hazardous Well Purgewater may be direct from one Texaco facility to the designated destination point; from one Texaco facility to the designated destination point via another Texaco facility; from a Texaco facility to the designated destination point via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of Texaco Environmental Services (TES).

This Source Record **BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Texaco facility described below:

TEXACO # 6248800888

street number	street name	city	state
2200 E.	12th St.	Oakland,	Ca.

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-9A	6		
MW-9B	4.5		
MW-9H	9.5		
MW-9I	25.5		

added equip. rinse water 10.0

any other adjustments

TOTAL GALS. RECOVERED 55.5

loaded onto BTS vehicle #

BTS event # 94 05 31 E1 time 1600 date 5/31/94

signature Brent E. Brown

* *

REC'D AT BTS time 1600 date 5/31/94

unloaded by signature Brent E. Brown