Texaco Refining and Marketing Inc
108 Cutting Boulevard
Richmond CA 94804

94 AUG -5

August 3, 1994

ENV - STUDIES, SURVEYS, & REPORTS
1127 Lincoln Avenue
Alameda, California

Ms. Juliet Shin
Alameda County Environmental
Health Department
80 Swan Way, Room 200
Oakland, CA 94621

Dear Ms. Shin:

This letter presents the results of groundwater monitoring and sampling conducted by Blaine Tech Services, Inc. on May 20, 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 northeast (see Plate 2, Groundwater Gradient Map). The gradient map has been reviewed by a registered professional. 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, Ms. Karen Petryna at (510) 236-9139.

Best Regards,

Rebecca B. Digerness
Groundwater Monitoring Coordinator

Karen E Petryna
Engineer
Texaco Environmental Services

RBD hs

C \QMR\1127L\QMR let

Enclosures

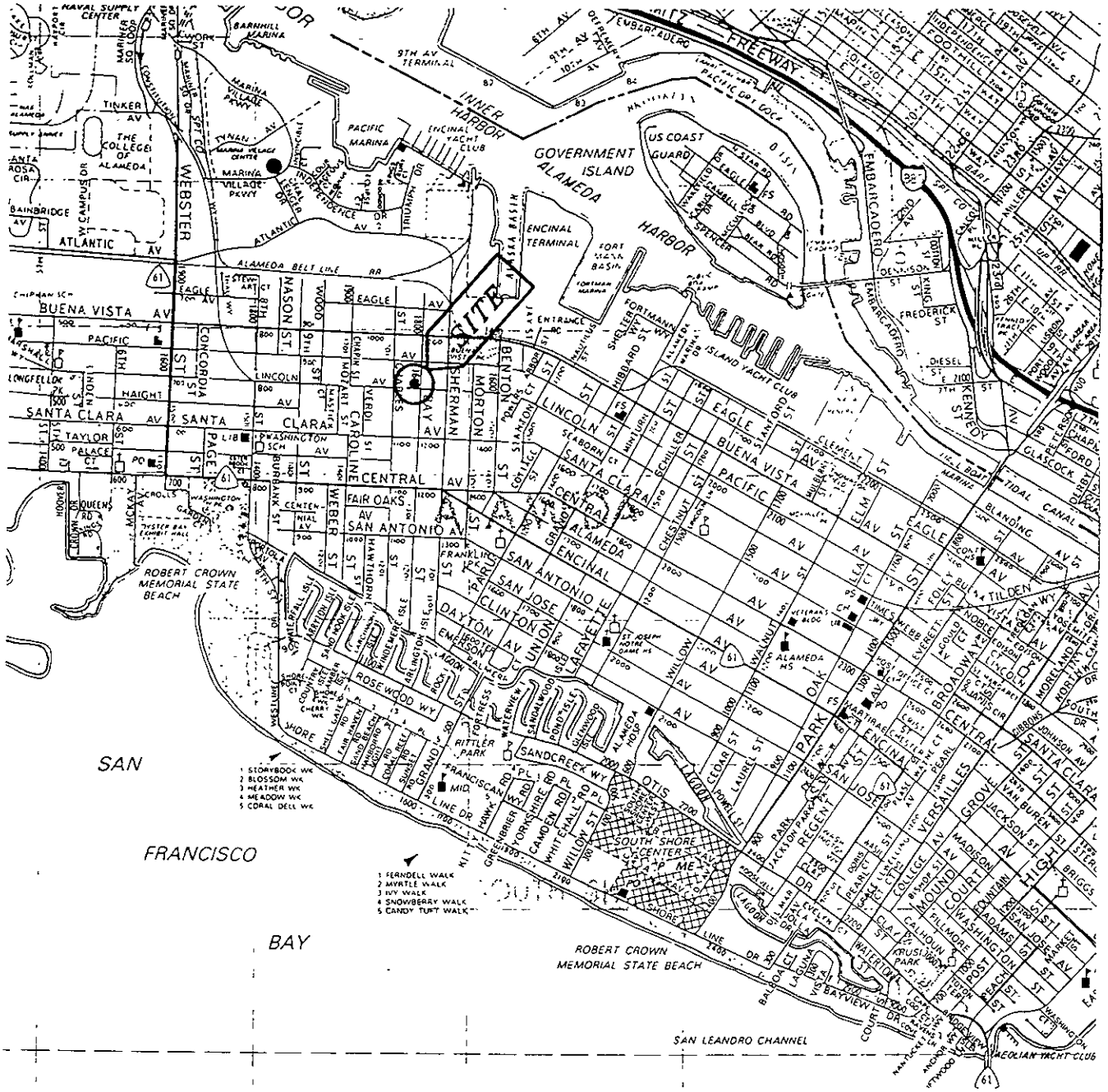
CC: Mr. Richard Hiett
CRWQCB - San Francisco Bay Region
2101 Webster St., Suite 500
Oakland, CA 94621

Mr. Leo Pagano
1127 Lincoln Avenue
Alameda, CA

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

PR: KEP

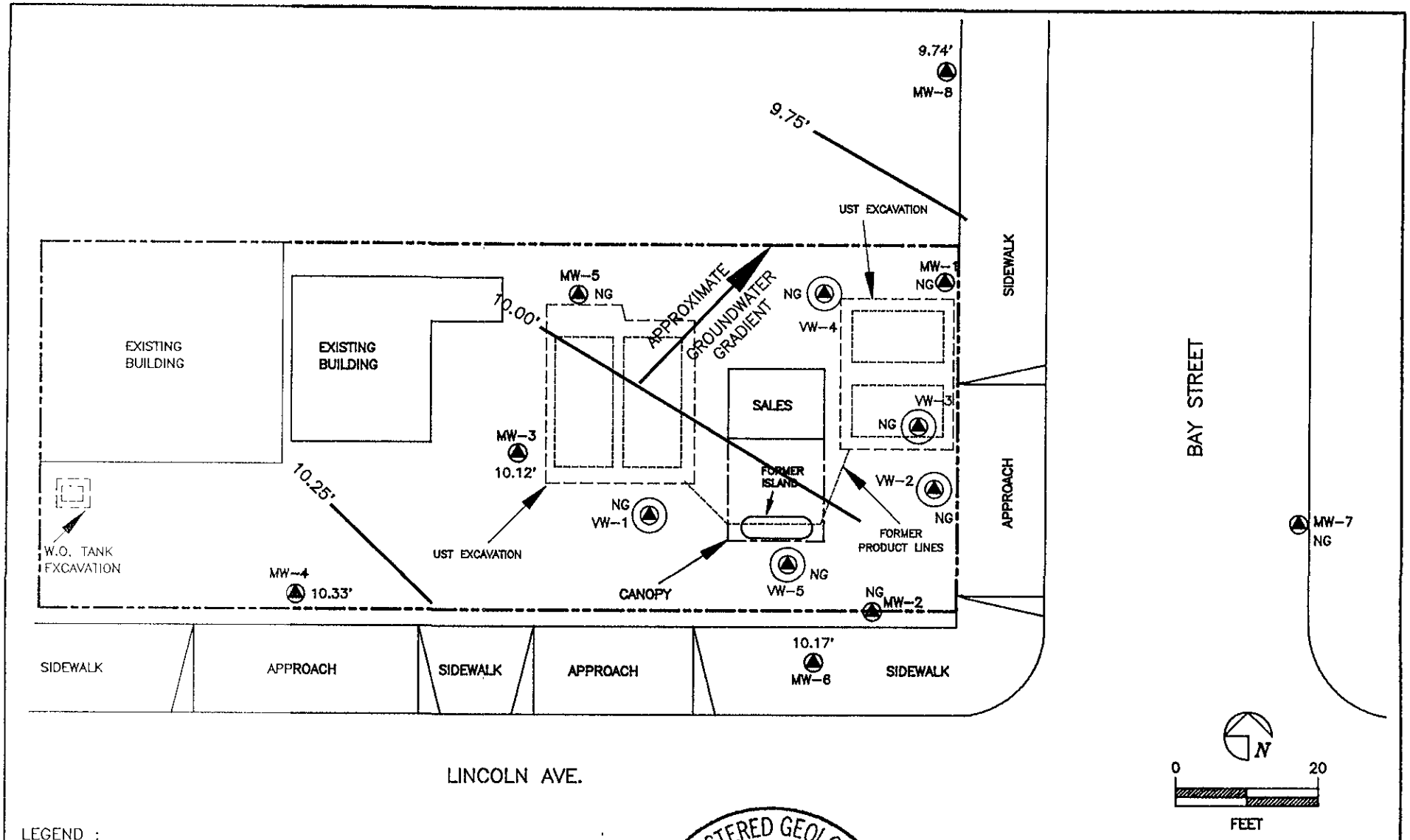
GROUNDWATER MONITORING AND SAMPLING
Second Quarter, 1994
at the
Former Texaco Station
1127 Lincoln Avenue
Alameda, California



SOURCE

1993 THE THOMAS GUIDE

TEXACO



LEGEND :

MW-1	MONITORING WELL LOCATION AND WELL NUMBER
VW-1	VAPOR EXTRACTION MONITORING WELL LOCATION AND WELL NUMBER
10.17'	GROUNDWATER CONTOUR LINE / GROUNDWATER ELEVATION (ABOVE MSL)
NG	WELL NOT GAUGED

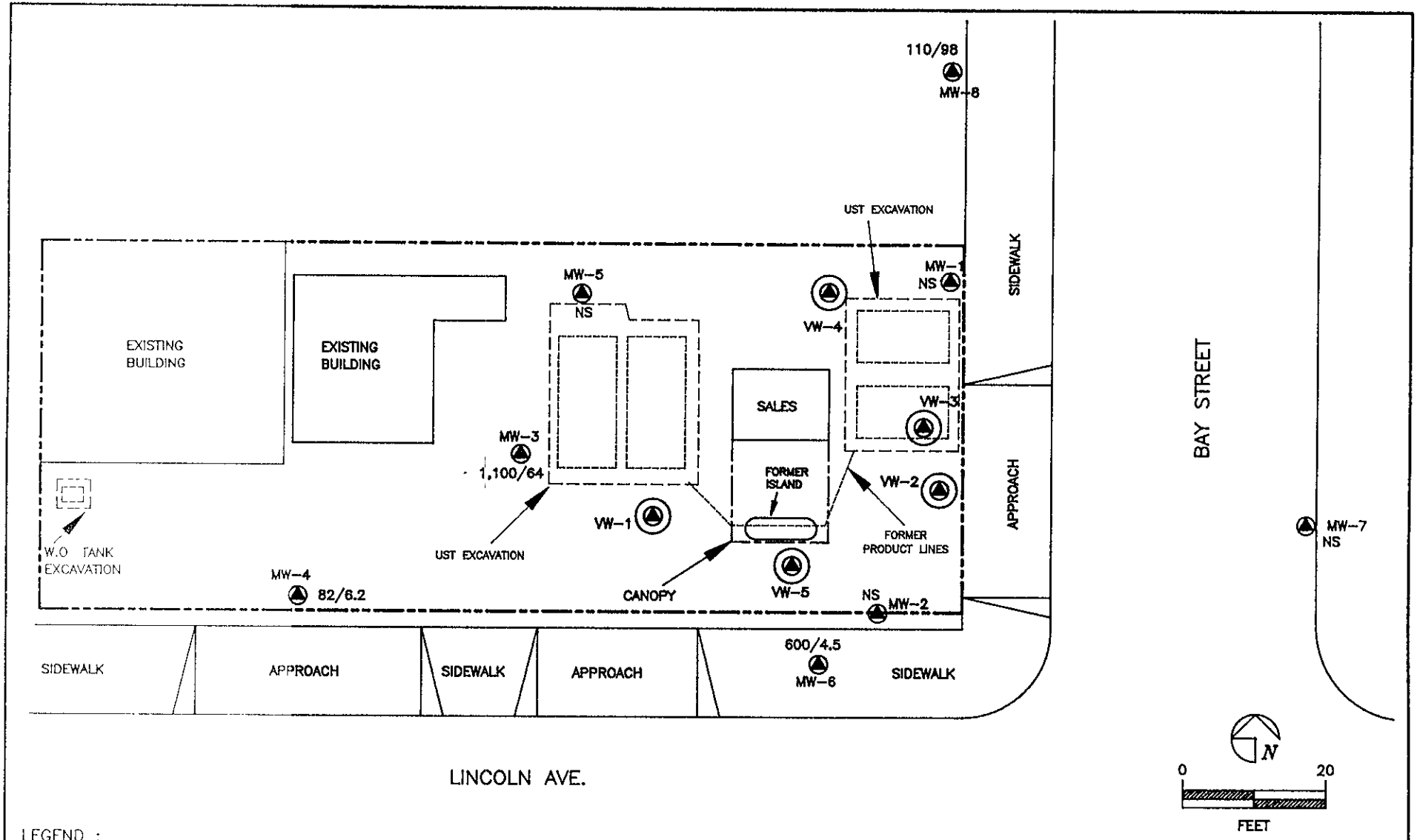
REGISTERED GEOLOGIST
MARVIN KATZ
No. 4543
STATE OF CALIFORNIA

TEXACO
REFINING AND MARKETING,INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 2 : GROUNDWATER GRADIENT MAP
(05/20/1994)

FORMER TEXACO SERVICE STATION
1127 LINCOLN AVE. / BAY ST.,
ALAMEDA, CALIFORNIA

SCALE	1"=20'-0"	LOCATION #	62-486-1450
DRAWN BY	AMA	DATE	07/21/1994
CHECKED BY	MK	DATE	7/26/94
DRAWING NO.	(ALAMEDA) LI-BY-AL.DWG		



LEGEND :

MW-1	MONITORING WELL LOCATION AND WELL NUMBER
VW-1	VAPOR EXTRACTION MONITORING WELL LOCATION AND WELL NUMBER
82/6.2	TPHg/BENZENE CONCENTRATION IN GROUNDWATER (ppb)
NS	WELL NOT SAMPLED

TEXACO
REFINING AND MARKETING,INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 3 : TPHg/BENZENE CONCENTRATION IN GROUNDWATER
(05/20/1994)

FORMER TEXACO SERVICE STATION

1127 LINCOLN AVE. / BAY ST.,
ALAMEDA, CALIFORNIA

SCALE	1"=20'-0"	LOCATION #	62-486-1450
DRAWN BY	AMA	DATE	07/21/1994
CHECKED BY	RJD	DATE	7/26/94
DRAWING NO.	(ALAMEDA) LI-BY-AL.DWG		

Table 1
Groundwater Elevation Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Gauged	Elevation of Wellhead (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-1	2/19/92	16.49	6.34	10.15
	6/25/92		7.60	8.89
	9/16/92		8.95	7.54
	11/17/92		9.10	7.39
	1/26/93		5.63	10.86
	2/4/93		6.02	10.47
	3/9/93		5.92	10.57
	5/6/93		6.76	9.73
	6/15/93		6.81	9.68
	7/26/93	Inaccessible - VES		
	8/31/93	Inaccessible - VES		
	9/27/93	Inaccessible - VES		
	10/19/93	Inaccessible - VES		
	11/15/93	Inaccessible - VES		
	12/17/93	Inaccessible - VES		
	2/7/94	Inaccessible - VES		
	5/20/94	Inaccessible - VES		
MW-2	2/19/92	17.14	6.96	10.18
	6/25/92		7.95	9.19
	9/16/92		9.16	7.98
	11/17/92		9.40	7.74
	1/26/93		6.29	10.85
	2/4/93		6.60	10.54
	3/9/93		6.36	10.78
	5/6/93		6.37	10.77
	6/15/93		7.04	10.10
	7/26/93	Inaccessible - VES		
	8/31/93	Inaccessible - VES		
	9/27/93	Inaccessible - VES		
	10/19/93	Inaccessible - VES		
	11/15/93	Inaccessible - VES		
	12/17/93	Inaccessible - VES		
	2/7/94	Inaccessible - VES		
	5/20/94	Inaccessible - VES		

Table 1
Groundwater Elevation Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Gauged	Elevation of Wellhead (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-3	2/19/92	16.91	6.69	10.22
	6/25/92		7.78	9.13
	9/16/92		9.24	7.67
	11/17/92		9.50	7.41
	1/26/93		5.82	11.09
	2/4/93		6.01	10.90
	3/9/93		5.88	11.03
	5/6/93		6.38	10.53
	6/15/93	Inaccessible		
	7/26/93		7.22	9.69
	8/31/93		7.87	9.04
	9/27/93		8.58	8.33
	10/19/93		9.13	7.78
	11/15/93		8.84	8.07
	12/17/93		7.80	9.11
	2/7/94		8.43	8.48
	5/20/94		6.79	10.12
MW-4	6/25/92	17.18	7.92	9.26
	9/16/92		9.40	7.78
	11/17/92		9.63	7.55
	1/26/93		5.91	11.27
	2/4/93		6.14	11.04
	3/9/93		5.81	11.37
	5/6/93		6.49	10.69
	6/15/93		6.34	10.84
	7/26/93		7.29	9.89
	8/31/93		8.02	9.16
	9/27/93	Inaccessible - Car On Well		
	10/19/93		9.14	8.04
	11/15/93		9.01	8.17
	12/17/93		7.91	9.27
	2/7/94		8.02	9.16
	5/20/94		6.85	10.33

Table 1
Groundwater Elevation Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Gauged	Elevation of Wellhead (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-5	6/25/92	16.37	7.35	9.02
	9/16/92		8.85	7.52
	11/17/92		9.03	7.34
	1/26/93	Not Monitored		
	2/4/93	Inaccessible		
	3/9/93		5.45	10.92
	5/6/93		6.00	10.37
	6/15/93		7.81	8.56
	7/26/93	Inaccessible - VES		
	8/31/93	Inaccessible - VES		
	9/27/93	Inaccessible - VES		
	10/19/93	Inaccessible - VES		
	11/15/93	Inaccessible - VES		
	12/17/93	Inaccessible - VES		
	2/7/94	Inaccessible - VES		
	5/20/94	Inaccessible - VES		
MW-6	6/25/92	17.12	7.86	9.26
	9/16/92		9.12	8.00
	11/17/92		9.40	7.72
	1/26/93		6.63	10.49
	2/4/93		6.48	10.64
	3/9/93		6.68	10.44
	5/6/93		6.93	10.19
	6/15/93		7.00	10.12
	7/26/93		7.25	9.87
	8/31/93		7.83	9.29
	9/27/93		8.38	8.74
	10/19/93		8.76	8.36
	11/15/93		8.65	8.47
	12/17/93		7.78	9.34
	2/7/94		7.90	9.22
	5/20/94		6.95	10.17

Table 1
Groundwater Elevation Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Gauged	Elevation of Wellhead (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-7	6/25/92	16.71	7.61	9.10
	9/16/92		8.78	7.93
	11/17/92	Inaccessible		
	1/26/93		6.53	10.18
	2/4/93		6.40	10.31
	3/9/93		6.52	10.19
	5/6/93	Inaccessible		
	6/15/93		6.69	10.02
	7/26/93	Inaccessible		
	8/31/93	Inaccessible		
	9/27/93		7.97	8.74
	10/19/93		8.24	8.47
	11/15/93		8.22	8.49
	12/17/94	Inaccessible		
	2/7/94	Inaccessible		
	5/20/94	Inaccessible		
MW-8	6/25/92	15.91	7.20	8.71
	9/16/92		8.60	7.31
	11/17/92		8.85	7.06
	1/26/93		5.30	10.61
	2/4/93		5.62	10.29
	3/9/93		5.56	10.35
	5/6/93		5.99	9.92
	6/15/93		6.32	9.59
	7/26/93		6.75	9.16
	8/31/93		7.35	8.56
	9/27/93		7.86	8.05
	10/19/93		8.27	7.64
	11/15/93		8.17	7.74
	12/17/93		7.14	8.77
	2/7/94		7.26	8.65
	5/20/94		6.17	9.74

Table 1
Groundwater Elevation Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Gauged	Elevation of Wellhead (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
VW-1	2/19/92	16.83	Dry	Dry
	6/25/92		7.36	9.47
	9/16/92	Not Monitored		
	11/17/92	Not Monitored		
	1/26/93	Not Monitored		
	2/4/93	Not Monitored		
	3/9/93	Not Monitored		
	5/6/93	Not Monitored		
	6/15/93	Not Monitored		
	7/26/93	Not Monitored		
	8/31/93	Not Monitored		
	9/27/93	Not Monitored		
	10/19/93	Not Monitored		
	11/15/93	Not Monitored		
	12/17/94	Not Monitored		
	2/7/94	Not Monitored		
	5/20/94	Not Monitored		
VW-2	2/19/92	17.00	6.94	10.06
	6/25/92		8.10	8.90
	9/16/92	Not Monitored		
	11/17/92	Not Monitored		
	1/26/93	Not Monitored		
	2/4/93	Not Monitored		
	3/9/93	Not Monitored		
	5/6/93	Not Monitored		
	6/15/93	Not Monitored		
	7/26/93	Not Monitored		
	8/31/93	Not Monitored		
	9/27/93	Not Monitored		
	10/19/93	Not Monitored		
	11/15/93	Not Monitored		
	12/17/94	Not Monitored		
	2/7/94	Not Monitored		
	5/20/94	Not Monitored		

Table 1
Groundwater Elevation Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Gauged	Elevation of Wellhead (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
VW-3	2/19/92	16.94	7.40	9.54
	6/25/92		7.16	9.78
	9/16/92	Not Monitored		
	11/17/92	Not Monitored		
	1/26/93	Not Monitored		
	2/4/93	Not Monitored		
	3/9/93	Not Monitored		
	5/6/93	Not Monitored		
	6/15/93	Not Monitored		
	7/26/93	Not Monitored		
	8/31/93	Not Monitored		
	9/27/93	Not Monitored		
	10/19/93	Not Monitored		
	11/15/93	Not Monitored		
	12/17/94	Not Monitored		
	2/7/94	Not Monitored		
	5/20/94	Not Monitored		
VW-4	2/19/92	16.81	5.76	11.05
	6/25/92		7.23	9.58
	9/16/92	Not Monitored		
	11/17/92	Not Monitored		
	1/26/93	Not Monitored		
	2/4/93	Not Monitored		
	3/9/93	Not Monitored		
	5/6/93	Not Monitored		
	6/15/93	Not Monitored		
	7/26/93	Not Monitored		
	8/31/93	Not Monitored		
	9/27/93	Not Monitored		
	10/19/93	Not Monitored		
	11/15/93	Not Monitored		
	12/17/94	Not Monitored		
	2/7/94	Not Monitored		
	5/20/94	Not Monitored		

Table 1
Groundwater Elevation Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Gauged	Elevation of Wellhead (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
VW-5	2/19/92	17.20	7.04	10.16
	6/25/92		8.09	9.11
	9/16/92	Not Monitored		
	11/17/92	Not Monitored		
	1/26/93	Not Monitored		
	2/4/93	Not Monitored		
	3/9/93	Not Monitored		
	5/6/93	Not Monitored		
	6/15/93	Not Monitored		
	7/26/93	Not Monitored		
	8/31/93	Not Monitored		
	9/27/93	Not Monitored		
	10/19/93	Not Monitored		
	11/15/93	Not Monitored		
	12/17/94	Not Monitored		
	2/7/94	Not Monitored		
	5/20/94	Not Monitored		
MSL = Mean Sea Level				
TOC = Top of Casing				
VES = Vapor Extraction System				

Table 2
Groundwater Analytical Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-Benzene (ppb)	Xylenes (ppb)
MW-1	2/19/92	440	14	14	2.1	9.9
	6/25/92	4,000	680	110	73	140
	9/16/92	3,400	880	28	41	53
	11/17/92	730	250	22	12	27
	2/4/93	120	22	3.1	3.3	10
	5/6/93	710	320	3.1	4.2	20
	9/28/93	Not Accessible - Connected to Vapor Extraction System				
	11/15/93	Not Accessible - Connected to Vapor Extraction System				
	2/7/94	Not Accessible - Connected to Vapor Extraction System				
	5/20/94	Not Accessible - Connected to Vapor Extraction System				
MW-2	2/19/92	2,100	57	5.6	9.1	75
	6/25/92	4,700	590	24	290	160
	9/16/92	5,700	740	8	370	77
	11/17/92	840	94	<0.5	93	14
	2/4/93	430	45	0.5	20	30
	5/6/93	2,000	460	2.4	160	66
	9/28/93	Not Accessible - Connected to Vapor Extraction System				
	11/15/93	Not Accessible - Connected to Vapor Extraction System				
	2/7/94	Not Accessible - Connected to Vapor Extraction System				
	5/20/94	Not Accessible - Connected to Vapor Extraction System				
MW-3	2/19/92	990	<0.5	<0.5	2	72
	6/25/92	4,900	350	11	330	570
	9/17/92	7,300	690	10	450	780
	11/17/92	1,200	160	2.1	83	160
	2/4/93	2,900	180	13	210	350
	5/6/93	2,700	270	6.2	300	720
	9/28/93	1,800	92	1.7	99	240
	11/15/93	1,900	100	2.4	85	280
	2/7/94	1,400	69	3.3	100	320
	5/20/94	1,100	64	19	120	180
MW-4	6/25/92	<50	<0.5	<0.5	<0.5	<0.5
	9/17/92	98	0.6	<0.5	1.2	7.7
	11/17/92	<50	<0.5	<0.5	<0.5	<0.5
	2/4/93	<50	<0.5	<0.5	<0.5	<0.5
	5/6/93	<50	1.6	<0.5	1	2.1
	9/28/93	Not Accessible - Auto on Well				
	11/15/93	<50	<0.5	<0.5	<0.5	<0.5
	2/7/94	<50	<0.5	<0.5	<0.5	2.6
	5/20/94	82	6.2	7.6	3.3	17

Table 2
Groundwater Analytical Data
1127 Lincoln Avenue, Alameda, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-Benzene (ppb)	Xylenes (ppb)
MW-5	6/25/92	18,000	310	1,200	750	2,400
	9/17/92	24,000	700	2,200	900	2,400
	11/17/92	14,000	1,000	1,500	730	1,900
	2/4/93	Not Sampled				
	5/6/93	6,200	460	980	300	1,200
	9/28/93	Not Accessible - Connected to Vapor Extraction System				
	11/15/93	Not Accessible - Connected to Vapor Extraction System				
	2/7/94	Not Accessible - Connected to Vapor Extraction System				
	5/20/94	Not Accessible - Connected to Vapor Extraction System				
MW-6	6/25/92	990	10	240	55	310
	9/17/92	1,200	26	4.7	6.5	140
	11/17/92	670	10	3.5	28	94
	2/4/93	2,300	19	5.4	27	220
	5/6/93	540	44	0.9	7	6.7
	9/28/93	180	2.7	0.73	6.3	13
	11/15/93	180	2.2	0.91	5.4	16
	2/7/94	240	2.9	1.2	3.9	7.1
	5/20/94	600	4.5	2.2	24	66
MW-7	6/25/92	<50	<0.5	<0.5	<0.5	<0.5
	9/16/92	<50	1.3	<0.5	<0.5	0.9
	11/17/92	Not Sampled				
	2/4/93	<50	<0.5	<0.5	<0.5	<0.5
	5/6/93	Not Sampled				
	9/28/93	<50	<0.5	<0.5	<0.5	<0.5
	11/15/93	<50	<0.5	<0.5	<0.5	<0.5
	2/7/94	Not Sampled				
	5/20/94	Not Sampled				
MW-8	6/25/92	11,000	1,100	29	150	190
	9/16/92	14,000	3,500	47	25	85
	11/17/92	4,700	1,700	12	8	22
	2/4/93	540	150	3.7	5.2	10
	5/6/93	22,000	9,400	46	390	520
	9/28/93	8,000	1,700	22	30	75
	11/15/93	2,000	840	8.8	15	42
	2/7/94	1,700	460	0.6	13	5
	5/20/94	110	98	1.4	1 3	3.4

ppb	parts per billion
TPHg	Total petroleum hydrocarbons as gasoline (analyzed by EPA Method 5030/602)
BTEX	Measured by EPA Method 5030/602.

Appendix

B C Analytical

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

ANALYTICAL REPORT

LOG NO: G94-05-321

Received: 23 MAY 94

Mailed: JUN 7 1994

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

Purchase Order: 94-1446346+4370

Requisition: AL;Partial Pymt
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020)							
		Date Analyzed Date	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 8	05/20/94	06/03/94	1	110	98	1.4	1.3	3.4	
2*MW 3	05/20/94	06/03/94	1	1100	64	19	120	180	
3*MW 6	05/20/94	06/03/94	1	600	4.5	2.2	24	66	
4*MW 1	05/20/94	06/03/94	1	82	6.2	7.6	3.3	17	
5*EB	05/20/94	06/03/94	1	<50	<0.5	0.92	<0.5	<0.5	
6*TRIP BLANK	05/20/94	06/03/94	1	<50	<0.5	<0.5	<0.5	<0.5	

624881450, Karen Petryna
1127 Lincoln Ave., Alameda

James C. Hein, Laboratory Director

BCA

: ORDER PLACED FOR CLIENT: Texaco Environmental Services 9405321 :
: BC ANALYTICAL : GLEN LAB : 16:00:11 07 JUN 1994 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9405321*1	MW 8	GAS.BTX.TESNC	06.03.94	8015M.TX	536-21	94056	7961
9405321*2	MW 3	GAS.BTX.TESNC	06.03.94	8015M.TX	536-21	94056	7961
9405321*3	MW 6	GAS.BTX.TESNC	06.03.94	8015M.TX	536-21	94056	7961
9405321*4	MW 4	GAS.BTX.TESNC	06.03.94	8015M.TX	536-21	94056	7961
9405321*5	EB	GAS.BTX.TESNC	06.03.94	8015M.TX	536-21	94056	7961
9405321*6	TRIP BLANK	GAS.BTX.TESNC	06.03.94	8015M.TX	536-21	94056	7961

***

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

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

BC Analytical

ORDER QC REPORT: Definitions and Terms

BCA

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 G9405321

DATE REPORTED : 06/07/94

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. TPH-gas/BTEX (CADHS/80 C406557*1						
Date Analyzed	06.03.94	94056	06/03/94	06/03/94	Date	N/A
Benzene	06.03.94	94056	20.8	24.3	ug/L	86
Toluene	06.03.94	94056	92.3	90.0	ug/L	103
Ethylbenzene	06.03.94	94056	17.2	17.9	ug/L	96
Total Xylene Isomers	06.03.94	94056	106	110	ug/L	96
TPH-gas	06.03.94	94056	887	1000	ug/L	89
2. TPH-gas/BTEX (CADHS/80 C406558*1						
Date Analyzed	06.03.94	94056	06/03/94	06/03/94	Date	N/A
Benzene	06.03.94	94056	11.9	24.3	ug/L	49 Q
Toluene	06.03.94	94056	89.5	90.0	ug/L	99
Ethylbenzene	06.03.94	94056	15.8	17.9	ug/L	88
Total Xylene Isomers	06.03.94	94056	98.7	110	ug/L	90
TPH-gas	06.03.94	94056	948	1000	ug/L	95

BC ANALYTICAL

ORDER QC REPORT FOR G9405321

DATE REPORTED : 06/07/94

ADDITIONAL LCS PRECISION (DUPLICATES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	LC1 RESULT	LC2 RESULT	UNIT	RELATIVE Z DIFF
1. TPH-gas/BTEX (CADHS/80							
Date Analyzed		06.03.94	94056	06/03/94	06/03/94	Date	N/A
Benzene		06.03.94	94056	20.8	11.9	ug/L	54 Q
Toluene		06.03.94	94056	92.3	89.5	ug/L	3
Ethylbenzene		06.03.94	94056	17.2	15.8	ug/L	8
Total Xylene Isomers		06.03.94	94056	106	98.7	ug/L	7
TPH-gas		06.03.94	94056	887	948	ug/L	7

BC ANALYTICAL

ORDER QC REPORT FOR G9405321

DATE REPORTED : 06/07/94

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. TPH-gas/BTEX (CADHS/80	9405321*1						
Date Analyzed		06.03.94	94056	06/03/94	06/03/94	Date	N/A
Benzene		06.03.94	94056	121	112	ug/L	8
Toluene		06.03.94	94056	93.2	98.9	ug/L	6
Ethylbenzene		06.03.94	94056	18.0	18.5	ug/L	3
Total Xylene Isomers		06.03.94	94056	107	109	ug/L	2
TPH-gas		06.03.94	94056	935	890	ug/L	5

BC ANALYTICAL

ORDER QC REPORT FOR G9405321

DATE REPORTED : 06/07/94

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT	
1. TPH-gas/BTEX (CADHS/80 9405321*1								
Benzene		06.03.94	94056	NC	NC	122	ug/L	NC
Toluene		06.03.94	94056	102	108	91.4	ug/L	
Ethylbenzene		06.03.94	94056	93	96	19.2	ug/L	
Total Xylene Isomers		06.03.94	94056	94	96	113.4	ug/L	
TPH-gas		06.03.94	94056	82	78	1110	ug/L	

BC ANALYTICAL

ORDER QC REPORT FOR G9405321

DATE REPORTED : 06/07/94

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

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
1. TPH-gas/BTEX (CADHS/80 B406393*1						
Date Analyzed	06.02.94	94056	06/02/94	NA	Date	8015M.TX
Benzene	06.02.94	94056	0	0.5	ug/L	8015M.TX
Toluene	06.02.94	94056	0	0.5	ug/L	8015M.TX
Ethylbenzene	06.02.94	94056	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	06.02.94	94056	0.14	0.5	ug/L	8015M.TX
TPH-gas	06.02.94	94056	0	50	ug/L	8015M.TX

: SURROGATE SUMMARY :
: BC ANALYTICAL : GLEN LAB : 16:03:13 07 JUN 1994 - P. 1 :

DETERM	SUBDET	REPORTED	TRUE	%RECOVERY	FLAG
9405321*1					
GAS.BTX.TESNC	|a,a,a-TFTol.R	48.7	50.0	97	
9405321*2					
GAS.BTX.TESNC	|a,a,a-TFTol.R	45.0	50.0	90	
9405321*3					
GAS.BTX.TESNC	|a,a,a-TFTol.R	51.8	50.0	104	
9405321*4					
GAS.BTX.TESNC	|a,a,a-TFTol.R	57.1	50.0	114	
9405321*5					
GAS.BTX.TESNC	|a,a,a-TFTol.R	56.5	50.0	113	
9405321*6					
GAS.BTX.TESNC	|a,a,a-TFTol.R	56.6	50.0	113	

: SURROGATE SUMMARY :
: BC ANALYTICAL : GLEN LAB : 16:03:28 07 JUN 1994 - P. 1 :

DETERM	SUBDET	REPORTED	TRUE	%RECOVERY	FLAG
9405321*1*R1					
GAS.BTX.TESNC	|a,a,a-TFTol.R	48.7	50.0	97	
9405321*1*S1					
GAS.BTX.TESNC	|a,a,a-TFTol.R	53.3	50.0	107	
9405321*1*S2					
GAS.BTX.TESNC	|a,a,a-TFTol.R	46.5	50.0	93	
9405321*1*T					
GAS.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

CONDUCT ANALYSIS TO DETECT

LAB: BC Analytical | DHS #

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

- ☐ EPA
- ☐ LIA
- ☐ OTHER
- ☐ RWQCB REGION ______

CHAIN OF CUSTODY: 940520A4

CLIENT: Texaco Environmental Services

SITE: Location # 624881450
1127 Lincoln Ave.
Alameda Ca.

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	CONTAINERS	C = COMPOSITE ALL CONTAINERS	TPH Gas BTEX							ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW 5	5/20/94	1550	W	3	40 cc VOAS		X										
MW 3		1505		3			X										
MW 6		1400		3			X										
MW 4		1410		3			X										
EB		1355		3			X										
Trip Blank				2			X										

SAMPLING COMPLETED — DATE: 5/20/94 — TIME: 1750

SAMPLING PERFORMED BY: Jeff Carter

RESULTS NEEDED NO LATER THAN: AS CONTRACTED

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Jeff Carter	5/23/94	1135	Bill Lyons	5-23-94	1155
Bill Lyons	5-23-94	2:20	[illegible signature]	5/23/94	1500
[illegible signature]	5/23/94	1500			

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

WELL GAUGING DATA

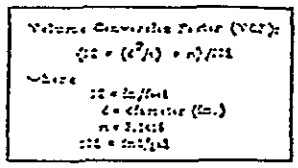
Project # 940520A4 Date 5/20/94 Client TEXACO

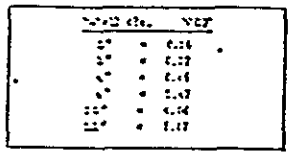
Site 1127 Lincoln Alameda

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
MW11		Gauging Port too Small for E/ Sounder						TOC
MW12		Gauging Port too small for E/ Sounder						
MW13	4					6.79	19.80	
MW14	4					6.85	20.17	
MW15		GUAGING PORT TOO SMALL FOR E/ Sounder						
MW16	2					6.95	19.80	
MW17		CAR PARKED OVER ENTIRE SAMPLING TIME						
MW18	4					6.17	19.74	

WELL MONITORING DATA SHEET

Project #: 940520A4	Client: TEXACO ENVIRONMENTAL SERVICES
Sampler: Gustus	Date Sampled: 5/20/94
Well I.D.: MW3	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 1980 After	Depth to Water: Before 6.79 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other --	





8.45 (1 Case Volume) x 3 (Specified Volumes) = 25.37 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:
1458	68.7	6.8	520	119.9	9.0	
1500	68.7	6.8	560	29.9	17.0	
1502	69.1	6.8	510	23.4	26.0	

Did Well Dewater? If yes, gals. Gallons Actually Evacuated:

Sampling Time: 1505

Sample I.D.: MW3 Laboratory: BC

Analyzed for: TPH GAS BTEX

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

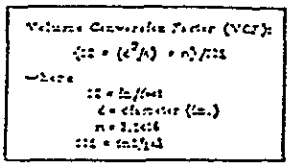
Analyzed for:

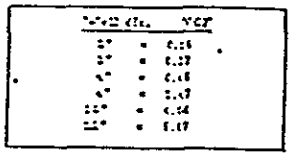
Wellhead maintenance performed:

Additional Notations:

WELL MONITORING DATA SHEET

Project #: 94052044	Client: TEXACO ENVIRONMENTAL SERVICES
Sampler: [illegible]	Date Sampled: 5/20/94
Well I.D.: MW4	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 20.17 After	Depth to Water: Before 6.85 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --





8.66 (1 Case Volume) x 3 (Specified Volumes) = 25.97 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:
1400	68.9	7.1	480	115.2	9.0	
1402	68.6	7.0	490	62.5	18.0	
1404	67.8	7.0	480	50.0	26.0	

Did Well Dewater? If yes, gals. Gallons Actually Evacuated:

Sampling Time: 1410

Sample I.D.: MW4 Laboratory: BC

Analyzed for: TPH GAS BTEX

Duplicate I.D.: Cleaning Blank I.D.: EB 1355

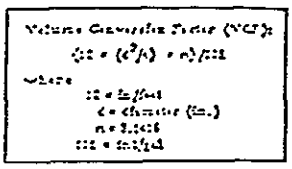
Analyzed for: TPH GAS BTEX

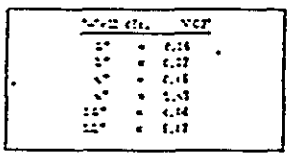
Wellhead maintenance performed:

Additional Notations:

WELL MONITORING DATA SHEET

Project #: 9405204	Client: TEXACO ENVIRONMENTAL SERVICES
Sampler: [illegible]	Date Sampled: 5-20-94
Well I.D.: MW 6	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 19.80 After	Depth to Water: Before 6.95 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --





2.0 x 3 = 6.0

1 Case Volume x 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:
1431	66.6	7.0	580	>200	2.0	
1434	66.5	6.9	580	>200	4.0	
1437	66.4	6.8	570	>200	6.0	

Did Well Dewater? If yes, gals. Gallons Actually Evacuated:

Sampling Time: 1440

Sample I.D.: MW 6 Laboratory: BC

Analyzed for: TPH GAS BTEX

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

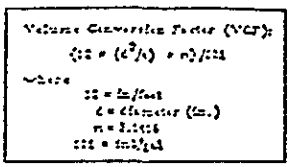
Analyzed for:

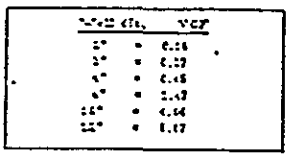
Wellhead maintenance performed:

Additional Notations:

WEL MONITORING DATA ..EET

Project #: 9405204	Client: TEXACO ENVIRONMENTAL SERVICES
Sampler: JC	Date Sampled: 5/20/94 US
Well I.D.: MW 7	Well Diameter: (circle one) 2 3 4 6 ___
Total Well Depth: Before / After	Depth to Water: Before / After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC Grade Other --	





Not Sampled

1 Case Volume	X 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:
Car parked over well entire time						
	BB was on-site for				1300 to 1600	

Did Well Dewater? If yes, gals. Gallons Actually Evacuated:

Sampling Time:

Sample I.D.: Laboratory:

Analyzed for:

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

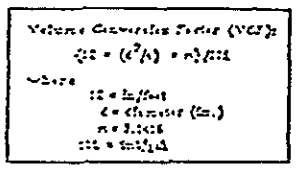
Analyzed for:

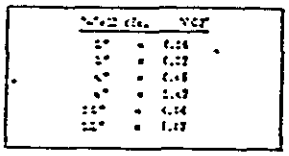
Wellhead maintenance performed:

Additional Notations:

WELL MONITORING DATA SHEET

Project #: 9405209.4	Client: TEXACO ENVIRONMENTAL SERVICES
Sampler: [signature]	Date Sampled: 5/20/94
Well I.D.: MW-8	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 19.74 After	Depth to Water: Before 6.17 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC Grade Other --	





8.82	x	3	=	26.46
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:
1542	66.5	6.8	640	74.8	9.0	
1544	65.7	6.8	680	167.0	18.0	
1546	65.6	6.8	680	>200	27.0	

Did Well Dewater? If yes, gals. Gallons Actually Evacuated:

Sampling Time: 1550

Sample I.D.: MW-8 Laboratory: BC

Analyzed for: TPH-G BTEX

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

Analyzed for:

Wellhead maintenance performed:

Additional Notations:

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 PURGE-WATER WHICH HAS BEEN RECOVERED FROM GROUND-WATER 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 # 62488 1450

street number	street name	city	state
1127	Lincoln Ave	Alameda	CA

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-3			
MW-4			
MW-6			
MW-8			

added equip. rinse water /

any other adjustments /

TOTAL GALS. RECOVERED 90

loaded onto BTS vehicle # 10

BTS event # 940520A4 time 1300 date 5/20/94

signature Jeff Curtis

* *

REC'D AT BTS time 1800 date 5/20/94

unloaded by signature Jeff Curtis