



Texaco Refining
and Marketing Inc

138 Quince St., 4th Fl.
Berkeley, CA 94701

July 17, 1995

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 19, 1995, at the site referenced above (see Plate 1, Site Vicinity Map). The gradient map has been reviewed by a registered professional (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, bill of lading and quarterly summary report are in the Appendix. Texaco Environmental Services' Standard Operating Procedures may be found in Texaco's fourth 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 Digermess
Environmental Assistant

Karen E. Petryna
Engineer
Texaco Environmental Services

RBD hs

C:\QMR\1127L\QMR.LET

Enclosures


8/11/95

Spoke to Karen Petryna.
Requested Texaco to submit
VEB sample info as part of
qtrly reports. Ms. Petryna
stated that Texaco will also
submit the report documenting
well installations in the
near future. - Juliet

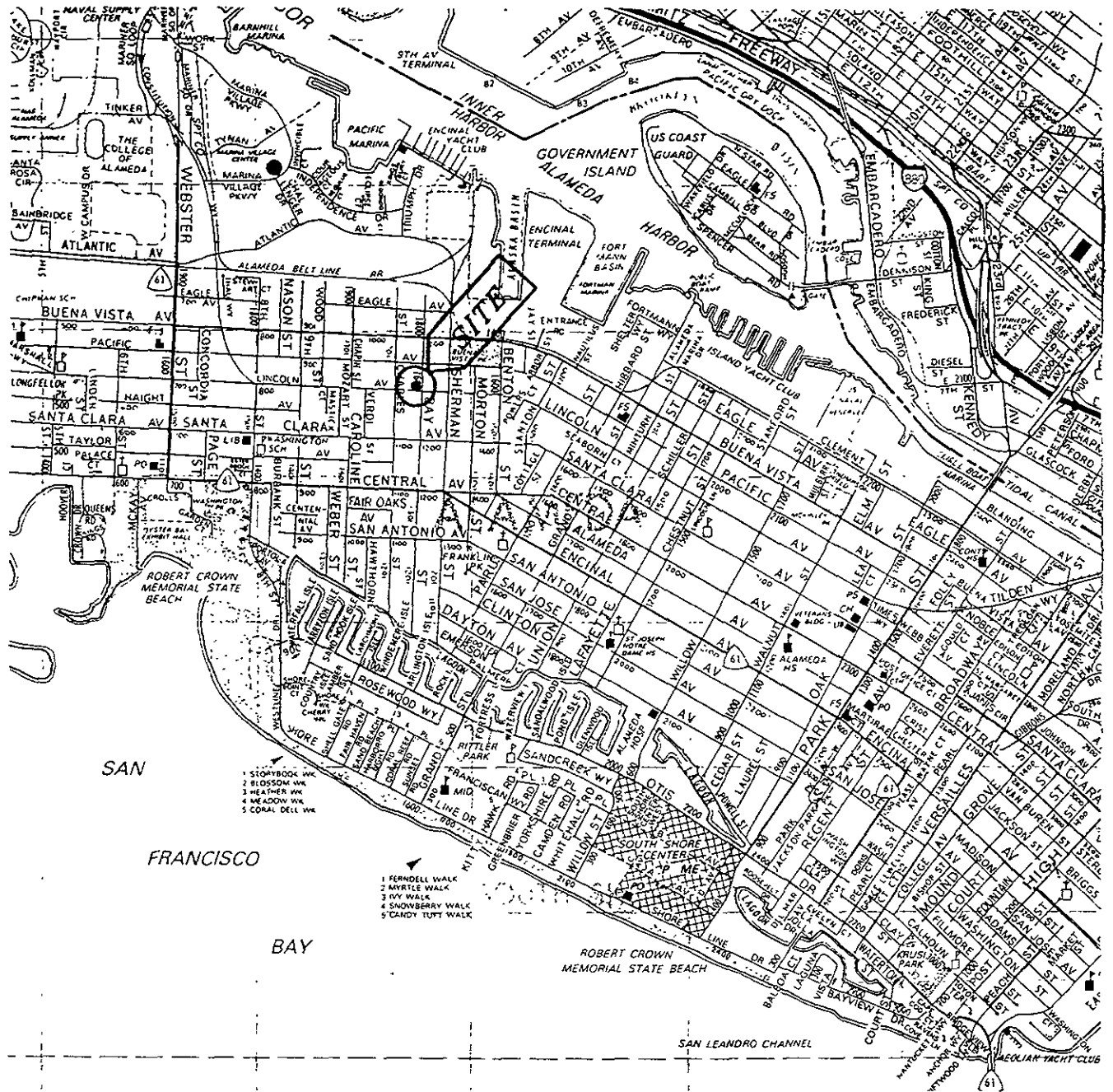
cc: Mr. Richard Hiett
CRWQCB - San Francisco Bay Region
2101 Webster St., Suite 500
Oakland, CA 94621

Mr. Leo Pagano
1127 Lincoln Avenue
Alameda, CA

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

pr: 

GROUNDWATER MONITORING AND SAMPLING
Second Quarter, 1995
at the
Former Texaco Station
1127 Lincoln Avenue
Alameda, California



SOURCE

1993 THE THOMAS GUIDE

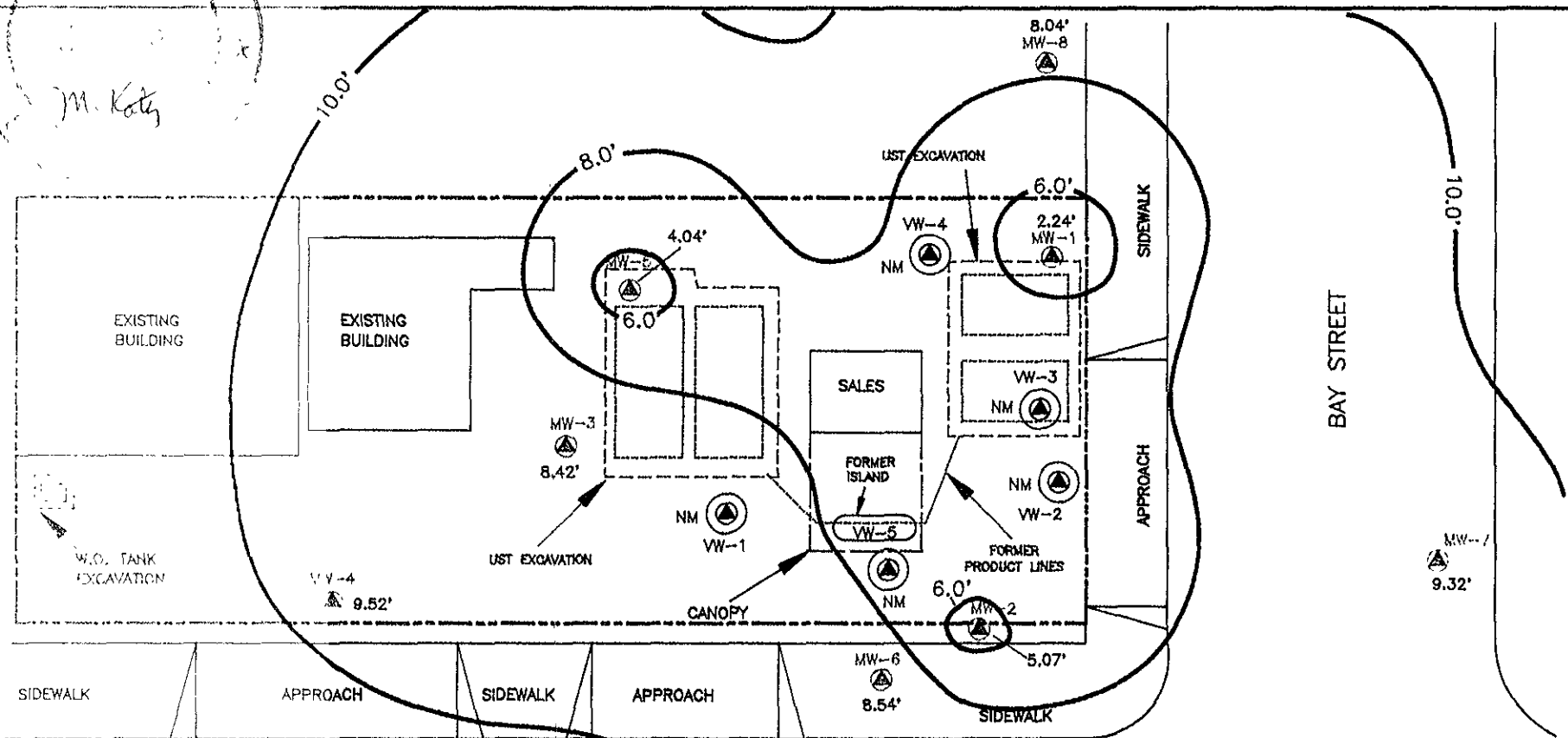


TEXACO

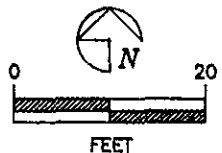
REFUELING AND MAINTENANCE
 FLUIDS AND ENVIRONMENTAL SERVICES

STATION
 FORMER TEXACO SERVICE STATION
 1000 WASHINGTON ST
 SAN FRANCISCO, CA 94133

REGISTERED GEOLOGIST
M. Katz



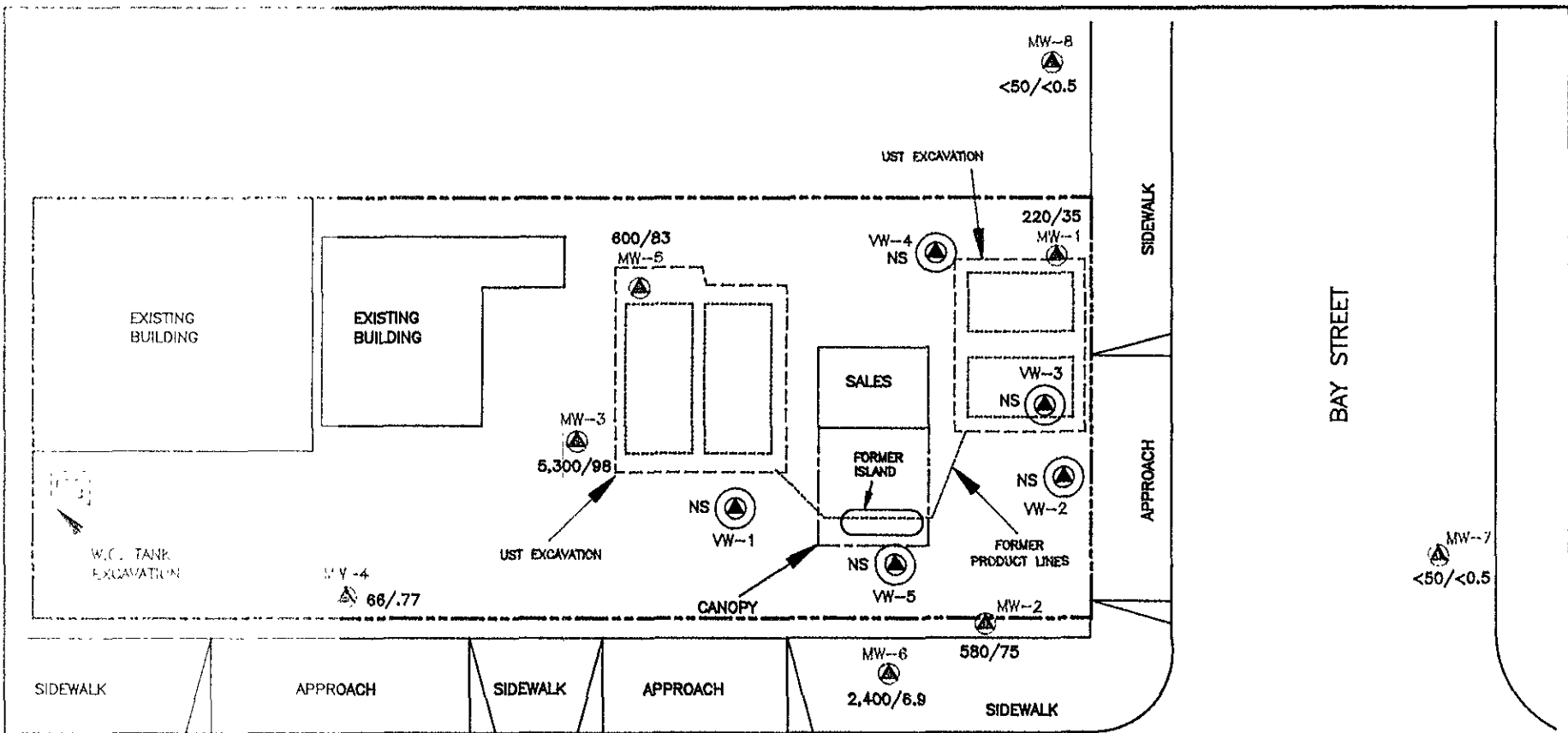
LINCOLN AVE.



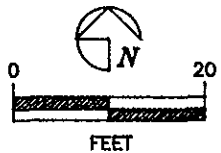
- LEGEND :**
- UST EXCAVATION
 - VAPOR EXTRACTION MONITORING WELL LOCATION AND WELL NUMBER
 - GROUNDWATER CONTOUR LINE
 - 8.54' GROUNDWATER ELEVATION (ABOVE MSL)
 - NM WELL NOT MONITORED

SOURCE :
MATTESON ENGINEERING CONDUCTED SURVEY ON 08/04/1994

TEXACO REFINING AND MARKETING INC. TEXACO ENVIRONMENTAL SERVICES	
PLATE 2 : GROUNDWATER GRADIENT MAP (05/19/1995)	
FORMER TEXACO SERVICE STATION	
1127 LINCOLN AVE. / BAY ST., ALAMEDA, CALIFORNIA	
SCALE	LOCATION #
1" = 20'-0"	02-488-1450
DRAWN BY	DATE
AMA	07/11/1995
CHECKED BY	DATE
PD	7/17/95
DRAWING NO. (ALAMEDA) LI-BY-AL.DWG	



LINCOLN AVE.



LEGEND :

- UST EXCAVATION
- W.C. TANK EXCAVATION
- VAPOR EXTRACTION MONITORING WELL LOCATION AND WELL NUMBER
- NS
- $<50/<0.5$ TPHq/BENZENE CONCENTRATION IN GROUNDWATER (ppb)

SOURCE :
 MATTESSON ENGINEERING CONDUCTED SURVEY ON 08/04/1994

TEXACO REFINING AND MARKETING INC. TEXACO ENVIRONMENTAL SERVICES	
PLATE 3 : TPHq/BENZENE CONCENTRATION IN GROUNDWATER (08/19/1995) FORMER TEXACO SERVICE STATION 1127 LINCOLN AVE. / BAY ST., ALAMEDA, CALIFORNIA	
SCALE	1"=20'-0"
DRIVEN BY	AMA
CHECKED BY	RJ
LOCATION #	82-488-1450
DATE	07/11/1995
DATE	7/17/95
DRAWING NO. (ALAMEDA) LI-BY-AL.DWG	

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

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-1	2/19/92	16.49		
	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	
	8/22/94	16.14 *	7.78	8.36
	11/2/94		Inaccessible - VES	
	2/14/95		15.16	0.98
5/19/95		13.90	2.24	
MW-2	2/19/92	17.14		
	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	
	8/22/94	16.84 *	8.08	8.76
	11/2/94		Inaccessible - VES	
	2/14/95		Inaccessible - VES	
5/19/95		11.77	5.07	

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

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-3	2/19/92	16.91		
	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 - VES	
	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
	8/22/94	16.86 *	8.32	8.54
	11/2/94		10.98	5.88
	2/14/95		7.93	8.93
	5/19/95		8.44	8.42
	MW-4	6/25/92	17.18	
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
8/22/94		17.13 *	8.48	8.65
11/2/94			10.52	6.61
2/14/95		6.99	10.14	
5/19/95		7.61	9.52	

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

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-5	6/25/92	16.37		
	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	
	8/22/94	15.59 *	7.27	8.32
	11/2/94		Inaccessible - VES	
	2/14/95		Inaccessible - VES	
5/19/95		11.55	4.04	
MW-6	6/25/92	17.12		
	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
	8/22/94	17.05 *	8.17	8.88
11/2/94		10.56	6.49	
2/14/95		8.08	8.97	
5/19/95		8.51	8.54	

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

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-7	6/25/92	16.71		
	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	
	8/22/94	16.65 *	7.78	8.87
	11/2/94		9.70	6.95
	2/14/95		Inaccessible	
5/19/95		7.33	9.32	
MW-8	6/25/92	15.91		
	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
	8/22/94	15.87 *	7.63	8.24
11/2/94		10.16	5.71	
2/14/95		7.32	8.55	
5/19/95		7.83	8.04	

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

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
VW-1	2/19/92	16.83		
	1/26/93 - 5/19/95		Not Monitored	
VW-2	2/19/92	17.00		
	1/26/93 - 5/19/95		Not Monitored	
VW-3	2/19/92	16.94		
	1/26/93 - 5/19/95		Not Monitored	
VW-4	2/19/92	16.81	5.76	11.05
	1/26/93 - 5/19/95		Not Monitored	
VW-5	2/19/92	17.20		
	1/26/93 - 5/19/95		Not Monitored	
MSL = Mean Sea Level				
TOC = Top of Casing				
VES = Vapor Extraction System				
* = Wells resurveyed 8/4/94.				

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	2/4/93	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				
	8/22/94	Not Accessible - Connected to Vapor Extraction System				
	11/3/94	<50	<0.5	<0.5	<0.5	<0.5
	2/14/95	350	40	1.6	15	31
	5/19/95	220	35	2.4	7.2	23
MW-2	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				
	8/22/94	Not Accessible - Connected to Vapor Extraction System				
	11/2/94	Not Sampled				
	2/14/95	Not Sampled				
	5/19/95	580	75	19	5.1	30
MW-3	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
	8/22/94	77	4.3	<0.5	2.0	5.6
	11/2/94	<50	0.75	<0.5	<0.5	<0.5
	2/14/95	1,300	24	5.2	85	360
	5/19/95	5,300	98	28	650	1,700
MW-4	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
	8/22/94	<50	<0.5	<0.5	<0.5	<0.5
	11/2/94	<50	<0.5	0.56	<0.5	<0.5
	2/14/95	<50	<0.5	<0.5	<0.5	<0.5
	5/19/95	66	0.77	0.63	0.87	3.6

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	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				
	8/22/94	Not Accessible - Connected to Vapor Extraction System				
	11/3/94	5,700	800	400	4.7	600
	2/14/95	1,300	290	76	21	140
	5/19/95	600	83	20	5.7	33
MW-6	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
	8/22/94	400	3.2	1	7.9	40
	11/2/94	150	1.6	1.3	6.5	27
	2/14/95	770	4.0	2.9	42	130
	5/19/95	2,400	6.9	11	99	350
MW-7	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				
	8/22/94	130	<0.5	<0.5	<0.5	<0.5
	11/2/94	73	<0.5	<0.5	<0.5	<0.5
	2/14/95	Not Sampled				
	5/19/95	<50	<0.5	<0.5	<0.5	2.3
MW-8	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
	8/22/94	51	16	<0.5	<0.5	<0.5
	11/2/94	<50	<0.5	<0.5	<0.5	<0.5
	2/14/95	<50	<0.5	<0.5	<0.5	<0.5
	5/19/95	<50	<0.5	<0.5	<0.5	<0.5

< = Less than the detection limit for the specified method of analysis
ppb = parts per billion
TPHg = Total Petroleum Hydrocarbons as gasoline

APPENDIX

801 Western Avenue
Glendale, CA 91201
818/247-5137
Fax: 818/247-9797

LOG NO: G95-05-380

Received: 22 MAY 95

Mailed: **MAY 31 1995**

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

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

Page 1

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020)	ANALYTICAL DATA						
			Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L
PHI				1	50	0.5	0.5	0.5	0.5
1* MW1	05/19/95	05/25/95		1	220	35	2.4	7.2	23
2* MW2	05/19/95	05/25/95		1	580	75	19	5.1	30
3* MW3	05/19/95	05/25/95		1	5300	98	28	650	1700
1* MW4	05/19/95	05/25/95		1	66	0.77	0.63	0.87	3.6
5* MW5	05/19/95	05/25/95		1	600	83	20	5.7	33
6* MW6	05/19/95	05/25/95		1	2400	6.9	11	99	350
7* MW7	05/19/95	05/25/95		1	<50	<0.5	<0.5	<0.5	2.3
8* MW8	05/19/95	05/25/95		1	<50	<0.5	<0.5	<0.5	<0.5
9* EB	05/19/95	05/25/95		1	<50	<0.5	<0.5	<0.5	<0.5
10* TB	05/19/95	05/25/95		1	<50	<0.5	<0.5	<0.5	<0.5

Karen Peleyua
1127 Lincoln Ave., Alameda
Alameda County

An unidentified peak was detected in the sample analysis of samples MW1, MW2 and MW3.
M. Adriance 5/31/95

Maria Adriance
Jane Freemyer, Program Manager



AMPL.S...	SAMPLE DESCRIPTION..	DETERM.....	DATE.....	METHOD.....	EQUIP.	BATCH..	ID.NO
			ANALYZED				
1505380*1	MW1	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*2	MW2	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*3	MW3	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*4	MW4	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*5	MW5	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*6	MW6	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*7	MW7	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*8	MW8	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*9	EB	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658
1505380*10	TB	GAS.BTX.TESNC	05.25.95	8015M.TX	516-20	958129	8658

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 FOR G9505380

DATE REPORTED : 05/31/95

Page 1

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. TPH (8015M/8020)		C5052954*1				
Date Analyzed	05.25.95	958129	05/25/95	05/25/95	Date	N/A
Benzene	05.25.95	958129	17.2	12.5	ug/L	138
Toluene	05.25.95	958129	64.8	55.5	ug/L	117
Ethylbenzene	05.25.95	958129	14.4	12.5	ug/L	115
Total Xylene Isomers	05.25.95	958129	71.6	66.5	ug/L	108
TPH (Gasoline Range)	05.25.95	958129	1030	1000	ug/L	103
2. TPH (8015M/8020)		C5052955*1				
Date Analyzed	05.25.95	958129	05/25/95	05/25/95	Date	N/A
Benzene	05.25.95	958129	16.3	12.5	ug/L	130
Toluene	05.25.95	958129	60.1	55.5	ug/L	108
Ethylbenzene	05.25.95	958129	13.6	12.5	ug/L	109
Total Xylene Isomers	05.25.95	958129	69.3	66.5	ug/L	104
TPH (Gasoline Range)	05.25.95	958129	950	1000	ug/L	95

BC ANALYTICAL

ORDER QC REPORT FOR G9505380

DATE REPORTED : 05/31/95

Page 1

ADDITIONAL LCS PRECISION (DUPLICATES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	LC1 RESULT	LC2 RESULT	UNIT	RELATIVE % DIFF
TPH (8015M/8020)							
Date Analyzed		05.25.95	958129	05/25/95	05/25/95	Date	N/A
Benzene		05.25.95	958129	17.2	16.3	ug/L	5
Toluene		05.25.95	958129	64.8	60.1	ug/L	8
Ethylbenzene		05.25.95	958129	14.4	13.6	ug/L	6
Tot. l Xylene Isomers		05.25.95	958129	71.6	69.3	ug/L	3
TPH (Gasoline Range)		05.25.95	958129	1030	950	ug/L	8

BC ANALYTICAL

ORDER QC REPORT FOR G9505380

DATE REPORTED : 05/31/95

MATRIX QC PRECISION (DUPLICATE SPIKES)
 BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNITS	RELATIVE % DIFF
TPH (8015M/8020)	9504999*1						
Date Analyzed		05.26.95	958129	05/26/95	05/27/95	Date	N/A
Benzene		05.26.95	958129	15.2	15.0	ug/l	1
Toluene		05.26.95	958129	59.9	56.0	ug/L	7
Ethylbenzene		05.26.95	958129	12.9	13.0	ug/l.	1
Total Xylene Isomers		05.26.95	958129	63.9	64.0	ug/L	0
TPH (Gasoline Range)		05.26.95	958129	1040	1070	ug/l.	3

BC ANALYTICAL

ORDER QC REPORT FOR G9505380

DATE REPORTED : 05/31/95

Page 1

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
1. TPH (8015M/8020)	9504999*1						
Toluene		05.26.95	958129	108	101	55.5	ug/L
Ethylbenzene		05.26.95	958129	103	104	12.5	ug/L
Total Xylene Isomers		05.26.95	958129	96	96	66.5	ug/L
TPH (Gasoline Range)		05.26.95	958129	104	107	1000	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9505380

DATE REPORTED : 05/31/95

Page 1

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

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
TPH (8015M/8020)	B5051539*1					
Date Analyzed	05.25.95	958129	05/25/95	NA	Date	8015M.TX
Benzene	05.25.95	958129	0	0.5	ug/L	8015M.TX
Toluene	05.25.95	958129	0.43	0.5	ug/L	8015M.TX
Ethylbenzene	05.25.95	958129	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	05.25.95	958129	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	05.25.95	958129	7.9	50	ug/L	8015M.TX
TPH (8015M/8020)	B5051657*1					
Date Analyzed	05.26.95	958129	05/26/95	NA	Date	8015M.TX
Benzene	05.26.95	958129	0	0.5	ug/L	8015M.TX
Toluene	05.26.95	958129	0.37	0.5	ug/L	8015M.TX
Ethylbenzene	05.26.95	958129	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	05.26.95	958129	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	05.26.95	958129	9.0	50	ug/L	8015M.TX

SURROGATE RECOVERIES :

BC ANALYTICAL : GLEN LAB : 15:27:18 31 MAY 1995 - P. 1 :

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ETHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
505380*1							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	49.0	50.0	98	
505380*2							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	48.3	50.0	97	
505380*3							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	47.6	50.0	95	
505380*4							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	46.6	50.0	93	
505380*5							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	51.6	50.0	103	
505380*6							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	51.4	50.0	103	
505380*7							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	47.0	50.0	94	
505380*8							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	47.0	50.0	94	
505380*9							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	46.6	50.0	93	
505380*10							
015M.TXa	,a,a-Trifluorotoluene	958129	05/25/95	46.0	50.0	92	

SURROGATE RECOVERIES :
 BC ANALYTICAL : GLEN LAB : 15:27:19 31 MAY 1995 - P. 1 :
 =====

ETHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
	504999*1*R1						
015M.TX	a,a,a-Trifluorotoluene	958129	05/26/95	47.0	50.0	94	
	504999*1*S1						
015M.TX	a,a,a-Trifluorotoluene	958129	05/26/95	57.8	50.0	116	
	504999*1*S2						
015M.TX	a,a,a-Trifluorotoluene	958129	05/27/95	58.4	50.0	117	
	504999*1*T						
015M.TX	a,a,a-Trifluorotoluene	958129	05/27/95	50.0	50.0	100	
	5051539*1*MB						
015M.TX	a,a,a-Trifluorotoluene	958129	05/25/95	46.3	50.0	93	
	5051657*1*MB						
015M.TX	a,a,a-Trifluorotoluene	958129	05/26/95	46.7	50.0	93	
	5052954*1*LC						
015M.TX	a,a,a-Trifluorotoluene	958129	05/25/95	66.2	50.0	132	
	5052954*1*LT						
015M.TX	a,a,a-Trifluorotoluene	958129	05/25/95	50.0	50.0	100	
	5052955*1*LC						
015M.TX	a,a,a-Trifluorotoluene	958129	05/25/95	58.2	50.0	116	
	5052955*1*LT						
015M.TX	a,a,a-Trifluorotoluene	958129	05/25/95	50.0	50.0	100	

67505 JDU

Chain of Custody

Texaco Environmental Services

108 Cutting Boulevard
 Richmond, California 94804
 Phone: (510) 238-3541
 FAX: (510) 237-7821

Forward Results to the Attention of Rebecca Digerness
 Texaco Project Coordinator Karen Petryna

Site Name: Texaco Loc. # 624881450
 Site Address: 1127 Lincoln Av., Alameda, CA
 Contractor Project Number: 950519C.1
 Contractor Name: Blaine Tech Services, Inc.
 Address: 985 Timothy Dr., San Jose, CA 95133
 Project Contact: Don Weltz
 Phone/FAX: (408) 995-5535 / (408) 293-8773

Laboratory: B C Analytical
 Turn Around Time: normal (10 day)
 Samplers (PRINT NAME): SCOTT BRADLOCK
 Sampler Signature: [Signature]
 Date Samples Collected: 5-19-95

ANALYSIS

624881450
 Alameda
 KEP
 FKEP1001L

Sample Number	Lab Sample Number	Date/Time Collected	No. of Containers	Type of Containers	Sample Matrix	Preservative	TPH gas/BTEX	TPH Diesel	O&G/TPH (418.1)	TPH Ex. (C8-C38+)	VOCs 8240/824	P. Halocarbons 8010/80	P. Aromatics 8020/802	Organic Lead	Comments
MW1		5/19	1101	3	VOAS	W	HCL	X							-1
MW2		5/19	1127	3				X							-2
MW3		5/19	1312	3				X							-3
MW4		5/19	1156	3				X							-4
MW5		5/19	1114	3				X							-5
MW6		5/19	1417	3				X							-6
MW7		5/19	1358	3				X							-7
MW8		5/19	1247	3				X							-8
EB		5/19	1215	3				X							-9
FB		5/19	-	2				X							-10

Relinquished by: [Signature] Date: 5/22/95 Time: 1340
 Received by: [Signature] Date: 5-22-95 Time: 1400
 Relinquished by: [Signature] Date: 5-22-95 Time: 310
 Received by: [Signature] Date: 5-22-95 Time: 310
 Relinquished by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____
 Method of Shipment: _____
 Lab Comments: _____

Groundwater Sampling Form

Project Name TEX 62488/1450
 Project Number 950519C1
 Recorded By SCOTT BROWERICK

Well No. MW1
 Well Type Monitor Extraction Other
 Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) _____
 Depth to Water (WL, ft. below TOC) 13.90

EXTRACTION SYSTEM

Depth to free phase hydrocarbons (FP, ft. below TOC) _____
 Number of well volumes to be purged
 3 10 Other _____

PURGE VOLUME CALCULATION

Water Column Length \times Multiplier \times No. Vols = _____
 MULTIPLIER (Casing Dia. [inches] = Gallons/linear ft.)
 2 = 0.1713 | 3 = 0.38 | 4 = 0.65 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

PURGE METHOD

Bailor - Type _____
 Pump - Type _____
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

Pumping Rate _____ gpm
 CALCULATED PURGE VOLUME _____ gals
 ACTUAL PURGE VOLUME _____ gals

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MIYRON/FULKE/HF

Time/Gallons	pH	Cond. (uomhes/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1058 / .1	6.4	500	67.4	12	

Comments during well purge _____
 Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 5/19/95 1101
 Bailor - Type Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

Date/Time/% Recharge	pH	Cond. (uomhes/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW1</u>	<u>3VOLS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Groundwater Sampling Form

Project Name TEX 62488/1450
 Project Number 950519C1
 Recorded By SCOTT BRODERICK

Well No. MWZ
 Well Type Monitor Extraction Other
 Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC)

Depth to Water (WL, ft. below TOC) 11.77

Depth to free phase hydrocarbons (FP, ft. below TOC)

Number of well volumes to be purged
 3 10 Other

PURGE VOLUME CALCULATION

Water Column Length \times Multiplier \times No. Vols =
 MULTIPLIER (Casing Dia. in inches) = Gallons/linear ft.
 2 = 0.17 | 3 = 0.38 | 4 = 0.66 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

PURGE METHOD

Bailor - Type _____
 Pump - Type _____
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

Pumping Rate _____ gpm

_____ cals
CALCULATED PURGE VOLUME
 _____ cals
ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1125 .1	6.0	500	67.8		13	

Comments during well purge _____
 Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 5/19/95 | 1127
 Bailor - Type _____ Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Date/Time/% Recharge	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MWZ</u>	<u>3VORS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Groundwater Sampling Form

Project Name TEX 62488/1450
 Project Number 950519C1
 Recorded By SCOTT BRODERICK

Well No. MU3
 Well Type Monitor Extraction Other
 Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 19.74

Depth to Water (WL, ft. below TOC) 8.44

Depth to free phase hydrocarbons (FP, ft. below TOC) _____

Number of well volumes to be purged
 3 10 Other _____

PURGE VOLUME CALCULATION

$$\frac{11.32}{\text{Water Column Length}} \times \frac{.66}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

MULTIPLIER (Casing Dia. in inches) = Gallons/linear ft.
 2 = 0.17 | 3 = 0.38 | 4 = 0.65 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

PURGE METHOD

Bailor - Type _____
 Pump - Type ELEC. SUB
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) 10
 Other _____

Pumping Rate 7 gpm

22.4 gals
 CALCULATED PURGE VOLUME

23 gals
 ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MYRON/PURE/HF

Time/Gallons	pH	Cond. (uomhos/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1306 8	6.6	630	67.6	17	
1308 15	6.8	500	68.6	12	
1309 23	6.8	500	69.2	6	
1					
1					
1					
1					
1					

Comments during well purge _____

Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 5/19/95 1 1312

Bailor - Type S.S. Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

Date/Time/% Recharge	pH	Cond. (uomhos/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1 1					

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MU3</u>	<u>3VOLS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other	

Groundwater Sampling Form

Project Name TEX 62488/1450
 Project Number 950519C1
 Recorded By SCOTT BRODERICK

Well No. MW4
 Well Type Monitor Extraction Other
 Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 20.34
 Depth to Water (WL, ft. below TOC) 7.61
 Depth to free phase hydrocarbons (FP, ft. below TOC) _____
 Number of well volumes to be purged
 3 10 Other _____

PURGE METHOD

Bailor - Type _____
 Pump - Type ELEC. SLUB
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) 19
 Other _____
 Pumping Rate 7 gpm

PURGE VOLUME CALCULATION

$$\frac{12.73}{\text{Water Column Length}} \times \frac{.66}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

MULTIPLIER (Casing Dia. [inches] = Gallons/linear ft.)
 2 = 0.17 | 3 = 0.38 | 4 = 0.66 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

25.2 gals
 CALCULATED PURGE VOLUME
26 gals
 ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MILON/FAIR/HP

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1145 / 7	6.2	650	69.4		27	
1147 / 18	6.4	470	67.4		25	
1147 / 26	6.5	400	67.6		20	
/						
/						
/						
/						
/						

Comments during well purge _____

Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 5/19/95 1156
 Bailor - Type SS. Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Date/Time/% Recharge	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
/ /						

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW4</u>	<u>3VOLS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples	
Original Sample No.	Duplicate Sample No.

Blank Samples	
Type	Sample No.
Trp	
Rinse	
Transfer	
Other EQUIP	<u>EB/1215</u>

EQUIPMENT BLANK DONE AFTER MW4 @ 1215

Groundwater Sampling Form

Project Name TEX 62480/450 Well No. MWS
 Project Number 950519C1 Well Type Monitor Extraction Other
 Recorded By SCOTT BRODERICK Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) _____

Depth to Water (WL, ft. below TOC) _____

Depth to free phase hydrocarbons (FP, ft. below TOC) _____

Number of well volumes to be purged
 3 10 Other _____

PURGE METHOD

Bailor - Type _____
 Pump - Type _____
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

Pumping Rate _____ gpm

PURGE VOLUME CALCULATION

Water Column Length X Multiplier X No. Vols = _____
 MULTIPLIER (Casing Dia. inches) = Gallons/linear ft.
 2 = 0.17 | 3 = 0.38 | 4 = 0.65 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

_____ gals
CALCULATED PURGE VOLUME

_____ gals
ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MYRON PARER/HF

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1111 / .1	6.0	520	68.6		14	

Comments during well purge _____
 Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 5/19/95 1114

Bailor - Type Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

Date/Time/% Recharge	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MWS</u>	<u>3VOLS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinse	
Transfer	
Other	

Groundwater Sampling Form

Project Name TEX 62488/1450
 Project Number 950519C1
 Recorded By SCOTT BRODERICK

Well No. MW6
 Well Type Monitor Extraction Other
 Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 19.70
 Depth to Water (WL, ft. below TOC) 8.51
 Depth to free phase hydrocarbons (FP, ft. below TOC) _____
 Number of well volumes to be purged
 3 10 Other _____

PURGE METHOD

Bailor - Type TEFLON
 Pump - Type _____
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

Pumping Rate _____ gpm
5.7 gals

CALCULATED PURGE VOLUME

6 gals

ACTUAL PURGE VOLUME

PURGE VOLUME CALCULATION

$$\frac{11.19}{\text{Water Column Length}} \times \frac{.17}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

MULTIPLIER (Casing Dia. in inches) = Gallons/linear ft.
 2 = 0.17 | 3 = 0.38 | 4 = 0.65 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MYRON/TRACE/HF

Time/Gallons	pH	Cond. (uomhos/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1407 1 2	6.9	400	65.6	> 200	
1411 1 4	7.0	560	65.2	> 200	
1414 1 6	7.0	588	65.8	> 200	
/					
/					
/					
/					
/					

Comments during well purge _____

Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD: _____ Date/Time Sampled 5/19/95 1417

Bailor - Type TEFLON Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

Date/Time/% Recharge	pH	Cond. (uomhos/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
/ /					

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW6</u>	<u>3VOLS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other	

Groundwater Sampling Form

Project Name TEX 62488/1450 Well No. MW7
 Project Number 950519C1 Well Type Monitor Extraction Other
 Recorded By SCOTT BRODERICK Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 19.95
 Depth to Water (WL, ft. below TOC) 7.33
 Depth to free phase hydrocarbons (FP, ft. below TOC) _____

Number of well volumes to be purged
 3 10 Other _____

PURGE VOLUME CALCULATION

$$\frac{12.62}{\text{Water Column Length}} \times \frac{.17}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

MULTIPLIER (Casing Dia. inches) = Gallons/linear ft.
 2 = 0.17 | 3 = 0.38 | 4 = 0.65 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

PURGE METHOD

Bailor - Type TEFLON
 Pump - Type _____
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

Pumping Rate _____ gpm
6.4 gals
CALCULATED PURGE VOLUME
7 gals
ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MAYRON/FULKE/HF

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1346 1 3	7.0	680	66.2		> 200	
1349 1 5	7.0	700	66.0		> 200	
1355 1 7	7.1	690	66.4		> 200	
/						
/						
/						
/						
/						

Comments during well purge _____

Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 5/19/95 1358

Bailor - Type TEFLON Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

Date/Time/% Recharge	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
/ /						

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW7</u>	<u>3VCRS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Tap	
Rinsete	
Transfer	
Other	

Groundwater Sampling Form

Project Name TEX 62488/450
 Project Number 950519C1
 Recorded By SCOTT BROWERICK

Well No. MW8
 Well Type Monitor Extraction Other
 Sampled by SCOTT Date 5-19-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other

Well Total Depth (TD, ft. below TOC) 19.84

Depth to Water (DWL, ft. below TOC) 7.83

Depth to free phase hydrocarbons (FP, ft. below TOC)

Number of well volumes to be purged
 3 10 Other

PURGE VOLUME CALCULATION

$$\frac{12.01}{\text{Water Column Length}} \times \frac{.66}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

MULTIPLIER (Casing Dia. [inches] = Gallons/linear ft)
 2 = 0.17 | 3 = 0.38 | 4 = 0.65 | 4.5 = 0.83 | 5 = 1.02 | 6 = 1.5 | 8 = 2.6

PURGE METHOD

Bailor - Type
 Pump - Type ELEC SUB
 Other

PUMP INTAKE

Near top Depth (ft)
 Near Bottom Depth (ft) 10
 Other

Pumping Rate 7 gpm
23.8 gals
 CALCULATED PURGE VOLUME

24 gals
 ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT Meter Type HYDRON/BRUKE/HF

Time/Gallons	pH	Cond. (uomhes/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1236 1 8	6.6	400	68.0	> 200	
1238 1 16	6.6	490	67.4	196	
1241 1 24	6.5	520	67.0	175	
1					
1					
1					
1					
1					

Comments during well purge
 Well Pumped dry: YES NO Purge water storage/disposal Drummed onsite Other BTS

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 5/19/95 11247
 Bailor - Type S.S. Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS Meter Type

Date/Time/% Recharge	pH	Cond. (uomhes/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1 1					

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW8</u>	<u>3VOLS/40ML</u>	<u>TPHG, BTEX</u>	<u>HCL</u>	<u>BCA</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples	
Original Sample No.	Duplicate Sample No.

Blank Samples	
Type	Sample No.
Top	
Rinsete	
Transfer	
Other	

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).

Contractor: Blaine Tech Services, Inc.
 Address: 985 Timothy Drive
 City, State, ZIP: San Jose, CA 95133
 Phone: (408) 995-5535

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 listed 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 directed 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 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 #: 624881450
 Address: 1127 LINCOLN AVE.
 City, State, ZIP: ALAMEDA, CA

Well I.D.	Gals.	Well I.D.	Gals.
MW3	1 23		1
MW4	1 24		1
MW6	1 6		1
MW7	1 7		1
MW8	1 24		1
	1		1
	1		1
	1		1
	1		1
	1		1
	1		1
Total gals.	<u>86</u>	added rinse water	<u>7</u>
Total Gals. Recovered	<u>93</u>		

Job #: 950519C.1
 Date: 5-19-95
 Time: 1400
 Signature: [Signature]

REC'D AT: BTS
 Date: 5-19-95
 Time: 1700
 Signature: [Signature]

QUARTERLY SUMMARY REPORT
Former Texaco Service Station
1127 Lincoln Avenue, Alameda, California
Alameda County
First Quarter, 1995

HISTORY OF INVESTIGATIVE AND REMEDIAL ACTIONS

Four gasoline and one waste-oil underground storage tanks were removed in September, 1989. Eleven soil borings were drilled with three groundwater monitoring wells (MW-1 through MW-3) and five vapor wells (VW-1 through VW-5) being installed into eight of the borings in March, 1981. Five groundwater monitoring wells, MW-4 through MW-8 were installed in June, 1992. A soil vapor extraction and groundwater remediation system was installed June, 1993 and began full operation in September, 1993. Monitoring well MW-5 was connected to the vapor extraction system in September, 1993 and MW-1 and MW-2 were connected to the extraction system in November, 1993. MW-1, MW-2, and MW-5 act as combined extraction/recovery wells.

WORK PERFORMED DURING THIS QUARTER

Quarterly groundwater monitoring and sampling was performed as was operation and maintenance of the groundwater/soil vapor extraction system.

CHARACTERIZATION STATUS

The extent of petroleum hydrocarbons in soil and groundwater has not been delineated.

REMEDIATION STATUS

A vapor extraction and groundwater treatment system is in operation at the site. Vapors are extracted from five vapor extraction wells and three combination wells and groundwater is extracted from the three combination wells. Two vapor-phase carbon canisters treat the vapors prior to discharge.

WORK TO BE PERFORMED NEXT QUARTER

Continue quarterly monitoring and sampling to record fluctuations in hydrocarbons concentrations as well as operation and maintenance of the groundwater and soil vapor treatment systems. Also perform additional assessment to further define the petroleum hydrocarbon plume.

COMPANY CONTACT: Karen Petryna (510) 236-9139