



Texaco Refining
and Marketing Inc

108 Cutting Boulevard
Richmond, CA 94804

ST 10 245

January 17, 1996

ENV - STUDIES, SURVEYS, & REPORTS

2200 E. 12th Street
Oakland, California

Mr. Thomas Peacock
Alameda County Health Department
1131 Harbor Way Pkwy.
Alameda, CA 94502-6577

Dear Mr. Peacock:

This letter presents the results of groundwater monitoring and sampling conducted by Blaine Tech Services, Inc. on November 2, 1995, 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. (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, Karen Petryna at (510) 236-9139.

Best Regards,

Rebecca Digemess
Environmental Assistant

Karen E. Petryna
Engineer
Texaco Environmental Services

RBD:hs
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Enclosures

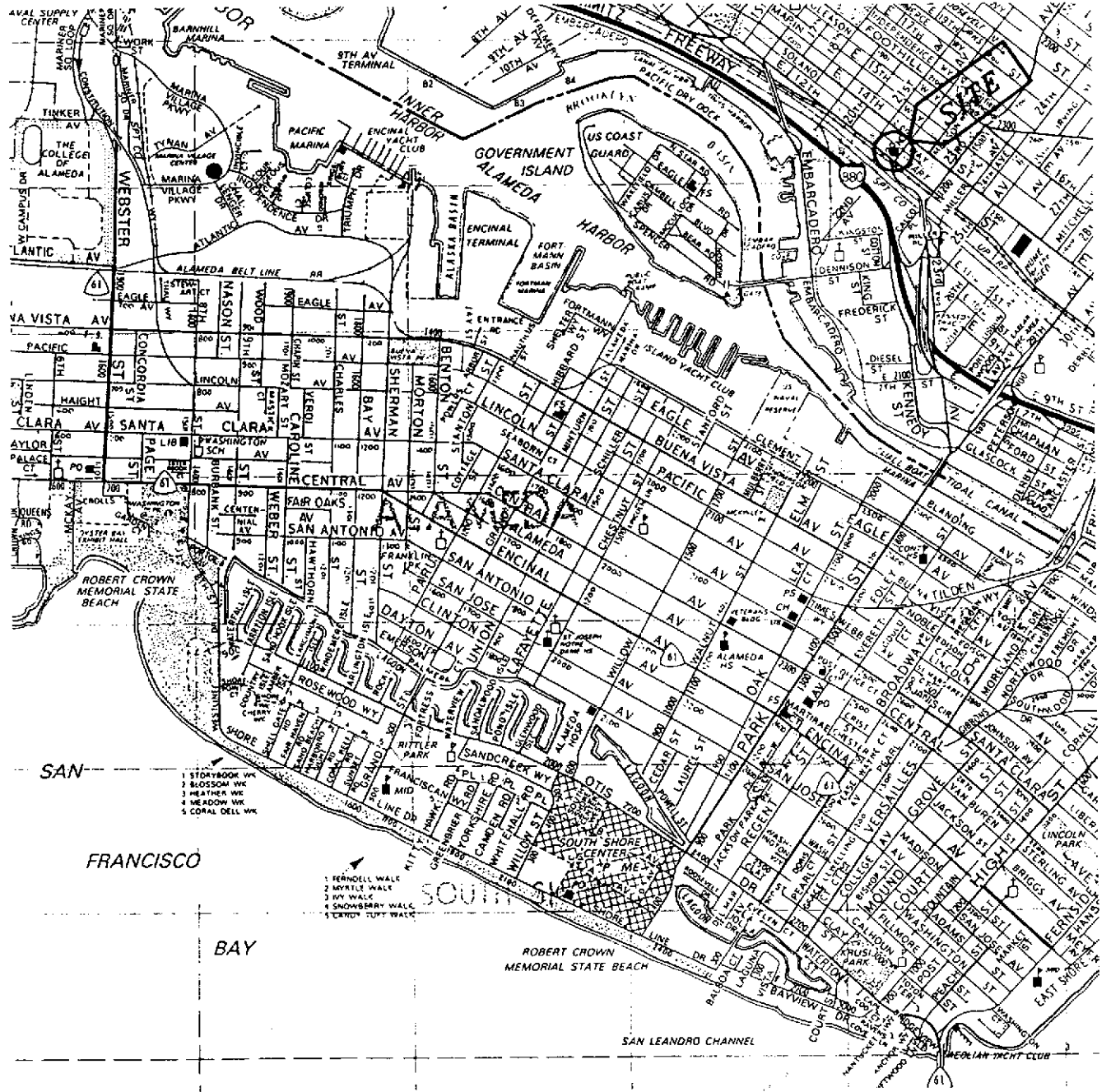
COPIES TO: ENV 25
PROJECT: 2200 E 12th St
DATE: 1/17/96

cc: 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)

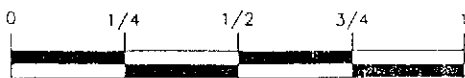
pr: EG

**Groundwater Monitoring and Sampling
Fourth Quarter, 1995
at the
Former Texaco Service Station
2200 East 12th Street
Oakland, CA**



SOURCE:

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



MILE

1" = 2200'



TEXACO

REFINING AND MARKETING, INC.
TEXACO ENVIRONMENTAL SERVICES

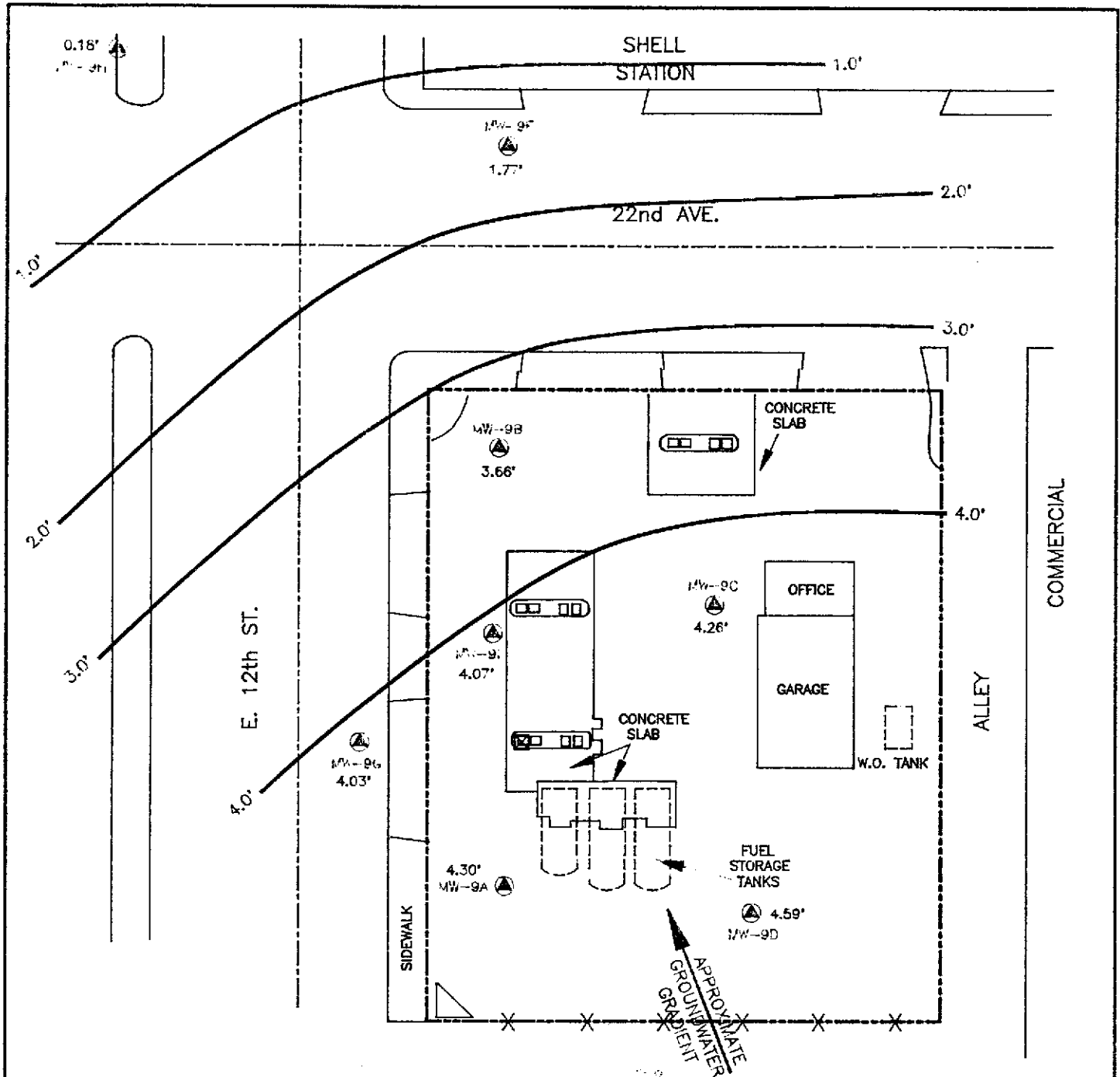
PLATE 1

SITE VICINITY MAP




FORMER TEXACO SERVICE STATION

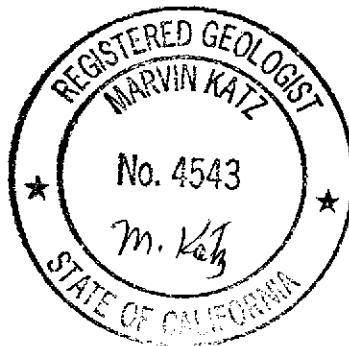
2200 E. 12th ST. / 22nd AVE.,

OAKLAND, CALIFORNIA




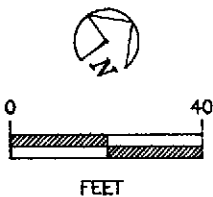
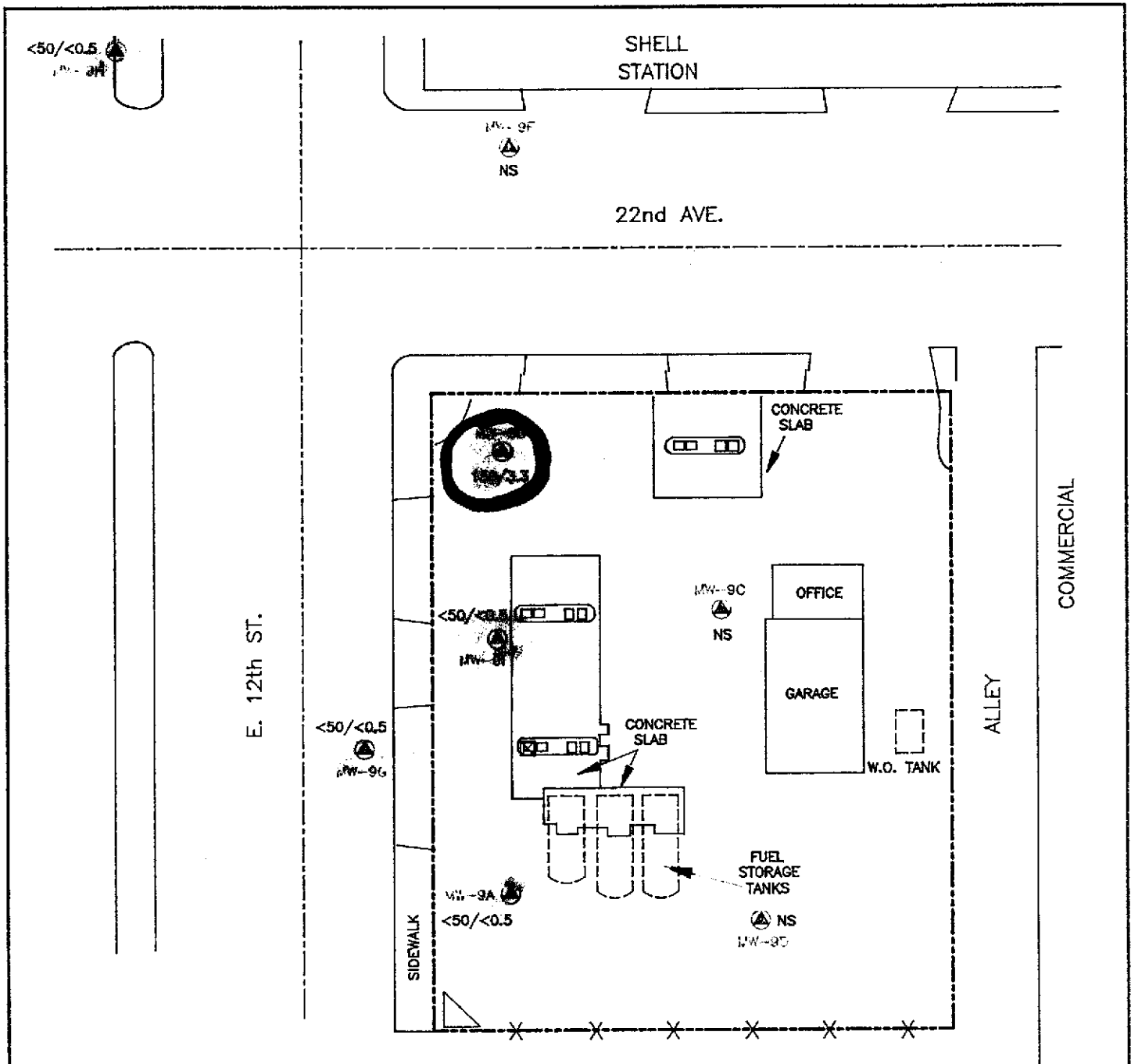
LEGEND :

-  MONITORING WELL LOCATION AND WELL NUMBER
-  GROUNDWATER CONTOUR LINE
-  4.03' GROUNDWATER ELEVATION (ABOVE MSL)




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

 TEXACO REFINING AND MARKETING INC. ENVIRONMENT, HEALTH AND SAFETY			
PLATE 2 : GROUNDWATER GRADIENT MAP (11/02/1995) FORMER TEXACO SERVICE STATION 2200 E. 12th ST. / 22nd AVE., OAKLAND, CALIFORNIA			
SCALE	1"=40'-0"	LOCATION #	62-488-0088
DRAWN BY	AMA	DATE	01/11/1996
CHECKED BY	RD	DATE	11/2/96
DRAWING NO. (OAKLAND) 12-22-OK.DWG			



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

LEGEND :

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


 TEXACO REFINING AND MARKETING INC. ENVIRONMENT, HEALTH AND SAFETY			
PLATE 3 : TPHg/BENZENE CONCENTRATION IN GROUNDWATER (11/02/1995)			
FORMER TEXACO SERVICE STATION 2200 E. 12th ST. / 22nd AVE., OAKLAND, CALIFORNIA			
SCALE	1"=40'-0"	LOCATION #	62-488-008B
DRAWN BY	AMA	DATE	01/11/1996
CHECKED BY	RD	DATE	1/12/96
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)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet)
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
	10/26/94	11.46 **	7.06	4.40
	5/15/95		6.32	5.14
	11/02/95		7.16	4.30
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
	10/26/94	9.80 **	6.04	3.76
	5/15/95		5.34	4.46
	11/02/95		6.14	3.66
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
	10/26/94	11.14 **	6.80	4.34
	5/15/95		5.72	5.42
	11/02/95		6.88	4.26

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

Well Number	Date Sampled	Elevation of Wellhead (feet)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet)
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
	10/26/94	12.90 **	8.34	4.56
	5/15/95		7.22	5.68
	11/02/95		8.31	4.59
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
	10/26/94	8.37 **	5.96	2.41
	5/15/95		5.52	2.85
	11/02/95		6.60	1.77
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
	10/26/94	9.95 **	5.76	4.19
	5/15/95		4.88	5.07
	11/02/95		5.92	4.03

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

Well Number	Date Sampled	Elevation of Wellhead (feet)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet)
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
	10/26/94	8.58 **	8.12	0.46
	5/15/95		7.88	0.70
	11/02/95		8.40	0.18
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
	10/26/94	10.11 **	5.88	4.23
	5/15/95		4.94	5.17
	11/02/95		6.04	4.07
* = Elevation relative to temporary benchmark with an arbitrary elevation of 100.0 feet.				
**Wells resurveyed on 8/4/94, relative to 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)	MTBE (ppb)
MW-9A	2/5/92	<50	1.1	1.8	0.6	1.3	NA
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	11/16/92	<50	1.1	<0.5	<0.5	<0.5	NA
	2/3/93	140	17	19	1.6	20	NA
	5/18/93	<50	0.8	<0.5	1.3	7	NA
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/31/94	<50	<0.5	<0.5	<0.5	<0.5	NA
	10/26/94	66	<0.5	<0.5	<0.5	<0.5	NA
	5/15/95	<50	0.52	0.67	<0.5	<0.5	NA
	11/2/95	<50	<0.5	<0.5	<0.5	<0.5	<10
MW-9B	2/5/92	60	14	<0.5	2.9	2.5	NA
	5/5/92	620	180	2.4	8.4	2.2	NA
	9/14/92	110	9.6	<0.5	<0.5	<0.5	NA
	11/16/92	200	33	<0.5	4.2	1.4	NA
	2/3/93	12,000	320	13	35	110	NA
	5/18/93	180	1.1	<0.5	2.6	5.9	NA
	8/26/93	180	36	<0.5	3	1.7	NA
	11/4/93	98	13	<0.5	1.4	<0.5	NA
	2/4/94	790	170	1.3	12	0.8	NA
	5/31/94	1,000	150	2.5	8.0	2.1	NA
	10/26/94	84	2.8	0.72	<0.5	<0.5	NA
	5/15/95	2,800	420	25	27	6.7	NA
	11/2/95	130	3.3	<0.5	<0.5	<0.5	<10
MW-9C	2/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	2/3/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/18/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/31/94	Not Sampled					
	10/26/94	Not Sampled					
	5/15/95	Not Sampled					
	11/2/95	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)	MTBE (ppb)
MW-9D	2/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	2/3/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/18/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/31/94	Not Sampled					
	10/26/94	Not Sampled					
	5/15/95	Not Sampled					
	11/2/95	Not Sampled					
	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	NA
9/14/92		Not Sampled					NA
11/16/92		<50	<0.5	<0.5	<0.5	<0.5	NA
2/3/93		<50	<0.5	<0.5	<0.5	<0.5	NA
5/19/93		<50	<0.5	<0.5	1.2	6.8	NA
8/26/93		<50	<0.5	<0.5	<0.5	<0.5	NA
11/5/93		<50	<0.5	<0.5	<0.5	<0.5	NA
2/4/94		<50	<0.5	<0.5	<0.5	<0.5	NA
5/31/94		Not Sampled					
10/26/94		Not Sampled					
5/15/95		Not Sampled					
11/2/95		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	NA
	9/14/92	Not Sampled					
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5	NA
	2/3/93	64	<0.5	<0.5	<0.5	<0.5	NA
	5/19/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	11/5/93	<50	<0.5	<0.5	<0.5	<0.5	NA
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5	NA
	5/31/94	Not Sampled					
	10/26/94	Not Sampled					
	5/15/95	Not Sampled					
	11/2/95	<50	<0.5	<0.5	<0.5	<0.5	<10

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)	MTBE (ppb)	
MW-9H	2/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA	
	5/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA	
	9/14/92	Not Sampled						
	11/16/92	Not Sampled						
	2/3/93	280	<0.5	<0.5	<0.5	<0.5	NA	
	5/19/93	<50	<0.5	<0.5	1.1	6.4	NA	
	8/26/93	<50	0.8	<0.5	<0.5	<0.5	NA	
	11/5/93	<50	<0.5	<0.5	<0.5	<0.5	NA	
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5	NA	
	5/31/94	<50	0.92	1.1	<0.5	0.86	NA	
	10/26/94	<50	<0.5	<0.5	<0.5	<0.5	NA	
	5/15/95	<50	<0.5	<0.5	<0.5	<0.5	NA	
	11/2/95	<50	<0.5	<0.5	<0.5	<0.5	<10	
MW-9I	2/5/92	<50	<0.5	<0.5	<0.5	<0.5	NA	
	5/5/92	<50	0.9	<0.5	<0.5	0.7	NA	
	9/14/92	<50	<0.5	<0.5	<0.5	<0.5	NA	
	11/16/92	<50	<0.5	<0.5	<0.5	<0.5	NA	
	2/2/93	240	46	1.1	2.3	2.1	NA	
	5/18/93	79	<0.5	<0.5	<0.5	<0.5	NA	
	8/26/93	<50	<0.5	<0.5	<0.5	<0.5	NA	
	11/4/93	<50	<0.5	<0.5	<0.5	<0.5	NA	
	2/4/94	<50	<0.5	<0.5	<0.5	<0.5	NA	
	5/31/94	240	0.66	0.63	<0.5	1.4	NA	
	10/26/94	150	<0.5	<0.5	<0.5	<0.5	NA	
	5/15/95	56	<0.5	0.82	<0.5	<0.5	NA	
	11/2/95	<50	<0.5	<0.5	<0.5	<0.5	<10	
MTBE = Methyl-tert-butylether								
NA = Not Analyzed								
ppb = parts per billion								
TPHg = Total petroleum hydrocarbons analyzed as gasoline								
< = Less than the detection limit for the specified method of analysis								

ANALYTICAL REPORT

B C Analytical

1085 Shary Circle
 Concord, CA 94518
 510/825-3894
 Fax: 510/825-3924

LOG NO: G95-11-100

Received: 03 NOV 95

Mailed: NOV 13 1995

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

Purchase Order: 94-1446346+4370

Requisition: 624880088
 Project: FKEP1016L

CC: Mr. Keith Winemiller

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	11-100-1	11-100-2	11-100-3
DATE SAMPLED	02 NOV 95	02 NOV 95	02 NOV 95
SAMPLE DESCRIPTION	MW 9A	MW 9G	MW 9I
AQUEOUS			
GRO (8015M.TX)			
Date Analyzed	11/06/95	11/06/95	11/06/95
Dilution Factor, Times	1	1	1
Benzene, ug/L	<0.5	<0.5	<0.5
Toluene, ug/L	<0.5	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	<0.5	<0.5
Methyl-tert-butylether, ug/L	<10	<10	<10
Total Xylene Isomers, ug/L	<0.5	<0.5	<0.5
Carbon Range, .	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	<50	<50	<50
Surrogates **			
a,a,a-Trifluorotoluene Rep., ug/L	51.2	51.0	50.3
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0	50.0



B C Analytical

1085 Shary Circle
Concord, CA 94518
510/825-3894
Fax: 510/825-3924

LOG NO: G95-11-100

Received: 03 NOV 95

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

Purchase Order: 94-1446346+4370

Requisition: 624880088
Project: FKEP1016L

CC: Mr. Keith Winemiller

REPORT OF ANALYTICAL RESULTS

Page 2

LOG NO	11-100-4	11-100-5
DATE SAMPLED	02 NOV 95	02 NOV 95
SAMPLE DESCRIPTION	MW 9B	MW 9H
AQUEOUS		
Dissolved Solids (160.1), mg/L	480	530



B C Analytical

1085 Shary Circle
Concord, CA 94518
510/825-3894
Fax: 510/825-3924

LOG NO: G95-11-100

Received: 03 NOV 95

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

Purchase Order: 94-1446346+4370

Requisition: 624880088
Project: FKEP1016L

CC: Mr. Keith Winemiller

REPORT OF ANALYTICAL RESULTS

Page 3

LOG NO	11-100-4	11-100-5
DATE SAMPLED	02 NOV 95	02 NOV 95
SAMPLE DESCRIPTION	MW 9B	MW 9H
AQUEOUS		
GRO (8015M.TX)		
Date Analyzed	11/07/95	11/06/95
Dilution Factor, Times	1	1
Benzene, ug/L	3.3	<0.5
Toluene, ug/L	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	<0.5
Methyl-tert-butylether, ug/L	<10	<10
Total Xylene Isomers, ug/L	<0.5	<0.5
Carbon Range, .	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	130	<50
Surrogates **		
a,a,a-Trifluorotoluene Rep., ug/L	54.9	50.7
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0



B C Analytical

1085 Shary Circle
Concord, CA 94518
510/825-3894
Fax: 510/825-3924

LOG NO: G95-11-100

Received: 03 NOV 95

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

Purchase Order: 94-1446346+4370

Requisition: 624880088
Project: FKEP1016L

CC: Mr. Keith Winemiller

REPORT OF ANALYTICAL RESULTS

Page 4

LOG NO	11-100-6	11-100-7
DATE SAMPLED	02 NOV 95	02 NOV 95
SAMPLE DESCRIPTION	EB	TB
AQUEOUS		
GRO (8015M.TX)		
Date Analyzed	11/06/95	11/07/95
Dilution Factor, Times	1	1
Benzene, ug/L	<0.5	<0.5
Toluene, ug/L	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	<0.5
Methyl-tert-butylether, ug/L	<10	<10
Total Xylene Isomers, ug/L	<0.5	<0.5
Carbon Range, .	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	<50	<50
Surrogates **		
a,a,a-Trifluorotoluene Rep., ug/L	49.8	50.5
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0



B C Analytical

1085 Shary Circle
Concord, CA 94518
510/825-3894
Fax: 510/825-3924

LOG NO: G95-11-100

Received: 03 NOV 95

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

Purchase Order: 94-1446346+4370

Requisition: 624880088
Project: FKEP1016L

CC: Mr. Keith Winemiller

REPORT OF ANALYTICAL RESULTS

Page 5

Karen Petryna
2200 East Twelfth St., Oakland
Alameda County


Jane Freemyer, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

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**BCA**

: ORDER PLACED FOR CLIENT: Texaco Environmental Services 9511100 :
: BC ANALYTICAL : GLEN LAB : 13:55:25 13 NOV 1995 - P. 1 :
=====

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE.....	METHOD.....	EQUIP.	BATCH..	ID.NO
			ANALYZED				
9511100*1	MW 9A	GAS.BTX.TESNC	11.06.95	8015M.TX	536-35	95424	8559
9511100*2	MW 9G	GAS.BTX.TESNC	11.06.95	8015M.TX	536-35	95424	8559
9511100*3	MW 9I	GAS.BTX.TESNC	11.06.95	8015M.TX	536-35	95424	8559
9511100*4	MW 9B	TDS	11.06.95	160.1		95111	8106
		GAS.BTX.TESNC	11.07.95	8015M.TX	536-35	95425	8559
9511100*5	MW 9H	TDS	11.06.95	160.1		95111	8106
		GAS.BTX.TESNC	11.06.95	8015M.TX	536-35	95424	8559
9511100*6	EB	GAS.BTX.TESNC	11.06.95	8015M.TX	536-35	95424	8559
9511100*7	TB	GAS.BTX.TESNC	11.07.95	8015M.TX	536-35	95424	8559

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 G9511100

DATE REPORTED : 11/13/95

Page 1

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. GRO	C511773*1					
Date Analyzed	11.07.95	95424	11/07/95	11/07/95	Date	N/A
Benzene	11.07.95	95424	17.5	18.5	ug/L	95
Toluene	11.07.95	95424	91.7	91.1	ug/L	101
Ethylbenzene	11.07.95	95424	19.8	19.2	ug/L	103
Total Xylene Isomers	11.07.95	95424	106	103	ug/L	103
TPH (Gasoline Range)	11.07.95	95424	979	1000	ug/L	98
a,a,a-Trifluorotoluene Rep.	11.07.95	95424	56.4	50.0	ug/L	113
a,a,a-Trifluorotoluene Th.	11.07.95	95424	50.0	50.0	ug/L	100
2. Dissolved Solids	C511766*1	11.06.95 95111	1020	1000	mg/L	102
3. Dissolved Solids	C511767*1	11.06.95 95111	1010	1000	mg/L	101
4. GRO	C5111268*1					
Date Analyzed	11.07.95	95425	11/07/95	11/07/95	Date	N/A
Benzene	11.07.95	95425	17.5	18.5	ug/L	95
Toluene	11.07.95	95425	91.7	91.1	ug/L	101
Ethylbenzene	11.07.95	95425	19.8	19.2	ug/L	103
Total Xylene Isomers	11.07.95	95425	106	103	ug/L	103
TPH (Gasoline Range)	11.07.95	95425	979	1000	ug/L	98
a,a,a-Trifluorotoluene Rep.	11.07.95	95425	56.4	50.0	ug/L	113
a,a,a-Trifluorotoluene Th.	11.07.95	95425	50.0	50.0	ug/L	100

BC ANALYTICAL

ORDER QC REPORT FOR G9511100

DATE REPORTED : 11/13/95

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ADDITIONAL LCS PRECISION (DUPLICATES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	LC1 RESULT	LC2 RESULT	UNIT	RELATIVE % DIFF
1. Dissolved Solids		11.06.95	95111	1020	1010	mg/L	1

BC ANALYTICAL

ORDER QC REPORT FOR G9511100

DATE REPORTED : 11/13/95

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MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
1. GRO	9511100*1						
Benzene		11.06.95	95424	95	94	18.5	ug/L
Toluene		11.06.95	95424	102	101	91.1	ug/L
Ethylbenzene		11.06.95	95424	102	100	19.2	ug/L
Total Xylene Isomers		11.06.95	95424	105	104	103	ug/L
TPH (Gasoline Range)		11.06.95	95424	95	99	1000	ug/L
a,a,a-Trifluorotoluene Rep.		11.06.95	95424	111	109	50.0	ug/L
a,a,a-Trifluorotoluene Th.		11.06.95	95424	100	100	50.0	ug/L
2. Dissolved Solids	9511082*1	11.06.95	95111	98	99	1730	mg/L
3. GRO	9511119*2						
Benzene		11.07.95	95425	93	96	18.5	ug/L
Toluene		11.07.95	95425	97	102	91.1	ug/L
Ethylbenzene		11.07.95	95425	98	101	19.2	ug/L
Total Xylene Isomers		11.07.95	95425	100	104	103	ug/L
TPH (Gasoline Range)		11.07.95	95425	99	97	1000	ug/L
a,a,a-Trifluorotoluene Rep.		11.07.95	95425	106	109	50.0	ug/L
a,a,a-Trifluorotoluene Th.		11.07.95	95425	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9511100

DATE REPORTED : 11/13/95

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MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. GRO	9511100*1						
Date Analyzed		11.06.95	95424	11/06/95	11/06/95	Date	N/A
Benzene		11.06.95	95424	17.5	17.4	ug/L	1
Toluene		11.06.95	95424	93.0	91.6	ug/L	2
Ethylbenzene		11.06.95	95424	19.5	19.2	ug/L	2
Total Xylene Isomers		11.06.95	95424	108	107	ug/L	1
TPH (Gasoline Range)		11.06.95	95424	952	989	ug/L	4
a,a,a-Trifluorotoluene Rep.		11.06.95	95424	55.3	54.4	ug/L	2
a,a,a-Trifluorotoluene Th.		11.06.95	95424	50.0	50.0	ug/L	0
2. Dissolved Solids	9511082*1	11.06.95	95111	1710	1720	mg/L	1
3. BTEX/GRO	9511119*2						
Date Analyzed		11.07.95	95425	11/07/95	11/07/95	Date	N/A
Benzene		11.07.95	95425	17.2	17.7	ug/L	3
Toluene		11.07.95	95425	88.6	92.6	ug/L	4
Ethylbenzene		11.07.95	95425	18.8	19.4	ug/L	3
Total Xylene Isomers		11.07.95	95425	103	107	ug/L	4
TPH (Gasoline Range)		11.07.95	95425	991	972	ug/L	2
a,a,a-Trifluorotoluene Rep.		11.07.95	95425	52.9	54.4	ug/L	3
a,a,a-Trifluorotoluene Th.		11.07.95	95425	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9511100

DATE REPORTED : 11/13/95

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
1. GRO	B511407*1					
Date Analyzed	11.06.95	95424	11/06/95	NA	Date	8015M.TX
Benzene	11.06.95	95424	0	0.5	ug/L	8015M.TX
Toluene	11.06.95	95424	0	0.5	ug/L	8015M.TX
Ethylbenzene	11.06.95	95424	0	0.5	ug/L	8015M.TX
Methyl-tert-butylether	11.06.95	95424	0	NA	ug/L	8015M.TX
Total Xylene Isomers	11.06.95	95424	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	11.06.95	95424	0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene Rep.	11.06.95	95424	51.6	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene Th.	11.06.95	95424	50.0	NA	ug/L	8015M.TX
2. Dissolved Solids	B511399*1	11.06.95 95111	0	10	mg/L	160.1
3. GRO	B511716*1					
Date Analyzed	11.07.95	95425	11/07/95	NA	Date	8015M.TX
Benzene	11.07.95	95425	0	0.5	ug/L	8015M.TX
Toluene	11.07.95	95425	0	0.5	ug/L	8015M.TX
Ethylbenzene	11.07.95	95425	0	0.5	ug/L	8015M.TX
Methyl-tert-butylether	11.07.95	95425	0	NA	ug/L	8015M.TX
Total Xylene Isomers	11.07.95	95425	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	11.07.95	95425	0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene Rep.	11.07.95	95425	53.2	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene Th.	11.07.95	95425	50.0	NA	ug/L	8015M.TX

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9511100*1							
8015M.TXa	,a,a-Trifluorotoluene	Re95424	11/06/95	51.2	50.0	102	
9511100*2							
8015M.TXa	,a,a-Trifluorotoluene	Re95424	11/06/95	51.0	50.0	102	
9511100*3							
8015M.TXa	,a,a-Trifluorotoluene	Re95424	11/06/95	50.3	50.0	101	
9511100*4							
8015M.TXa	,a,a-Trifluorotoluene	Re95425	11/07/95	54.9	50.0	110	
9511100*5							
8015M.TXa	,a,a-Trifluorotoluene	Re95424	11/06/95	50.7	50.0	101	
9511100*6							
8015M.TXa	,a,a-Trifluorotoluene	Re95424	11/06/95	49.8	50.0	100	
9511100*7							
8015M.TXa	,a,a-Trifluorotoluene	Re95424	11/07/95	50.5	50.0	101	

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9511100*1*R1							
8015M.TXa	a,a,a-Trifluorotoluene	Re95424	11/06/95	51.2	50.0	102	
9511100*1*S1							
8015M.TXa	a,a,a-Trifluorotoluene	Re95424	11/06/95	55.3	50.0	111	
9511100*1*S2							
8015M.TXa	a,a,a-Trifluorotoluene	Re95424	11/06/95	54.4	50.0	109	
9511100*1*T							
8015M.TXa	a,a,a-Trifluorotoluene	Re95424	11/06/95	50.0	50.0	100	
9511119*2*R1							
8015M	a,a,a-Trifluorotoluene	Re95425	11/07/95	51.0	50.0	102	
9511119*2*S1							
8015M	a,a,a-Trifluorotoluene	Re95425	11/07/95	52.9	50.0	106	
9511119*2*S2							
8015M	a,a,a-Trifluorotoluene	Re95425	11/07/95	54.4	50.0	109	
9511119*2*T							
8015M	a,a,a-Trifluorotoluene	Re95425	11/07/95	50.0	50.0	100	
B511407*1*MB							
8015M.TXa	a,a,a-Trifluorotoluene	Re95424	11/06/95	51.6	50.0	103	
B511716*1*MB							
8015M.TXa	a,a,a-Trifluorotoluene	Re95425	11/07/95	53.2	50.0	106	
C5111268*1*LC							
8015M.TXa	a,a,a-Trifluorotoluene	Re95425	11/07/95	56.4	50.0	113	
C5111268*1*LT							
8015M.TXa	a,a,a-Trifluorotoluene	Re95425	11/07/95	50.0	50.0	100	
C511773*1*LC							
8015M.TXa	a,a,a-Trifluorotoluene	Re95424	11/07/95	56.4	50.0	113	
C511773*1*LT							
8015M.TXa	a,a,a-Trifluorotoluene	Re95424	11/07/95	50.0	50.0	100	

Chain-of-Custody

9951.

Texaco Environmental Services

108 Cutting Boulevard
 Richmond, California 94804
 Phone: (510) 230-3541
 FAX: (510) 237-7821

Forward Results to the Attention of Rebecca Digeress

Texaco Project Coordinator Karen Petryna

Site Name: Texaco Loc. # 624880088

Site Address: 2200 East Twelfth St. Oakland, CA

Contractor Project Number: 951102-AZ

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): GANDY VALENTINE

Sampler Signature: [Signature]

Date Samples Collected: 11-2-95

ANALYSIS

cooler temp:
 4.5 °C
 Sample cond:
 good

Sample Number	Lab. Sample Number	Date/Time Collected	No. of Containers	Type of Containers	Sample Matrix	Preservative	TPH gas/BTEX	TPH Diesel	O&G/TRPH (41B.1)	TPH Ex. (C8-C36+)	VOCs 8240/824	P. Halocarbons 8010/60	P. Aromatics 8020/602	Organic Lead	MTBE	TDS	Comments
MW9A		11-2 / 1305	3	VDA/PEY	W	HCl	X								X		-1
MW9B		1 / 1505	5				X								X	X	-4
MW9C		1 / 1240	3				X								X		-2
MW9H		1 / 1410	5				X								X	X	-5
MW9I		1 / 1480	3				X								X		-3
EB		1 / 1310	3				X								X		-6
TB			2				X								X		-7
																	624880088
																	Alameda
																	REP
																	KEEP 10/10L
																	cc: K. Winemiller

Relinquished by: [Signature] Date: 11-3-95 Time: 1:35

Received by: [Signature] Date: 11-3-95 Time: 1:50

Relinquished by: [Signature] Date: 11-3-95 Time: 3:25

Received by: [Signature] Date: 11/3/95 Time: 3:35

Relinquished by: [Signature] Date: 11/3/95 Time: 5:30

Received by: [Signature] Date: 11/3/95 Time: 5:30

Method of Shipment:

Lab Comments:

Well Gauging Data

Project Name: TEXACO
 Project Number: 951102-A2

Date: 11-2-95
 Recorded By: RV

Well ID	TOC Elev.	DTB (ft. TOC)	Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
MW9A		17.60	2		7.16		
MW9B		17.60	2		6.14		
MW9C		16.12	2		6.88		
MW9D		14.70 13.85	4		8.31		
MW9F		13.85	4		6.60		
MW9G		14.00	4		5.92		
MW9H		14.20	4		8.40		
MW9I		14.00	4		6.04		

TOC = Top of casing
 DTB = Depth to bottom in feet below TOC
 DTP = Depth to product in feet below TOC
 DTW = Depth to water in feet below TOC
 PT = Product thickness in feet

Groundwater Sampling Form

Project Name TEXACO
 Project Number 951102-A2
 Recorded By RV

Well No. MW9A
 Well Type Monitor Extraction Other
 Sampled by RV Date 11-2-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 17.60
 Depth to Water (WL, ft. below TOC) 7.16
 Depth to free phase hydrocarbons (FP, ft. below TOC) _____
 Number of well volumes to be purged
 3 10 Other _____

PURGE METHOD

Bailor - Type TEF.
 Pump - Type _____
 Other _____

PUMP INTAKE

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

Pumping Rate _____ gpm

5.3 calcs
CALCULATED PURGE VOLUME
6.0 calcs
ACTUAL PURGE VOLUME

PURGE VOLUME CALCULATION

$$\frac{10.44}{\text{Water Column Length}} \times \frac{.17}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

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

GROUNDWATER PARAMETER MEASUREMENT

Meter Type M420N/C

Time/Gallons	pH	Cond. (uomhcs/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1252 2.0	7.0	840	73.4		126	
1255 4.0	7.1	900	72.0		100	
1258 6.0	7.1	900	72.0		130	
/						
/						
/						
/						
/						

Comments during well purge _____

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

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 11-2 1 1305

Bailor - Type TEF Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

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

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW9A</u>	<u>FP #6 2 WAD</u>	<u>TPHG</u>	<u>HQ</u>	<u>BC</u>	
	<u>ISIX VOA</u>	<u>BTEX</u>			
	<u>MRE</u>	<u>MRE</u>			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	<u>ERC 1310</u>
Transfer	
Other:	

Groundwater Sampling Form

Project Name TEXACO
 Project Number 951102-A2
 Recorded By RV

Well No. MW 9 B
 Well Type Monitor Extraction Other
 Sampled by RV Date 11-2-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 17.60
 Depth to Water (WL, ft. below TOC) 6.14
 Depth to free phase hydrocarbons (FP, ft. below TOC)
 Number of well volumes to be purged
 3 10 Other

PURGE METHOD

Bailer - Type TEF
 Pump - Type
 Other

PUMP INTAKE

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

Pumping Rate _____ gpm
5.8 gals
CALCULATED PURGE VOLUME

PURGE VOLUME CALCULATION

$$\frac{11.46}{\text{Water Column Length}} \times \frac{.17}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

6.0 gals
ACTUAL PURGE VOLUME

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

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MYRON L

Time/Gallons	pH	Cond. (uomhos/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1447 1 2.0	6.8	700	73.6	117	
1449 1 4.0	7.0	740	72.6	170	
1453 1 6.0	7.0	740	72.4	197	
/					
/					
/					
/					

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

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 11-2 1150S

Bailer - Type TEF 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>MW 9 B</u>	<u>3 40ML</u>	<u>TPHG</u>	<u>HCl</u>	<u>RSC</u>	
	<u>VOA</u>	<u>BTX</u>			
	<u>2 500ML</u>	<u>MTBE</u>			
	<u>POLY</u>	<u>TDS</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 TEXACO
 Project Number 951102-AZ
 Recorded By RW

Well No. MW 9#G
 Well Type Monitor Extraction Other
 Sampled by RW Date 11-2-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 14.00
 Depth to Water (WL, ft. below TOC) 5.92
 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 E. SUB
 Other

PUMP INTAKE

Near top Depth (ft)
 Near Bottom Depth (ft) 14
 Other

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

PURGE VOLUME CALCULATION

8.08 x .66 x 3 = _____
 Water Column Length Multiplier 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

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MYRON C

Time/Gallons	pH	Cond. (uomhcs/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
<u>1327 6.0</u>	<u>6.9</u>	<u>1200</u>	<u>69.4</u>		<u>40</u>	
<u>1328 12.0</u>	<u>7.1</u>	<u>740</u>	<u>71.0</u>		<u>26</u>	
<u>1329 16.0</u>	<u>7.0</u>	<u>730</u>	<u>70.8</u>		<u>37</u>	
/						
/						
/						
/						
/						

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

WELL SAMPLING

SAMPLING METHOD: Date/Time Sampled 11-2-1340
 Bailor - Type TEF Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

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

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW9G</u>	<u>340ml VOA</u>	<u>TPH BTEX</u>	<u>HCl</u>	<u>BC</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsale	
Transfer	
Other:	

Groundwater Sampling Form

Project Name TEYACO
 Project Number 951102-42
 Recorded By RW

Well No. MW9H
 Well Type Monitor Extraction Other
 Sampled by RW Date 11-2-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other
 Well Total Depth (TD, ft. below TOC) 14.20
 Depth to Water (WL, ft. below TOC) 8.40

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

Number of well volumes to be purged
 3 10 Other _____

PURGE VOLUME CALCULATION

$$\frac{5.8}{\text{Water Column Length}} \times \frac{.66}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

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

PURGE METHOD

Bailor - Type _____
 Pump - Type ESUR
 Other _____

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) 14
 Other _____

Pumping Rate 8 gpm
11.4 gals
CALCULATED PURGE VOLUME

12.0 gals
ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT Meter Type

Time/Gallons	pH	Cond. (uomhos/cm)	Temp (deg C / deg F)	Turbidity (NTU)	Color/Odor
1359 1 4.0	7.2	1100	72.0	7200	
1400 1 8.0	7.0	1000	70.6	197	
1401 1 12.0	7.0	1000	70.4	190	
/					
/					
/					
/					
/					

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

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 11-2 1 1410

Bailor - Type TEF 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>MW9H</u>	<u>3 60 mL</u>	<u>TPH</u>	<u>HCl</u>	<u>BC</u>	
	<u>VOA</u>	<u>BTEX</u>			
		<u>MTBE</u>			
	<u>2 500 mL POLY</u>	<u>TSS</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 TEXACO
 Project Number 951102-AZ
 Recorded By PV

Well No. MW9I
 Well Type Monitor Extraction Other
 Sampled by PV Date 11-2-95

WELL PURGING

PURGE VOLUME

Well casing diameter
 2-inch 4-inch Other _____
 Well Total Depth (TD, ft. below TOC) 14.00
 Depth to Water (WL, ft. below TOC) 6.04

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

Number of well volumes to be purged
 3 10 Other _____

PURGE VOLUME CALCULATION

$$\frac{7.96}{\text{Water Column Length}} \times \frac{1.66}{\text{Multiplier}} \times \frac{3}{\text{No. Vols}} =$$

MULTIPLIER (Casing Dia. [inches] = Gallons/linear ft.)
 2 = 0.173 | 3 = 0.38 | 4 = 0.66 | 5 = 0.83 | 6 = 1.02 | 8 = 1.5 | 10 = 2.6

PURGE METHOD

Bailor - Type _____
 Pump - Type ESOB
 Other _____

PUMP INTAKE

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

Pumping Rate _____ gpm
 CALCULATED PURGE VOLUME 15.7 gals

ACTUAL PURGE VOLUME 16.0 gals

GROUNDWATER PARAMETER MEASUREMENT

Meter Type MYRON

Time/Gallons	pH	Cond. (uomhcs/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1421 / 6.0	6.7	1300	74.8		62	
1422 / 12.0	6.9	1200	76.2		50	
1423 / 16.0	6.9	1200	75.6		36	
/						
/						
/						
/						
/						

Comments during well purge _____

Well Pumped dry. YES NO Purge water storage/disposal Drummed onsite Other TRUCK

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 11-2 1140

Bailor - Type TEF _____ Sample port Other

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS

Meter Type _____

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

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
<u>MW9I</u>	<u>340ml</u>	<u>TPAG</u>	<u>HCl</u>	<u>BC</u>	
	<u>10-VOA</u>	<u>BTEX</u>			
		<u>MTSE</u>			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsale	
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 #: 624880088
 Address: 2200 E. 12TH ST.
 City, State, ZIP: OAKLAND, CA

Well I.D.	Gals.	Well I.D.	Gals.
<u>MW9A</u>	<u>16.0</u>	<u>1</u>	
<u>MW9B</u>	<u>16.0</u>	<u>1</u>	
<u>MW9C</u>	<u>16.0</u>	<u>1</u>	
<u>MW9D</u>	<u>12.0</u>	<u>1</u>	
<u>MW9E</u>	<u>16.0</u>	<u>1</u>	
<u>1</u>		<u>1</u>	
<u>1</u>		<u>1</u>	
<u>1</u>		<u>1</u>	
<u>1</u>		<u>1</u>	
<u>1</u>		<u>1</u>	
<u>1</u>		<u>1</u>	

Total gals. _____ added rinse water 50

Total Gals. Recovered 61.0

Job #: 951102-AZ
 Date: 11-2-95
 Time: 1518
 Signature: Randy Valenzuela

REC'D AT: BTS
 Date: 11-2-95
 Time: 1700
 Signature: Randy Valenzuela

QUARTERLY SUMMARY REPORT
Former Texaco/Current Exxon Service Station
2200 East 12th, Oakland, California
Alameda County
Third Quarter, 1995

HISTORY OF INVESTIGATIVE AND REMEDIAL ACTIONS

Investigation began in May, 1988 and initially consisted of a sensitive receptor study and a preliminary subsurface investigation. Five shallow monitoring wells have been installed on site; three (3) wells were installed off-site. Dissolved petroleum hydrocarbons were found in water from two (2) on-site wells, downgradient of the tanks and a pump island. 20 shallow soil borings were drilled and sampled near the pump islands and underground tanks. Slug tests were performed in two (2) on-site wells to evaluate hydraulic properties of shallow saturated material. The site assessment report was completed in the third quarter of 1989. In fourth quarter, 1990 soils with hydrocarbon concentrations at and above 100 parts per million (ppm) were excavated between the sidewalk and the canopy covering the western pump islands. Following on-site treatment, the excavated soils were removed from the site to Redwood Landfill in Novato. MW-9E was abandoned, and MW-9I was installed in approximately the same location. During the third quarter of 1991, Exxon removed and replaced the underground storage tanks and product lines.

WORK PERFORMED DURING THIS QUARTER

Quarterly groundwater monitoring and sampling.

CHARACTERIZATION STATUS

The petroleum hydrocarbon plume has been delineated.

REMEDIATION STATUS

Not applicable.

WORK TO BE PERFORMED NEXT QUARTER

Continue quarterly monitoring and sampling to record fluctuations in hydrocarbons concentrations and water levels.

COMPANY CONTACT: Karen Petryna (510) 236-9139