Texaco Refining
and Marketing Inc

[illegible] Cutting Boulevard
Richmond CA 94804

January 18, 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 November 2, 1994, at the site referenced above (see Plate 1, Site Vicinity Map). Based on groundwater level measurements, the areal hydraulic gradient was estimated to be west-northwest. 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, along with Texaco Environmental Services' Standard Operating Procedures.

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 Digerness
Environmental Assistant

Karen E Petryna
Engineer
Texaco Environmental Services

RBD hs

C \QMR\1127L\QMR LET

Enclosures

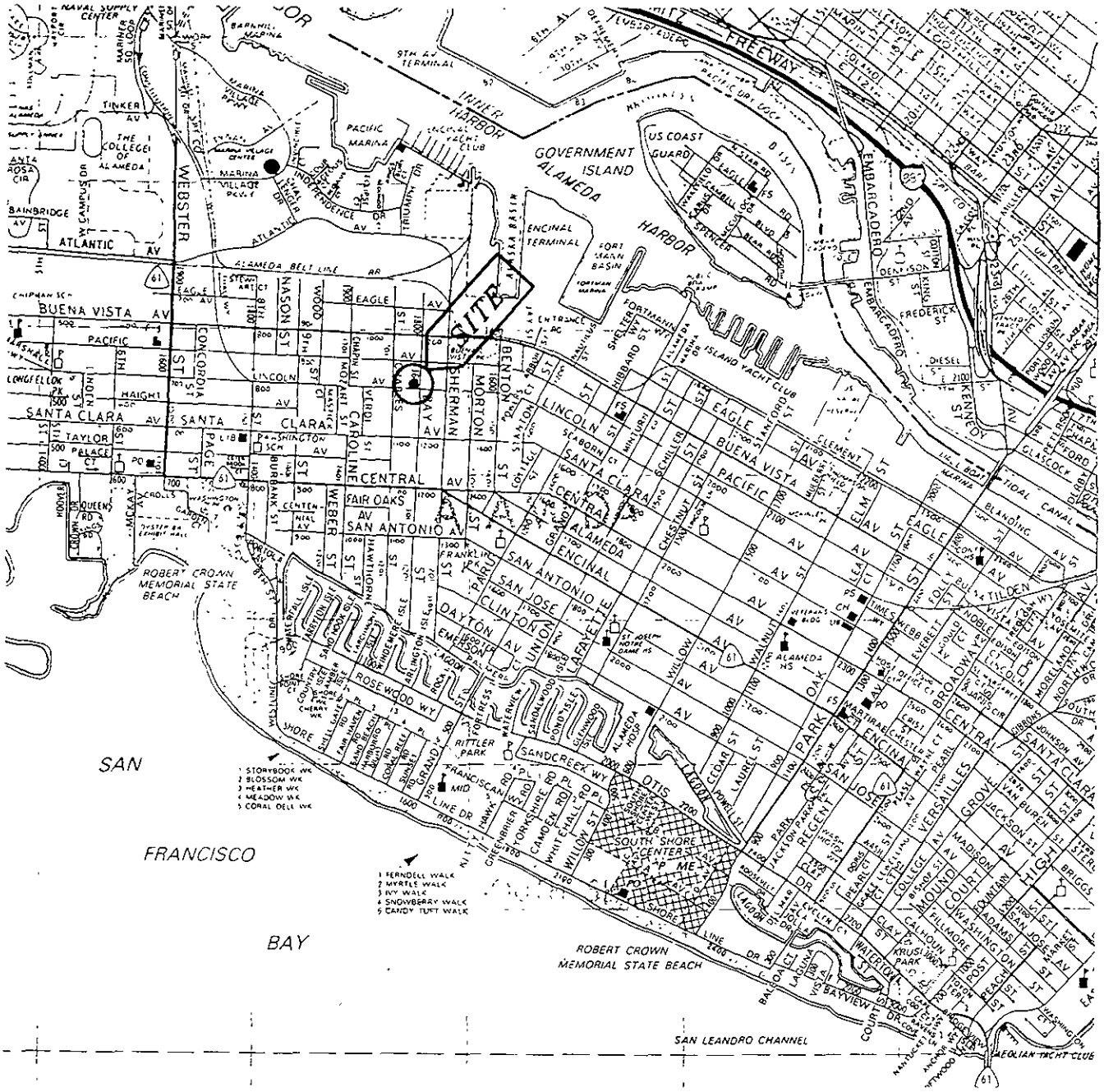
CC: Mr. Richard Hiett
CRWQCB - San Francisco Bay Region
2101 Webster St., Suite 500
Oakland, CA 94621

Mr. Leo Pagano
1127 Lincoln Avenue
Alameda, CA

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

PR: KEP

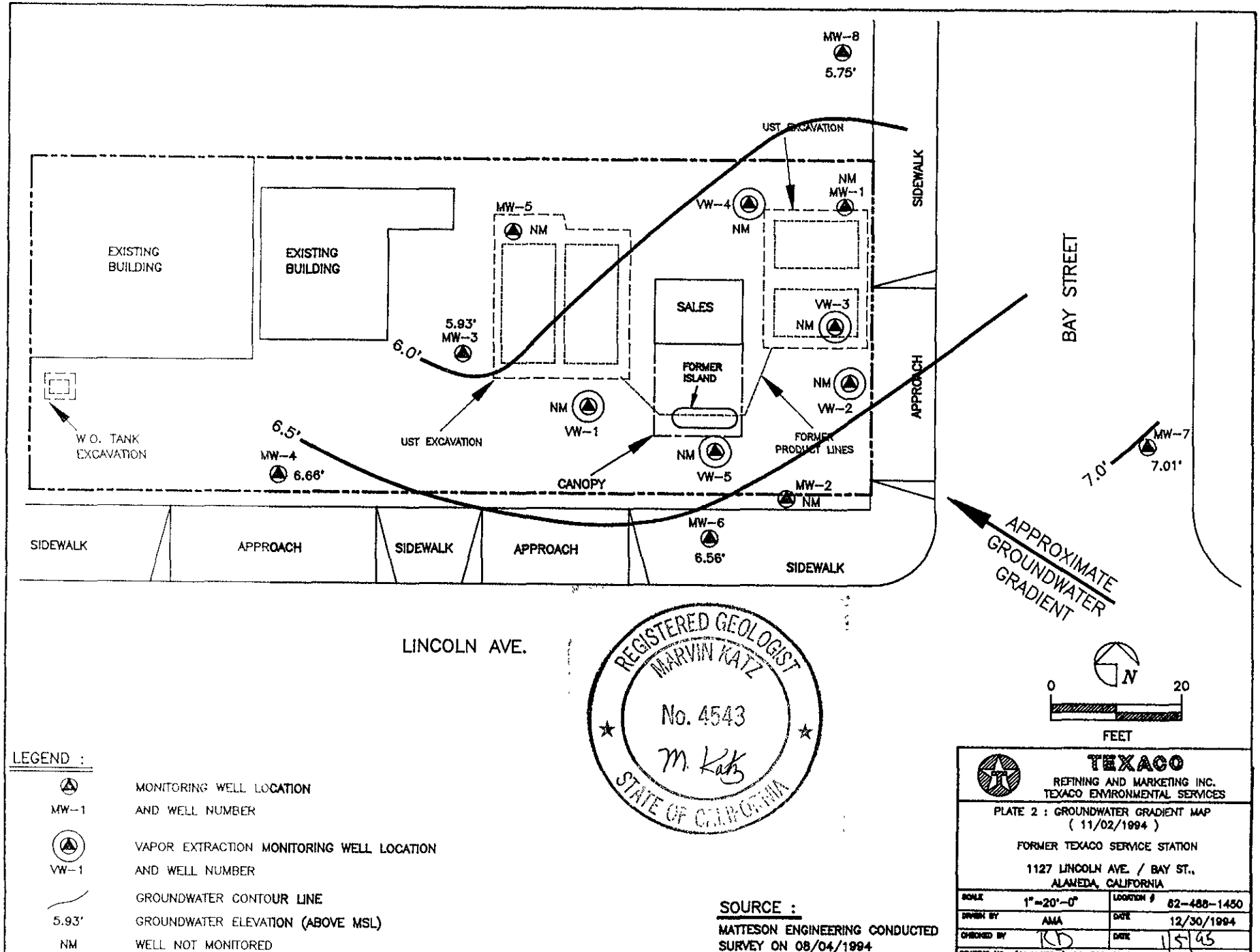
GROUNDWATER MONITORING AND SAMPLING
Fourth Quarter, 1994
at the
Former Texaco Station
1127 Lincoln Avenue
Alameda, California



SOURCE

1993 THE THOMAS GUIDE

TEXACO



REGISTERED GEOLOGIST
MARVIN KATZ
No. 4543
M. Katz
STATE OF CALIFORNIA

LEGEND :

	MONITORING WELL LOCATION
MW-1	AND WELL NUMBER
	VAPOR EXTRACTION MONITORING WELL LOCATION
VW-1	AND WELL NUMBER
	GROUNDWATER CONTOUR LINE
5.93'	GROUNDWATER ELEVATION (ABOVE MSL)
NM	WELL NOT MONITORED

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

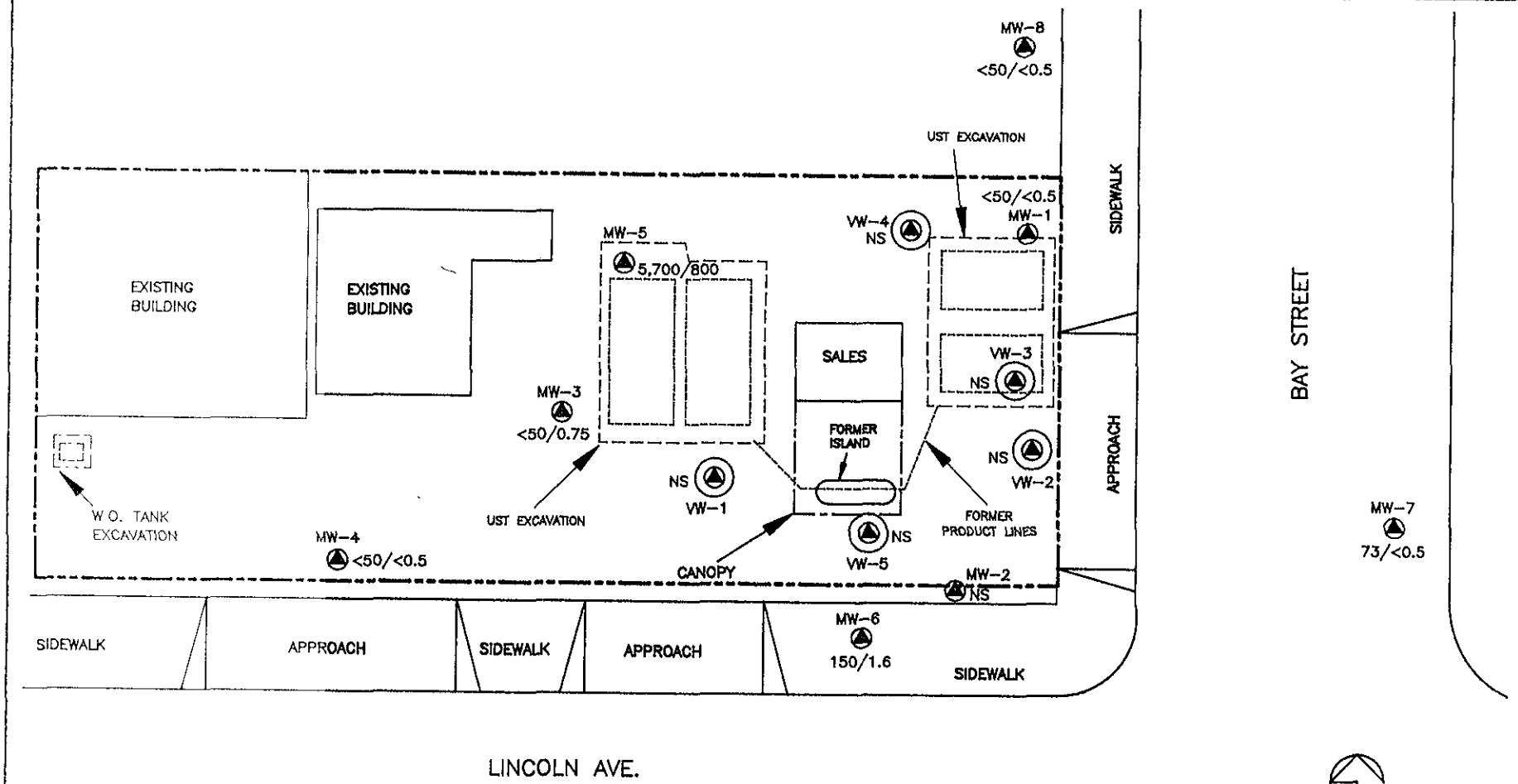
TEXACO
REFINING AND MARKETING INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 2 : GROUNDWATER GRADIENT MAP
(11/02/1994)

FORMER TEXACO SERVICE STATION

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

SCALE	1"=20'-0"	LOCATION #	62-488-1450
DRAWN BY	AMA	DATE	12/30/1994
CHECKED BY	KD	DATE	1/5/95
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
<50/<0.5	TPHg/BENZENE CONCENTRATION IN GROUNDWATER (ppb)
NS	WELL NOT SAMPLED

SOURCE :

MATTESON ENGINEERING CONDUCTED SURVEY ON 08/04/1994

TEXACO

REFINING AND MARKETING INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 3 : TPHg/BENZENE CONCENTRATION IN GROUNDWATER
(11/2 & 3/1994)

FORMER TEXACO SERVICE STATION

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

SCALE	1"=20'-0"	LOCATION #	62-488-1450
DRAWN BY	AMA	DATE	12/30/1994
CHECKED BY	RD	DATE	1/5/95
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	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		
	8/22/94		7.78	8.71
	11/2/94	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		
	8/22/94		8.08	9.06
	11/2/94	Inaccessible		

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	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
	8/22/94		8.32	8.59
	11/2/94		10.98	5.93
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
	8/22/94		8.48	8.70
	11/2/94		10.52	6.66

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	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		
	8/22/94		7.27	9.10
	11/2/94	Inaccessible		
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
	8/22/94		8.17	8.95
	11/2/94		10.56	6.56

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	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		
	8/22/94		7.78	8.93
	11/2/94		9.70	7.01
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
	8/22/94		7.63	8.28
	11/2/94		10.16	5.75

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	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		
	8/22/94	Not Monitored		
	11/2/94	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		
	8/22/94	Not Monitored		
	11/2/94	Not Monitored		

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-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		
	8/22/94	Not Monitored		
	11/2/94	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		
	8/22/94	Not Monitored		
	11/2/94	Not Monitored		

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-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		
	8/22/94	Not Monitored		
	11/2/94	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				
	8/22/94	Not Accessible - Connected to Vapor Extraction System				
	11/3/94	<50	<0.5	<0.5	<0.5	<0.5
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				
	8/22/94	Not Accessible - Connected to Vapor Extraction System				
	11/2/94	Not Sampled				
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
	8/22/94	77	4.3	<0.5	2.0	5.6
	11/2/94	<50	0.75	<0.5	<0.5	<0.5

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-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
	8/22/94	<50	<0.5	<0.5	<0.5	<0.5
	11/2/94	<50	<0.5	0.56	<0.5	<0.5
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				
	8/22/94	Not Accessible - Connected to Vapor Extraction System				
	11/3/94	5,700	800	400	4.7	600
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
	8/22/94	400	3.2	1	7.9	40
	11/2/94	150	1.6	1.3	6.5	27
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				
	8/22/94	130	<0.5	<0.5	<0.5	<0.5
	11/2/94	73	<0.5	<0.5	<0.5	<0.5

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-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
	8/22/94	51	16	<0.5	<0.5	<0.5
	11/2/94	<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 (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: G94-11-082

Received: 04 NOV 94

Mailed: NOV 21 [illegible]

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

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

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020)							
		Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L	
RDL			1		0.5	0.5	0.5	0.5	
1*MW-3	11/02/94	11/14/94	1	<50	0.75	<0.5	<0.5	<0.5	
2*MW-4	11/02/94	11/14/94	1	<50	<0.5	0.56	<0.5	<0.5	
3*MW-6	11/02/94	11/15/94	1	150	1.6	1.3	6.5	27	
4*MW-7	11/02/94	11/15/94	1	73	<0.5	<0.5	<0.5	<0.5	
5*MW-8	11/02/94	11/14/94	1	<50	<0.5	<0.5	<0.5	<0.5	
6*TB	11/02/94	11/14/94	1	<50	<0.5	<0.5	<0.5	<0.5	
7*TB	11/02/94	11/15/94	1	<50	<0.5	<0.5	<0.5	<0.5	
8*MW-1	11/03/94	11/15/94	1	<50	<0.5	<0.5	<0.5	<0.5	
9*MW-5	11/03/94	11/16/94	5	5700	800	400	4.7	600	

Karen Petryna
1127 Lincoln Ave., Alameda
Alameda County
The TPH pattern for sample MW-7 did not match that of gasoline. The TPH value was based on a single peak.
M. Advance 11/16/94

Mark A. Valentini, PhD, Laboratory Director

: ORDER PLACED FOR CLIENT: Texaco Environmental Services 9411082 :
: BC ANALYTICAL : GLEN LAB : 17:46:34 19 NOV 1994 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9411082*1	MW-3	GAS.BTX.TESNC	11.14.94	8015M.TX	516-20	948034	8607
9411082*2	MW-4	GAS.BTX.TESNC	11.14.94	8015M.TX	516-20	948034	8607
9411082*3	MW-6	GAS.BTX.TESNC	11.15.94	8015M.TX	516-20	948034	8607
9411082*4	MW-7	GAS.BTX.TESNC	11.15.94	8015M.TX	516-20	948034	8607
9411082*5	MW-8	GAS.BTX.TESNC	11.14.94	8015M.TX	516-24	947101	8523
9411082*6	EB	GAS.BTX.TESNC	11.14.94	8015M.TX	516-24	947101	8523
9411082*7	TB	GAS.BTX.TESNC	11.15.94	8015M.TX	516-24	947102	8523
9411082*8	MW-1	GAS.BTX.TESNC	11.15.94	8015M.TX	516-24	947102	
9411082*9	MW-5	GAS.BTX.TESNC	11.16.94	8015M.TX	516-24	947103	8523

***

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 G9411082

DATE REPORTED : 11/19/94

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 C4111583*1						
Date Analyzed	11.14.94	948034	11/14/94	11/14/94	Date	N/A
Benzene	11.14.94	948034	19.1	19.6	ug/L	97
Toluene	11.14.94	948034	50.5	57.0	ug/L	89
Ethylbenzene	11.14.94	948034	14.1	13.9	ug/L	101
Total Xylene Isomers	11.14.94	948034	66.5	67.3	ug/L	99
TPH (as Gasoline)	11.14.94	948034	755	1000	ug/L	76
2. TPH-gas/BTEX (CADHS/80 C4111762*1						
Date Analyzed	11.14.94	947101	11/14/94	11/14/94	Date	N/A
Benzene	11.14.94	947101	17.7	19.6	ug/L	90
Toluene	11.14.94	947101	49.6	57.0	ug/L	87
Ethylbenzene	11.14.94	947101	15.4	13.9	ug/L	111
Total Xylene Isomers	11.14.94	947101	66.2	67.3	ug/L	98
TPH (as Gasoline)	11.14.94	947101	930	1000	ug/L	93
3. TPH-gas/BTEX (CADHS/80 C4111887*1						
Date Analyzed	11.15.94	947102	11/15/94	11/15/94	Date	N/A
Benzene	11.15.94	947102	20.7	19.6	ug/L	106
Toluene	11.15.94	947102	57.8	57.0	ug/L	101
Ethylbenzene	11.15.94	947102	14.5	13.9	ug/L	104
Total Xylene Isomers	11.15.94	947102	71.3	67.3	ug/L	106
TPH (as Gasoline)	11.15.94	947102	1260	1000	ug/L	126

BC ANALYTICAL

ORDER QC REPORT FOR G9411082

DATE REPORTED : 11/19/94

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 9411082*1							
Date Analyzed		11.14.94	948034	11/14/94	11/14/94	Date	N/A
Benzene		11.14.94	948034	21.3	19.3	ug/L	10
Toluene		11.14.94	948034	54.9	50.0	ug/L	9
Ethylbenzene		11.14.94	948034	14.9	14.2	ug/L	5
Total Xylene Isomers		11.14.94	948034	70.4	67.0	ug/L	5
TPH (as Gasoline)		11.14.94	948034	883	867	ug/L	2
2. TPH-gas/BTEX (CADHS/80 9411082*5							
Date Analyzed		11.14.94	947101	11/14/94	11/14/94	Date	N/A
Benzene		11.14.94	947101	19.5	21.7	ug/L	11
Toluene		11.14.94	947101	55.4	56.8	ug/L	2
Ethylbenzene		11.14.94	947101	17.4	17.7	ug/L	2
Total Xylene Isomers		11.14.94	947101	70.9	73.5	ug/L	4
TPH (as Gasoline)		11.14.94	947101	1160	1130	ug/L	3
3. TPH-gas/BTEX (CADHS/80 9411059*4							
Date Analyzed		11.15.94	947102	11/15/94	11/15/94	Date	N/A
Benzene		11.15.94	947102	24.5	21.9	ug/L	11
Toluene		11.15.94	947102	64.2	58.3	ug/L	10
Ethylbenzene		11.15.94	947102	16.9	15.2	ug/L	11
Total Xylene Isomers		11.15.94	947102	82.1	75.4	ug/L	9
TPH (as Gasoline)		11.15.94	947102	1300	1300	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9411082

DATE REPORTED : 11/19/94

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 9411082*1								
Benzene		11.14.94	948034	105	94	20.4	ug/L	
Toluene		11.14.94	948034	96	88	57.0	ug/L	
Ethylbenzene		11.14.94	948034	107	102	13.9	ug/L	
Total Xylene Isomers		11.14.94	948034	105	100	67.3	ug/L	
TPH (as Gasoline)		11.14.94	948034	88	87	1000	ug/L	
2. TPH-gas/BTEX (CADHS/80 9411082*5								
Benzene		11.14.94	947101	99	111	19.6	ug/L	
Toluene		11.14.94	947101	97	100	57.0	ug/L	
Ethylbenzene		11.14.94	947101	125	127 Q	13.9	ug/L	Q
Total Xylene Isomers		11.14.94	947101	105	109	67.3	ug/L	
TPH (as Gasoline)		11.14.94	947101	116	113	1000	ug/L	
3. TPH-gas/BTEX (CADHS/80 9411059*4								
Benzene		11.15.94	947102	125	112	19.6	ug/L	
Toluene		11.15.94	947102	111	100	58.2	ug/L	
Ethylbenzene		11.15.94	947102	122	109	13.9	ug/L	
Total Xylene Isomers		11.15.94	947102	122	112	67.3	ug/L	
TPH (as Gasoline)		11.15.94	947102	130	130	1000	ug/L	

BC ANALYTICAL

ORDER QC REPORT FOR G9411082

DATE REPORTED : 11/19/94

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 B4111257*1						
Date Analyzed	11.14.94	948034	11/14/94	NA	Date	8015M.TX
Benzene	11.14.94	948034	0	0.5	ug/L	8015M.TX
Toluene	11.14.94	948034	0.46	0.5	ug/L	8015M.TX
Ethylbenzene	11.14.94	948034	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	11.14.94	948034	0.059	0.5	ug/L	8015M.TX
TPH (as Gasoline)	11.14.94	948034	5.3	50	ug/L	8015M.TX
2. TPH-gas/BTEX (CADHS/80 B4111407*1						
Date Analyzed	11.14.94	947101	11/14/94	NA	Date	8015M.TX
Benzene	11.14.94	947101	0.075	0.5	ug/L	8015M.TX
Toluene	11.14.94	947101	0.59	0.5	ug/L	8015M.TX
Ethylbenzene	11.14.94	947101	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	11.14.94	947101	0.32	0.5	ug/L	8015M.TX
TPH (as Gasoline)	11.14.94	947101	21	50	ug/L	8015M.TX
3. TPH-gas/BTEX (CADHS/80 B4111508*1						
Date Analyzed	11.15.94	947102	11/15/94	NA	Date	8015M.TX
Benzene	11.15.94	947102	0.052	0.5	ug/L	8015M.TX
Toluene	11.15.94	947102	0.37	0.5	ug/L	8015M.TX
Ethylbenzene	11.15.94	947102	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	11.15.94	947102	0.53	0.5	ug/L	8015M.TX
TPH (as Gasoline)	11.15.94	947102	12	50	ug/L	8015M.TX
4. TPH-gas/BTEX (CADHS/80 B4111641*1						
Date Analyzed	11.16.94	947103	11/16/94	NA	Date	8015M.TX
Benzene	11.16.94	947103	0.054	0.5	ug/L	8015M.TX
Toluene	11.16.94	947103	0.26	0.5	ug/L	8015M.TX
Ethylbenzene	11.16.94	947103	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	11.16.94	947103	0.16	0.5	ug/L	8015M.TX
TPH (as Gasoline)	11.16.94	947103	6.5	50	ug/L	8015M.TX

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 17:47:28 19 NOV 1994 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9411082*1							
8015M.TX	a,a,a-Trifluorotoluene	948034	11/14/94	54.5	50.0	109	
9411082*2							
8015M.TX	a,a,a-Trifluorotoluene	948034	11/14/94	54.1	50.0	108	
9411082*3							
8015M.TX	a,a,a-Trifluorotoluene	948034	11/15/94	55.4	50.0	111	
9411082*4							
8015M.TX	a,a,a-Trifluorotoluene	948034	11/15/94	56.3	50.0	113	
9411082*5							
8015M.TX	a,a,a-Trifluorotoluene	947101	11/14/94	49.2	50.0	98	
9411082*6							
8015M.TX	a,a,a-Trifluorotoluene	947101	11/14/94	41.9	50.0	84	
9411082*7							
8015M.TX	a,a,a-Trifluorotoluene	947102	11/15/94	66.1	50.0	132	
9411082*8							
8015M.TX	a,a,a-Trifluorotoluene	947102	11/15/94	66.3	50.0	133	
9411082*9							
8015M.TX	a,a,a-Trifluorotoluene	947103	11/16/94	66.3	50.0	133	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 17:47:31 19 NOV 1994 - P. 1 :

METHOD ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9411059*4*R1						
8015M.TXa,a,a-Trifluorotoluene	947102	11/15/94	64.7	50.0	129	
9411059*4*S1						
8015M.TXa,a,a-Trifluorotoluene	947102	11/15/94	49.8	50.0	100	
9411059*4*S2						
8015M.TXa,a,a-Trifluorotoluene	947102	11/15/94	61.6	50.0	123	
9411059*4*T						
8015M.TXa,a,a-Trifluorotoluene	947102	11/15/94	50.0	50.0	100	
9411082*1*R1						
8015M.TXa,a,a-Trifluorotoluene	948034	11/14/94	54.5	50.0	109	
9411082*1*S1						
8015M.TXa,a,a-Trifluorotoluene	948034	11/14/94	57.1	50.0	114	
9411082*1*S2						
8015M.TXa,a,a-Trifluorotoluene	948034	11/14/94	58.6	50.0	117	
9411082*1*T						
8015M.TXa,a,a-Trifluorotoluene	948034	11/14/94	50.0	50.0	100	
9411082*5*R1						
8015M.TXa,a,a-Trifluorotoluene	947101	11/14/94	49.2	50.0	98	
9411082*5*S1						
8015M.TXa,a,a-Trifluorotoluene	947101	11/14/94	64.3	50.0	129	
9411082*5*S2						
8015M.TXa,a,a-Trifluorotoluene	947101	11/14/94	63.1	50.0	126	
9411082*5*T						
8015M.TXa,a,a-Trifluorotoluene	947101	11/14/94	50.0	50.0	100	
B4111257*1*MB						
8015M.TXa,a,a-Trifluorotoluene	948034	11/14/94	54.6	50.0	109	
B4111407*1*MB						
8015M.TXa,a,a-Trifluorotoluene	947101	11/14/94	52.3	50.0	105	

METHOD ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
B4111508*1*MB						
8015M.TXa,a,a-Trifluorotoluene	947102	11/15/94	40.0	50.0	80	
B4111641*1*MB						
8015M.TXa,a,a-Trifluorotoluene	947103	11/16/94	54.0	50.0	108	
C4111583*1*LC						
8015M.TXa,a,a-Trifluorotoluene	948034	11/14/94	56.8	50.0	114	
C4111583*1*LT						
8015M.TXa,a,a-Trifluorotoluene	948034	11/14/94	50.0	50.0	100	
C4111762*1*LC						
8015M.TXa,a,a-Trifluorotoluene	947101	11/14/94	58.0	50.0	116	
C4111762*1*LT						
8015M.TXa,a,a-Trifluorotoluene	947101	11/14/94	50.0	50.0	100	
C4111887*1*LC						
8015M.TXa,a,a-Trifluorotoluene	947102	11/15/94	61.8	50.0	124	
C4111887*1*LT						
8015M.TXa,a,a-Trifluorotoluene	947102	11/15/94	50.0	50.0	100	

Chain-of-Custody

Page ___ of ___

Texaco Environmental Services
108 Cutting Boulevard
Richmond, California 94804
Phone: (510) 236-3541
FAX: (510) 237-7021

Forward Results to the Attention of Rebecca Digerness

Texaco Project Coordinator: Karen Petryna

Site Name: Texaco Loc.# 624881450
Site Address: 1127 Lincoln Ave, Alameda, CA
Contractor Project Number: 941102.M2
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): Mike Myers
Sampler Signature: Mike Myers
Date Samples Collected: 11-02-94

Sample Number	Lab Sample Number	Date/Time Collected	No. of Containers	Type of Containers	Sample Matrix	Preservative	ANALYSIS: TPH gas/BTEX	TPH Diesel	O&G/TRPH (418.1)	TPH Ex. (C8-C36 +)	VOCs 8240/624	P. Halocarbons 8010/60	P. Aromatics 8020/602	Organic Lead			Comments
MW-3		11-02 17:00	3	VOA	W	HCL	X										
MW-4		11-02 16:45	3	"	"	"	X										
MW-6		11-02 17:10	3	"	"	"	X										
MW-7		11-02 16:45	3	"	"	"	X										
MW-8		11-02 17:20	3	"	"	"	X										
FB		11-02 17:00	3	"	"	"	X										
TB		11-02 —	2	"	"	"	X										
MW-2 MW-1		11-3 10:30	3	VOA	W	HCL	X										Vials are labelled MW-1, should be MW-1 on COC per Don W 11/4/94 JW
MW-5		11-3 10:35	3	"	"	"	X										

Relinquished by (Signature): Mike Myers	Date: 11/4/94	Time: 1250	Received by (Signature): [illegible]
Relinquished by (Signature): [illegible]	Date: 11-4-94	Time: 3:35	Received by (Signature): [illegible]
Relinquished by (Signature):	Date:	Time:	Received by (Signature):
Method of Shipment:			Lab Comments:

P:\GWM\FORMS\TEX COC XLS

Well Gauging Data

Project Name: 1127 LINCOLN
Project Number: 941102-M2

Date: 11-02-94
Recorded By: MIKE ARCHER

Well ID	TOC Elev.	DTB (ft. TOC)	Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
MW-1	IN ACCESSIBLE - CAR PARKED OVER WELL						
MW-2	IN ACCESSIBLE - UNABLE TO ACCESS THROUGH EXT SYS CAP						
MW-3		19.56	4		10.98		
MW-4		20.14	4		10.52		
MW-5	IN ACCESSIBLE				UNABLE TO ACCESS THROUGH EXT SYS CAP		
MW-6		19.54	2		10.56		
MW-7		19.80	2		9.70		
MW-8		19.66	4		10.16		

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 1127 LINCOLN
Well No. MW-1
Project Number 991102-M2
Well Type ☐ Monitor ☒ Extraction ☐ Other
Recorded By BB
Sampled by BB
Date 11/3/94

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

☐ Bailer - Type
☐ Pump - Type
☐ Other

PUMP INTAKE

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

PURGE VOLUME CALCULATION

Pumping Rate gpm

Water Column Length X Multiplier X No. Vols = gals CALCULATED 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

gals ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT Meter Type

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
/						
/						
/						
/ EXTRACTION SYSTEM, SAMPLE ONLY NOT ENOUGH WATER						
/						
/ TO GET PARAMETERS						
/						
/						

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

WELL SAMPLING

SAMPLING METHOD: Date/Time Sampled 11/3/94 / 1630
Bailer - 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
MW-1	3/40 ML VOAS	TPH-G, BTEX	HCL	BC	

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 1127 LINCOLN
Project Number 941102 - M2
Recorded By DB
Well No. MW - 2
Well Type ☐ Monitor ☒ Extraction ☐ Other
Sampled by
Date 11/3/94

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

☐ Bailer - 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 = gals CALCULATED 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

gals ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT Meter Type

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	☐ deg C ☐ deg F	Turbidity (NTU)	Color/Odor
/						
/						
/						
/ EXTRACTION SYSTEM NOT WORKING						
/						
/ DISCONNECTED AT SYSTEM - UNABLE TO ACCESS WELL						
/						
/						

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

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled /

Bailer - 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

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 1127 LINCOLN Well No. MW-3
Project Number 941102-M2 Well Type [X] Monitor [ ] Extraction [ ] Other
Recorded By Tom Flory Sampled by TF Date 11-2-94

WELL PURGING

PURGE VOLUME

Well casing diameter
[ ] 2-inch [X] 4-inch [ ] Other
Well Total Depth (TD, ft. below TOC) 19.56
Depth to Water (WL, ft. below TOC) 10.98
Depth to free phase hydrocarbons (FP, ft. below TOC)
Number of well volumes to be purged
[ ] 3 [ ] 10 [ ] Other

PURGE METHOD

[ ] Bailer - Type
[ ] Pump - Type ELECTRIC SUB
[ ] Other

PUMP INTAKE

[ ] Near top Depth (ft)
[X] Near Bottom Depth (ft) 18.00
[ ] Other

Pumping Rate 6 gpm

PURGE VOLUME CALCULATION

8.58 (Water Column Length) x 0.66 (Multiplier) x 3 (No. Vols) = 16.9 gals CALCULATED 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

17.0 gals ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT Meter Type MYRON L/HACH

Time/Gallons	pH	Cond. (uomhos/cm)	Temp [ ] deg C [ ] deg F	Turbidity (NTU)	Color/Odor
16:52 / 6.0	7.5	800	66.4	34.1	CLEAR / TAN
16:54 / 13.0	7.6	750	67.5	7.3	
16:57 / 17.0	7.7	730	67.6	9.6	↓
/					
/					
/					
/					
/					

Comments during well purge

Well Pumped dry: YES (NO) Purge water storage/disposal [ ] Drummed onsite [X] Other TEXACO

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 11-2-94 / 1700

Bailer - Type [X] SS 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
MW 3	3-40 ml VOA	TPHG, BTEX	HCl	BC	

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 1127 LINCOLN Well No. MW-4
Project Number 941102-M2 Well Type [X] Monitor [ ] Extraction [ ] Other
Recorded By Tim Flory Sampled by TF Date 11-2-94

WELL PURGING

PURGE VOLUME

Well casing diameter
[ ] 2-inch [X] 4-inch [ ] Other
Well Total Depth (TD, ft. below TOC) 20.14
Depth to Water (WL, ft. below TOC) 10.52
Depth to free phase hydrocarbons (FP, ft. below TOC)
Number of well volumes to be purged
[X] 3 [ ] 10 [ ] Other

PURGE METHOD

[ ] Bailer - Type
[ ] Pump - Type Electric Sub
[ ] Other

PUMP INTAKE

[ ] Near top Depth (ft)
[X] Near Bottom Depth (ft) 19.00
[ ] Other
Pumping Rate 6 gpm

PURGE VOLUME CALCULATION

9.62 (Water Column Length) x 0.66 (Multiplier) x 3 (No. Vols) = 6.3 - 18.9 gals CALCULATED 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

19.0 gals ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT Meter Type MYRON L HFSC1

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1638 / 6.5	7.2	1200	69.2		>200	clear/none
1640 / 13.0	7.4	1000	69.4		129 E	
1641 / 19.0	7.5	950	67.5		12.3	
/						
/						
/						
/						
/						

Comments during well purge
Well Pumped dry: YES (NO) Purge water storage/disposal [ ] Drummed onsite [ ] Other

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 11-2-94 / 1645
Bailer - Type [X] SS Sample port [ ] Other [ ]

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS Meter Type Myron L

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
MW-4	3-40ml VOA	TPH BTEX	HCl	BC	

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 1127 LINCOLN
Project Number 941102 - M2
Recorded By BB
Well No. MW-5
Well Type ☐ Monitor ☒ Extraction ☐ Other
Sampled by BB
Date 11/3/94

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

☐ Bailer - 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 = gals CALCULATED 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

gals ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENT Meter Type

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
/						
/						
/ EXTRACTION SYSTEM, SAMPLE ONLY						
/						
/ DE-WATERED AFTER SAMPLE						
/						
/						
/						

Comments during well purge
Well Pumped dry (YES) NO
Purge water storage/disposal ☐ Drummed onsite ☐ Other

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 11/3/94 / 1635
Bailer - 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
MW-5	3 VOAs	TPH5/BTEX	HCl	BC	

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 1127 LINCOLN Well No. MW-6
Project Number 641102-M2 Well Type [X] Monitor [ ] Extraction [ ] Other
Recorded By MM Sampled by MM Date 11-2

WELL PURGING

PURGE VOLUME

Well casing diameter
[X] 2-inch [ ] 4-inch [ ] Other
Well Total Depth (TD, ft. below TOC) 19.54
Depth to Water (WL, ft. below TOC) 10.56
Depth to free phase hydrocarbons (FP, ft. below TOC)
Number of well volumes to be purged
[X] 3 [ ] 10 [ ] Other 1.5 case

PURGE VOLUME CALCULATION
8.98 (Water Column Length) x .17 (Multiplier) x 3 (No. Vols) = 2.5 gals CALCULATED PURGE VOLUME
5.0 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

PURGE METHOD

[X] Bailer - Type TEFLON
[ ] Pump - Type
[ ] Other

PUMP INTAKE

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

Pumping Rate gpm

GROUNDWATER PARAMETER MEASUREMENT Meter Type MYRON L/HF SC

Time/Gallons	pH	Cond. (uomhos/cm)	Temp [X] deg C [ ] deg F	Turbidity (NTU)	Color/Odor
17:02 / 1.5	7.0	900	19.6	7200	
17:05 / 3.0	7.1	1000	19.6	7200	
17:08 / 5.0	7.0	900	19.4	7200	
/					
/					
/					
/					
/					

Comments during well purge
Well Pumped dry: YES (NO) Purge water storage/disposal [ ] Drummed onsite [X] Other TEXACO

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 17:10 / 11-02-94
Bailer - Type [X] 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
MW-6	3 40mL VOA	TPH/BTEX	HCL	BC	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No	Duplicate Sample No

Blank Samples

Type	Sample No
Trip	
Rinsate	EB @ 17:00
Transfer	
Other:	

Groundwater Sampling Form

Project Name 1127 LINCOLN Well No. MW-7
Project Number 94102-M2 Well Type [X] Monitor [ ] Extraction [ ] Other
Recorded By MM Sampled by MM Date 11-02-94

WELL PURGING

PURGE VOLUME

Well casing diameter
[X] 2-inch [ ] 4-inch [ ] Other
Well Total Depth (TD, ft. below TOC) 19.80
Depth to Water (WL, ft. below TOC) 9.70
Depth to free phase hydrocarbons (FP, ft. below TOC)
Number of well volumes to be purged
[X] 3 [ ] 10 [ ] Other 1.7 case

PURGE VOLUME CALCULATION

10.1 (Water Column Length) x .17 (Multiplier) x 3 (No. Vols) = 5.2 gals CALCULATED 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

6.0 gals ACTUAL PURGE VOLUME

PURGE METHOD

[X] Bailer - Type TEFLON
[ ] Pump - Type
[ ] Other

PUMP INTAKE

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

Pumping Rate ____ gpm

GROUNDWATER PARAMETER MEASUREMENT Meter Type HORIBA U-10 / HF SCI

Time/Gallons	pH	Cond. (uomhos/cm)	Temp [X] deg C [ ] deg F	Turbidity (NTU)	Color/Odor
16:40 / 2.0	7.3	1080	19.4	>200	
16: / 4.0	7.3	900	18.8	>200	
/ 6.0	7.2	900	18.4	>200	
/					
/					
/					
/					
/					

Comments during well purge
Well Pumped dry: YES (NO) Purge water storage/disposal [ ] Drummed onsite [X] Other TEXACO

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 11-2 / 16:45
Bailer - Type [X] 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
MW-7	3 40ML VOA	TPHG/BTEX	HCL	BC	

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 [redacted] 827 LINCOLN Well No. MW-8

Project Number 941102-M2 Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By Tom Flory Sampled by TF Date 11-2-94

WELL PURGING

PURGE VOLUME

Well casing diameter

☐ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) 19.66

Depth to Water (WL, ft. below TOC) 10.16

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

Number of well volumes to be purged

☒ 3 ☐ 10 ☐ Other

PURGE VOLUME CALCULATION

9.5 (Water Column Length) x 0.66 (Multiplier) x 3 (No. Vols) = 18.8 gals CALCULATED 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

19. gals ACTUAL PURGE VOLUME

PURGE METHOD

☐ Bailer - Type

☐ Pump - Type Electric Sub

☐ Other

PUMP INTAKE

☐ Near top Depth (ft)

☐ Near Bottom Depth (ft) 13.0

☐ Other

Pumping Rate 6 gpm

GROUNDWATER PARAMETER MEASUREMENT Meter Type MYRON L/HFSC1

Time/Gallons	pH	Cond. (uomhos/cm)	Temp	deg C / deg F	Turbidity (NTU)	Color/Odor
1710 / 6	7.5	750	65.7		22.8	Clear / none
1713 / 13	7.6	730	65.9		17.2	
1717 / 19	7.6	710	66.1		9.3	
/						
/						
/						
/						
/						

Comments during well purge

Well Pumped dry: YES (NO) Purge water storage/disposal ☐ Drummed onsite ☒ Other TEXACO

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 11-2-94 1720

Bailer - Type ☒ SS Sample port ☐ Other ☐

GROUNDWATER SAMPLE PARAMETER MEASUREMENTS Meter Type Myron - C

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
MW-8	#3-40 ml VOA	TPHG/BTEX	HCl	BC	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No	Duplicate Sample No

Blank Samples

Type	Sample No
Trip	
Rinsate	
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 desitnation 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 #: 62488 1450
Address: 1127 LINCOLN AVE
City, State, ZIP: ALAMEDA, CA

Well I.D.	Gals.	Well I.D.	Gals.
	/		/
MW-3	/ 17.0		/
MW-4	/ 19.0		/
MW-6	/ 5.0		/
MW-7	/ 6.0		/
MW-8	/ 19.0		/
	/		/
	/		/
	/		/
	/		/

Total gals. 66

added rinse water 10

Total Gals. Recovered 76

Job #: 941102-M2
Date 11-02-94
Time 14:20
Signature: Mike Ryan

REC'D AT: BTS
Date: 11-02-94
Time: 19:00
Signature: Mike Ryan

P \GWMP\FORMS\TEX-BOL.WK1

QUARTERLY SUMMARY REPORT

Former Texaco Service Station
1127 Lincoln Avenue, Alameda, California
Alameda County
Third Quarter, 1994

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 maintanence of the goundwater/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

U:\WPWIN\QSR\1127L.QSR
W:\QSR_RAO\1127L.QSR

Texaco Environmental Services
Standard Operating Procedures
for Groundwater Monitoring and Sampling

The following are routine procedures to be followed by personnel obtaining field information concerning petroleum product thickness and samples of groundwater during the monitoring and sampling of Texaco sites. These procedures are designed to assure that:

- Information and samples are properly collected.
- Samples are identified, preserved and transported in a manner such that they are representative of field conditions.
- Monitoring and sampling results are reproducible.

Water Level Measurements

Water level measurements are needed to document groundwater flow directions and calculate gradient. By gauging the level of water in a groundwater monitoring well and comparing the complied data, calculations can be made that determine the direction the groundwater at the monitored well is flowing and the groundwater gradient between successive monitoring wells.

- An interface probe or electronic probe is generally used to gauge the level of water in a monitoring well. When using either probe, it is slowly lowered into the well until the oscillating alarm indicating water is heard. Raise the interface probe above the water level and lower it back into the water at least three times to verify that the true depth to water is measured. Without moving the probe, read the numbers on the tape to determine the distance from the predetermined top of the well casing. A chalked, steel add-tape may also be used to gauge the level of water in a monitoring well. When using the steel tape, it is slowly lowered into the well until the chalked portion of the tape encounters water. Read the numbers on the tape to determine the distance from the predetermined top of the well casing. Raise the tape to the surface grade, re-chalk and lower it back into the water at least two times to verify that the true depth to water is measured. Record the depth to water on the Well Gauging Form and Groundwater Sampling Form.

Petroleum Product Thickness Measurements.

If free phase petroleum hydrocarbons (product) are observed floating on the groundwater surface during the water level measurement, the thickness of the product will be measured in each appropriate well. Groundwater samples will not be collected for chemical analysis from wells containing product unless specifically requested by the Project Coordinator. Product thicknesses will be measured using interface probes, and/or acrylic (clear plastic) bailers. The procedures for obtaining level and thickness measurements using each instrument are:

- The level of the top of the product will be measured with an interface probe. When product is suspected but not measurable with the interface probe, a visual evaluation can be made using clear acrylic bailers. A bailer will be lowered into the water/product surface so that the top of the bailer is NOT submerged, the bailer is then removed from

the well and the thickness of the product visually measured and documented on the Well Gauging Form.

- When the interface probe contacts liquid, the visual/audible alarm on the reel will be activated. An oscillating alarm indicates water, a continuous alarm indicates hydrocarbon. To determine the exact thickness of a hydrocarbon layer, the probe should be slowly lowered to the air/hydrocarbon interface until the alarm is activated. with the probe at the exact point where the alarm comes on, read the numbers on the tape to determine the distance from the predetermined top of casing elevation mark. Next, lower the probe through the hydrocarbon layer and well into the water. An oscillating alarm will be obtained. The probe should then be raised slowly to the hydrocarbon/water interface until the point where the alarm changes from oscillating to continuous. The thickness of the hydrocarbon layer is determined by subtracting the first reading from the second reading. Record the calculated value on the Well Gauging Form and Groundwater Sampling Form.

Groundwater Sampling

Groundwater samples will be collected from selected groundwater monitoring wells to provide data which will be statistically representative of local groundwater conditions at the site. Groundwater samples will be collected as follows:

- All measuring and sampling equipment will be decontaminated prior to sample collection from each well and documented on the Groundwater Sampling Form.

- Prior to sampling activity, the water level of the well will be measured and the minimum purge volume of each well will be calculated using the purge volume calculation portion of the Groundwater Sampling Form. A minimum of three casing volumes will be purged prior to sample collection. The actual total volume purged will be recorded on Groundwater Sampling Form.

- Prior to sampling, a submersible pump, centrifugal pump, peristaltic pump, or a Teflon or stainless steel bailer will be used to purge a minimum of three casing volumes from each well. Purge volumes will be estimated using a flow meter or a stopwatch and a bucket to estimate flow rate, from which a time to purge the required volume will be calculated. The pump will be lowered to a depth of two to three feet from bottom of the well. When bailers are used for purging, the bailer should be gently lowered into the water and allowed to fill then removed. Care should be taken to not agitate the water which could release volatile organics.

- Whenever possible, groundwater parameters (pH, temperature (in degrees Celsius [C]), specific conductance (in micromhos per centimeters squared [umhos]), and turbidity (in National Turbidity Units [NTU]) will be monitored and recorded on the Groundwater Sampling Form.

- If a well is purged dry before three casing volumes have been removed, the sample will be taken after the well has recovered to within 80 percent of the static water level prior to purging or after 4 hours when sufficient water volume is available to meet analytical requirements, whichever comes first. Reasonable efforts will be made to avoid dewatering wells by using low-yield pumps as necessary.

- Water samples will be collected with a stainless steel or Teflon bailer. To reduce potential cross contamination, sampling should take place in order from least to most contaminated wells. Bailer strings should be replaced between each well to avoid cross contamination from a bailer string which has absorbed contamination.

- Sample containers will be filled directly from the bailer.

- Use only sample containers prepared and provided by an analytical laboratory. Preservatives are required for some types of samples. Sample containers containing preservatives should be supplied by an analytical laboratory.

- For volatile organics analysis, each sample vial will be filled with sample water so that water stands above the lip of the vial. The cap should then be quickly placed on the vial and tightened securely. The vial should then be checked to ensure that no air bubbles are present prior to labeling the sample.

- Take site blank samples (trip and rinsate) using distilled water or laboratory supplied water from a known uncontaminated source. One trip blank and one rinsate blank sample for each site will be analyzed for each site sampling event.

- Once collected and labeled, all samples will be stored in cooler maintained at 4 degrees Celsius using frozen water ice.

Sample Custody Procedures

Sample custody procedures will be followed through sample collection, transfer, analysis and ultimate disposal. The purpose of these procedures is to assure that the integrity of samples is maintained during their collection and transfer. Sample quantities, types and locations will be determined before the actual field work beings. As few people as possible will handle samples. The field sampler is personally responsible for the care and custody of the collected samples until they are properly transferred.

Each sample will be labelled and sealed properly immediately after collection. Sample identification documents will be carefully prepared so that identification and chain-of-custody records can be maintained and sample disposition can be controlled. Forms will be filled out with waterproof ink. The following are sample identification documents that will be utilized during the field operations.

- Sample Identification Label
- Chain-of Custody

Each separate sample will be identified using a label obtained from the laboratory. The sampler will complete all information, using a black waterproof pen, as follows:

The Site ID This is the name assigned to the particular sampling station

The Sample Source This will be the name of the well location.

The Analysis Required This will be indicated for each sample using proper EPA reference

number indicating analytical method.

The Date Taken. This will be the date the sample was collected, using the format MM-DD-YY. *Example: 06-15-91*

Noting the Time. The time the sample was collected will be given in military time. Example: 1430

The Method of Preservation. Preservation methods will be provided, specifying the type of preservation. For non-acidified samples, "ice" will be indicated.

The Sampler's Name. This will be printed in the "Sampled By" section. The sampler's signature will be written in the "Signed" section.

There is the potential that samples and analysis could be of an evidentiary nature. Therefore, the possession of samples must be traceable from the time samples are collected in the field until the analysis is completed and the data are entered as evidence. The tracing of the samples through the laboratory is accomplished by "chain-of-custody" procedures. Chain-of-Custody Forms will be completed for each set of samples. The sampler will sign the first "Relinquished By" line at the bottom of the chain of custody record, and will indicate the date and time of the custody transfer. Samples will not leave custody of the field technician until relinquished to another party. Custody is defined by the following criteria.

In the Actual Physical Possession. When field personnel have sample in possession, they have "custody".

In View. The field personnel view after being in physical possession.

Special Areas. Sample is kept in a locked area after being in physical possession.

Designated Area. Sample is in a designated, locked-storage area.

Transfer of samples to an analytical laboratory will be done by use of a common carrier or personal delivery. Carrier personnel will personally secure samples and sample containers in such a way that no containers can be opened in transit. The person to whom custody is being transferred will sign on the first "Received By" line of the chain-of-custody record, indicating that custody is being accepted by the carrier for all the samples listed on the sheet. For subsequent transfers of custody, the succeeding relinquish and receipt lines will be used.

Equipment Decontamination

All equipment that comes in contact with potentially contaminated soil or water will be decontaminated prior to and after each use (for example, after each sampling event). All hand bailers and will be decontamination with an Alconox wash with deionized (DI) water rinse.