

108 Cutting Blvd Richmond CA 94804

November 3, 1994

ENV - STUDIES, SURVEYS, & REPORTS 500 Grand Avenue Oakland, California

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

Dear Ms. Hugo:

This letter presents the results of groundwater monitoring and sampling conducted by Blaine Tech Services, Inc. on August 25, 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 south-southeast (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, Tom Hargett at (818) 505-2733.

Best Regards,

Rebecca Digerness

Groundwater Monitoring Coordinator

Tom Hargett, R. G. Project Coordinator

Troject Goordinator

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Texaco Environmental Services

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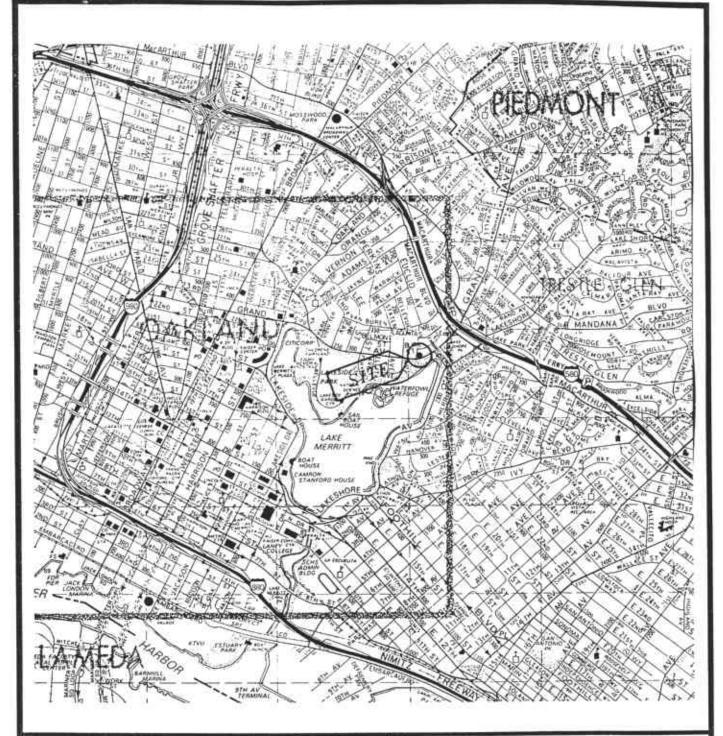
Enclosures

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

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

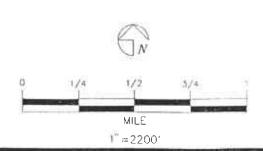
PR:<u>&</u>

Groundwater Monitoring and Sampling
Third Quarter, 1994
at the
Former Texaco Station
500 Grand Avenue
Oakland, CA



SOURCE

1993 THE THOMAS GUIDE ALAMEDA COUNTY, PAGE 9 (D4)





TEXACO

REFINING AND MARKETING, INC. TEXACO ENVIRONMENTAL SERVICES

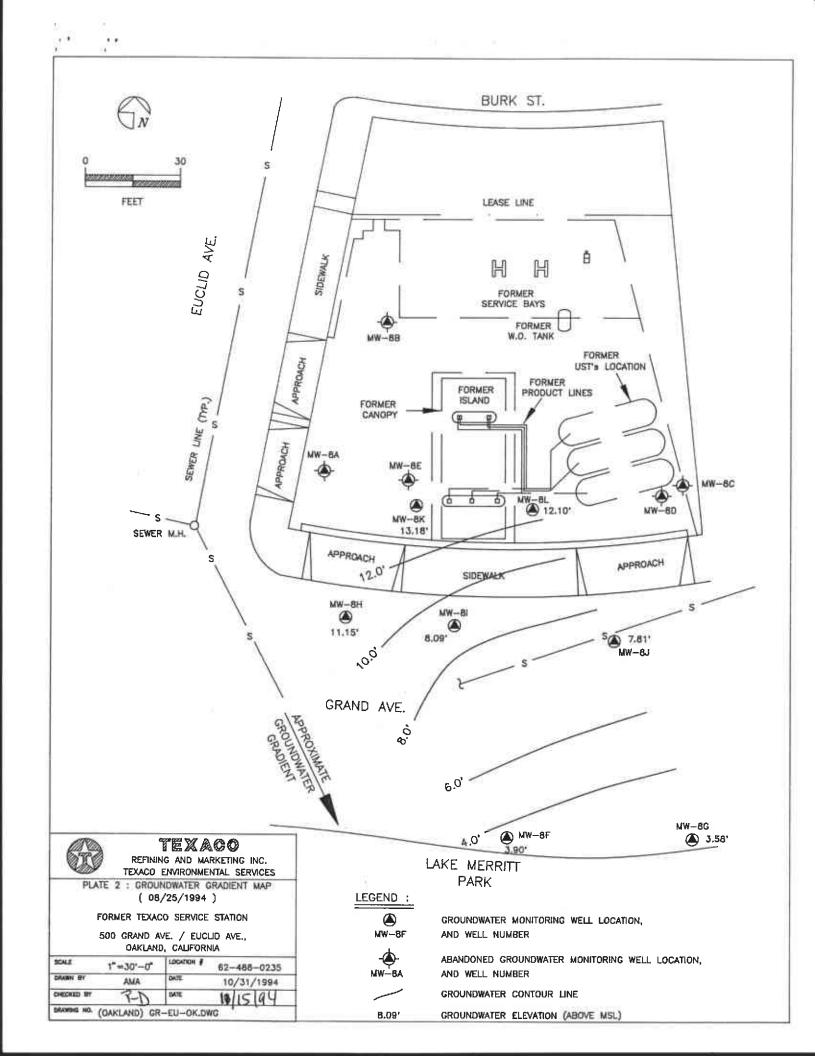
PLATE 1

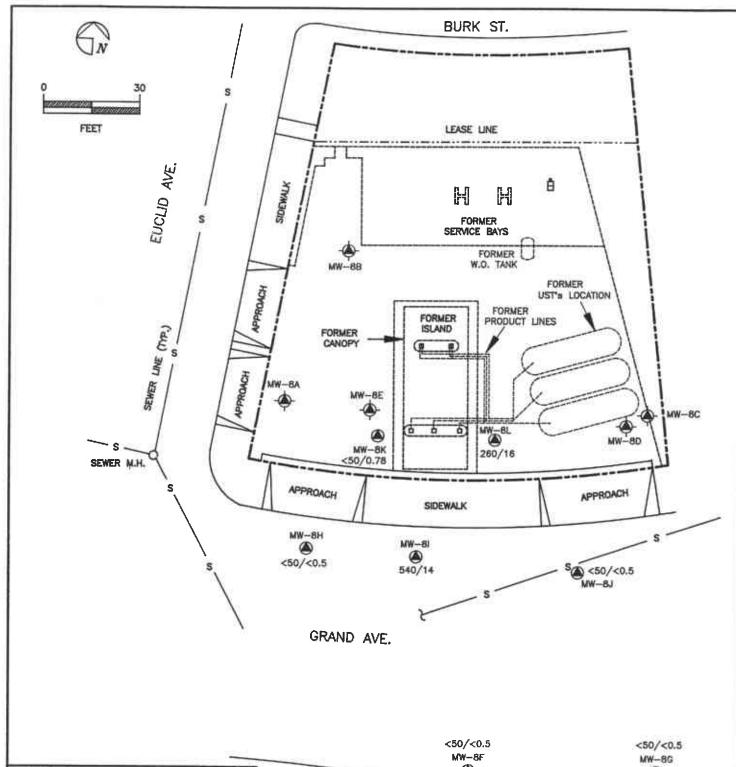
SITE VICINITY MAP

FORMER TEXACO SERVICE STATION

500 GRAND AVE. / EUCLID AVE.,

OAKLAND. CALIFORNIA







TEXACO

REFINING AND MARKETING INC. TEXACO ENVIRONMENTAL SERVICES

PLATE 3: TPHg/BENZENE CONCENTRATION IN GROUNDWATER (08/25/1994)

FORMER TEXACO SERVICE STATION

500 GRAND AVE. / EUCLID AVE., OAKLAND, CALIFORNIA

BOALE	1"=30'-0"	FOCKSION &	62-488-0235 10/31/1994		
DRAMM BY	AMA	DATE			
OKDOD IN	RD	DATE	11/2/94		
DRAMMO NO.	(OAKLAND) GR	-EU-OK.DY	WG (



LAKE MERRITT PARK

LEGENU :	LE	gend	:
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MW-BF GROUNDWATER MONITORING WELL LOCATION, AND WELL NUMBER

AB-WM

ABANDONED GROUNDWATER MONITORING WELL LOCATION. AND WELL NUMBER

<50/<0.5

TPHg/BENZENE CONCENTRATION IN GROUNDWATER (ppb)

Table 1 Groundwater Elevation Data 500 Grand Avenue, Oakland, CA

		Elevation of	Depth to	Elevation of
Well	Date	Wellhead	Water	Groundwater
Number	Gauged	(feet, MSL)	(feet, TOC)	(feet, MSL)
MW-8A	03/29/91	99.72	 	
	01/23/92		2.57	97.15
	02/28/92		2.48	97.24
	03/26/92		2.13	97.59
	04/30/92		2.10	97.62
	08/03/92		Well Proper	y Abandoned
MW-8B	03/29/91	101.11		
	01/23/92		0.54	
	02/28/92		0.29	100.82
	03/26/92		0.07	101.04
	04/30/92		0.60	
	09/28/92		Not Mon	itored
1.	11/19/92		Not Mon	itored
	02/12/93		Not Mon	
	04/01/93		Well Proper	ly Abandoned
MW-8C	03/29/91	98.41	· · · · · · · · · · · · · · · · · · ·	
71	01/23/92	· · ·	6.88	91.53
	02/28/92		6.69	91.72
	03/26/92		6.69	91.72
	04/30/92		5.90	92.51
	09/28/92		Not Mon	itored
	11/19/92		Not Mon	itored
	02/12/93		Not Mon	
	04/01/93		Well Proper	ly Abandoned
MW-8D			Well Proper	ly Abandoned
MW-8E	03/29/91	99.38	```	·
	01/23/92		3.57	95.81
	02/28/92		3.35	96.03
	03/26/92		3.01	96.37
	04/30/92	`	3.76	95.62
	08/03/92		Well Proper	

Table 1 Groundwater Elevation Data 500 Grand Avenue, Oakland, CA

		Elevation of	Depth to	Elevation of
Well	Date	Wellhead	Water	Groundwater
Number	Gauged	(feet, MSL)	(feet, TOC)	(feet, MSL)
MW-8F	03/29/91	97,94		
	01/23/92		10.24	87.70
-	02/28/92	·	9.93	88.01
	03/26/92		8.78	89.16
	04/30/92		9.36	88.58
	09/28/92		11.83	86.11
	11/19/92		11.22	86.72
	02/12/93		9.66	88.28
	05/06/93		8.83	89.11
-	08/16/93	14.04	10.16	3.88
	10/12/93		10.60	3.44
	02/03/94		9.29	4.75
	05/31/94		9.34	4.70
	08/25/94		10.14	3.90
				7 - 10
MW-8G	04/23/91	97.24		
	01/23/92		11.30	85.94
	02/28/92		10.83	86.41
	03/26/92		9.20	88.04
··-	04/30/92	-	9.00	88.24
	09/28/92		13.32	83.92
	11/19/92			essible
	02/12/93			essible
	05/06/93		11.18	86.06
	08/16/93	13.32	9.51	3.81
	10/12/93		10.93	2.39
	02/03/94		9.69	3.63
	05/31/94		9.24	4.08
-	08/25/94		9.74	3.58
MW-8H	03/29/91	98.90		
	01/23/92	90.90	3.74	95.16
	02/28/92		4.44	94.46
	03/26/92		4.21	94.69
	04/30/92		3.46	95.44
	09/28/92		Well Inacc	
	11/19/92		3.75	95.15
	02/12/93		4.12	94.78
	05/06/93		3.85	95.05
-	08/16/93	15.04	3.88	11.16
	10/12/93	10.04	3.80	11.24
	02/03/94		3.71	11.33
	05/31/94		3.80	11.24
	08/25/94		3.89	11.15
	V:-T	I	J.U31	11.131

Table 1 Groundwater Elevation Data 500 Grand Avenue, Oakland, CA

		Elevation of	Depth to	Elevation of
Well	Date	Wellhead	Water	Groundwater
Number	Gauged	(feet, MSL)	(feet, TOC)	(feet, MSL)
MW-81	03/29/91	98.27		
	01/23/92		6.33	91.94
	02/28/92		6.55	91.72
	03/26/92		6.45	91.82
	04/30/92		6.48	91.79
	09/28/92		Well Inac	cessible
	11/19/92		6.37	91.90
	02/12/93		6.44	91.83
	05/06/93		6.36	91.91
	08/16/93	14.40	6.35	8.05
	10/12/93		5.99	8.41
	02/03/94		5.84	8.56
	05/31/94		6.25	8.15
	08/25/94		6.31	8.09
MW-8J	03/29/91	97.69		
	01/23/92		6.31	91.38
	02/28/92		6.28	91.41
	03/26/92		6.20	91.49
	04/30/92		6.48	91.21
	09/28/92	-	Well Inac	***
	11/19/92		6.55	91.14
	02/12/93		7.46	90.23
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	05/06/93		6.21	91.48
-	08/16/93	13.82	6.29	7.53
	10/12/93		5.87	7.95
	02/03/94		5.98	7.84
	05/31/94		6.10	7.72
	08/25/94		6.01	7.81
MW-8K	08/16/93	15.18	2.08	13.10
	10/12/93		1.95	13.23
· · · · · · · · · · · · · · · · · · ·	02/03/94		1.48	13.70
	05/31/94		1.59	13.59
	08/25/94		2.00	13.18
MW-8L	08/16/93	14.44	2.47	44.67
IVITE OL	10/12/93	14.44	2.47	11.97
	02/03/94		2.36	12.08
	05/31/94		2.82	11.62
	08/25/94		2.66	11.78
	00/23/94		2.34	12.10
* = New w	ell elevation s	urvey performe	d on August 16,	1993 based on
mean s	ea level (MSL) Prior data ba	ased on arbitrary	site data.
TOC = Top	of casing			

Table 2 Groundwater Analytical Data 500 Grand Avenue, Oakland, CA

					Ethyl-			TPH as
Well	Date	TPHg	Benzene	Toluene	benzene	Xylenes	TPHd	Other*
Number	Sampled	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppm)	(ppm)
MW-8A	01/23/92	<50	<0.5	<0.5	<0.5	<0.5	0.7	NA
	04/30/92		<0.5	<0.5	<0.5	<0.5	<0.05	<500
	08/03/92	***************************************	Well Pro	perly Aband	doned	********		
MW-8B	01/23/92	<50	<0.5	<0.5	<0.5	<0.5	0.55	NA
	04/30/92		<0.5	<0.5	<0.5	<0.5	<0.05	<500
				mpled		\0.5	~0.03	\300
	11/19/92		Not Sa	mpled			+	
	02/12/93	777777777777777777777777777777777777777	Not Sa	mpled				
	04/01/93		Well Pro	perly Aband	loned			
					<u> </u>			
MW-8C	01/23/92	<50	1.2		<0.5	<0.5	0.84	NA
	04/30/92	<50	<0.5	<0.5	<0.5	<0.5	0.15	<500
	09/28/92		Not Sa	mpled			1	
	04/01/93		Well Pro	perly Aband	loned			
MW-8D			Mall Dec					
INIAA-OD			vveli Pro	peny Aband	loned			
MW-8E	01/23/92	38,000	3,800	2,800	610	4,800	9.8	NA
	04/23/92	41,000	20,000		500	3,900	9.6	<500
					loned		3.0	7000
								T-21-7-
MW-8F	01/23/92	<50	4.0	1.3	<0.5	1.9	1.3	NA
	04/30/92	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<500
	09/28/92	<50	<0.5	<0.5	<0.5	<0.5	NA NA	NA
	11/19/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA_
	02/12/93	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	05/06/93	<50	<0.5	<0.5	<0.5	<0.5	<0.1	<50
	08/16/93	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	10/12/93	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	02/03/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	05/31/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	0.53
	08/25/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	1.4
MW-8G	01/24/92	<50	<0.5	<0.5	<0.5	<0.5	0.98	NA
	04/30/92	<50	1.7	<0.5	<0.5	<0.5	<0.05	<500
· ,	09/28/92			Dry		- 0.0	-0.00	
	11/19/92							
	02/12/93							
	04/29/93	<50	<0.5	<0.5	<0.5	<0.5	0.06	<250
	08/16/93	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	10/12/93	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	02/03/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	05/31/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<0.2
	08/25/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	0.86
					-			

Table 2
Groundwater Analytical Data
500 Grand Avenue, Oakland, CA

					Ethyl-			TPH as
Well	Date	TPHg	Benzene	Toluene	benzene	Xylenes	TPHd	Other*
Number	Sampled	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppm)	(ppm)
MW-8H	01/23/92	110	7.2	1.2	4.7	3.2	<0.06	NA
	04/30/92	190	11	1.5	5.6	3.6	0.09	<500
	09/28/92		Well Ir	naccessible				
	11/19/92	130	6.8	<0.5	1.1	1.5	NA	NA
<u> </u>	02/12/93	73	5.9	<0.5	0.8	<0.5	NA	NA
	05/06/93	57	1.7	<0.5	<0.5	<0.5	<0.1	<50
	08/16/93	<50	0.5	<0.5	0.5	1.4	<0.05	<50
	10/12/93	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	02/03/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	05/31/94	<50	0.79	<0.5	<0.5	<0.5	<0.05	1.6
	08/25/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	4.0
I8-WM	01/23/92	820	420	7	27	20	0.21	NA
 -	04/30/92	2,200	1,800	19	180	25	0.43	<500
	09/28/92		Well Ina					
	11/19/92	720	120	1.1	29	13	NA	NA
	02/12/93	4,000	970	9.2	52	36	NA	NA NA
	05/06/93	1,400	370	2.4	40	8.4	<0.01	<50
	08/16/93	<50	3.1	<0.5	6	<0.5	<0.05	<50
	10/12/93	<50	1.4	<0.5	<0.5	<0.5	<0.05	<50
	02/03/94	1,000	270	3.2	51	14	<0.05	<50
	05/31/94	1,400	330	4.6	52	16	<0.05	0.33
	08/25/94	540	14	0.58	30	4.3	<0.05	0.73
				-				
MW-8J	01/23/92	<50	1	<0.5	<0.5	<0.5	<0.05	NA
_	04/30/92	<50	2	<0.5	<0.5	<0.5	<0.05	<500
	09/28/92 -	**	Well Ina	ccessible -				
	11/19/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	02/12/93	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	05/06/93	<50	<0.5	<0.5	<0.5	<0.5	<0.01	<50
	08/16/93	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	10/12/93	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	02/03/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50
	05/31/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<0.2
	08/25/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	1.0
	"	-		-				
MW-8K	05/21/93	54	12	<0.5	<0.5	<0.5	<0.05	<50
	08/16/93	<50	<0.5	<0.5	1.0	<0.5	<0.05	<50
	10/24/93	<50	4.2	<0.5	<0.5	<0.5	<0.05	<50
	02/03/94	<50	<0.5	<0.5	<0.5	<0.5	<0.05	<50 <50
	05/31/94	<50	1.0	0.57	<0.5	<0.5	<0.05	<0.2
1	08/25/94	<50	0.78	<0.5	<0.5	<0.5	<0.05	0.98
	·						-0.00	

Table 2
Groundwater Analytical Data
500 Grand Avenue, Oakland, CA

					Ethyl-			TPH as
Well	Date	TPHg	Benzene	Toluene	benzene	Xylenes	TPHd	Other*
Number	Sampled	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppm)	(ppm)
MW-8L	05/21/93	76	1.1	<0.5	<0.5	6	<0.05	<50
	08/16/93	<50	<0.5	<0.5	0.7	1.1	<0.05	<50
	10/12/93	110	13	<0.5	6	<0.5	<0.05	<50
	02/03/94	590	61	2.4	<0.5	110	<0.05	<50
	05/31/94	410	77	<0.5	20	1,1	<0.05	<0.2
	08/25/94	260	16	<0.5	2.5	<0.5	<0.05	1.1
OB-3	11/06/89	4,000	420	8.0	6.0	64	NA	NA
	04/26/90	1,000	160	19	5.0	8.6	3.2	<50
	07/26/90	68	<0.5	<0.5	<0.5	0.9	1.2	<50
	10/18/90	3,200	260	69	35	490	2.1	<50
			Well Al	pandoned		-		
OB-4	11/06/89	4,000	500	11	10	24	NA	NA
 	04/26/90	460	360	10	10	18	3.9	<50
	07/26/90	200	23	3.7	1.6	5.9	1.6	<50
	10/18/90	4,300	600	540	83	840	0.33	<50
	10/10/00			pandoned		-	0.00	
EB	08/25/94	69	<0.5	<0.5	<0.5	<0.5	<0.05	0.71
ТВ	08/25/94	52	<0.5	<0.5	<0.5	<0.5	NA	NA
CD - Caul	 oment Blank	,						 · ·
TB = Trip !								
	s per billion							
	s per billion							
NA = Not		I				· · · · · · · · · · · · · · · · · · ·		
	analyzed an the dete	ction limit f	or the speci	fied method	t of analysis			
	ian the dete						12.16.1	

^{* =} Includes "heavy" petroleum hydrocarbons such as waste oil, mineral spirits, jet fuel, or fuel oil.

^{** =} Non-diesel mix >C16. The certified analytical report for sample MW-8G was revised on 10/21/93.

ANALYTICAL REPORT

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

LOG NO: G94-08-311

Received: 26 AUG 94

Mailed: SEP | 3 1994

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

Purchase Order: 94-1446346+4370

Requisition: 624880235 Project: FKEP1014L

	REPORT OF ANALYTICAL	RESULTS	Page 1
LOG NO	08-311-1	08-311-2	08-311-3
DATE SAMPLED SAMPLE DESCRIPTION GROUND WATER	25 AUG 94 MW8F	25 AUG 94 MW8G	25 AUG 94 MW8H
0il & Grease, IR(EPA-413.2),	mg/L 1.4	0.86	4.0
TPH-diesel/CADHS/3520			
Date Analyzed	09/03/94	09/03/94	09/03/94
Date Extracted	08/31/94	08/31/94	08/31/94
Dilution Factor, Times 1	1	1	1
TPH (as diesel), mg/L	<0.05	<0.05	<0.05

B C Analytical

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

LOG NO: G94-08-311

Received: 26 AUG 94

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

Purchase Order: 94-1446346+4370

Requisition: 624880235

Project: FKEP1014L

REPORT OF ANALYTICAL RESULTS

Page 2

LOG NO	08-311-1	08-311-2	08-311-3
DATE SAMPLED SAMPLE DESCRIPTION GROUND WATER	25 AUG 94 MW8F	25 AUG 94 MW8G	25 AUG 94 MW8H
TPH-gas/BTEX (CADHS/8020)			
Date Analyzed	09/01/94	09/01/94	09/01/94
Dilution Factor, Times 1	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
Total Xylene Isomers, ug/L	<0.5	<0.5	<0.5
TPH (as Gasoline), ug/L	<50	<50	<50

B C Analytical

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

LOG NO: G94-08-311

Received: 26 AUG 94

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

Purchase Order: 94-1446346+4370

Requisition: 624880235

Project: FKEP1014L

REPORT OF ANALYTICAL RESULTS

Page 3

LOG NO	08-311-4	08-311-5	08-311-6
DATE SAMPLED SAMPLE DESCRIPTION GROUND WATER	25 AUG 94 MW8I	25 AUG 94 MW8J	25 AUG 94 MW8K
Oil & Grease, IR(EPA-413.2), mg/L	0.73	1.0	0.98
TPH-diesel/CADHS/3520			
Date Analyzed	09/03/94	09/03/94	09/03/94
Date Extracted	08/31/94	08/31/94	08/31/94
Dilution Factor, Times 1	1	1	1
TPH (as diesel), mg/L	<0.05	<0.05	<0.05

B' C Analytical

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

LOG NO: G94-08-311

Received: 26 AUG 94

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

Purchase Order: 94-1446346+4370

Requisition: 624880235

Project: FKEP1014L

	REPORT OF ANALYTICAL	RESULTS	Page 4
LOG NO	08-311-4	08-311-5	08-311-6
DATE SAMPLED SAMPLE DESCRIPTION GROUND WATER	25 AUG 94 MW8I	25 AUG 94 MW8J	25 AUG 94 MW8K
TPH-gas/BTEX (CADHS/8020)	~~		
Date Analyzed	09/01/94	09/01/94	09/01/94
Dilution Factor, Times 1	1	1	1
Benzene, ug/L	14	<0.5	0.78
Toluene, ug/L	0.58	<0.5	<0.5
Ethylbenzene, ug/L	30	<0.5	<0.5
Total Xylene Isomers, ug/L	4.3	<0.5	<0.5
TPH (as Gasoline), ug/L	540	<50	<50

B' C Analytical

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

LOG NO: G94-08-311

Received: 26 AUG 94

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

Purchase Order: 94-1446346+4370

Requisition: 624880235

Project: FKEP1014L

	REPORT	0F	ANALYTICAL	RESULTS		Page 5
LOG NO					08-311-7	08-311-8
DATE SAMPLED SAMPLE DESCRIPTION GROUND WATER					25 AUG 94 MW8L	25 AUG 94 EB
Oil & Grease, IR(EPA-413.2),	mg/L				1.1	0.71
TPH-diesel/CADHS/3520						
Date Analyzed					09/03/94	09/03/94
Date Extracted					08/31/94	08/31/94
Dilution Factor, Times 1					1	1
TPH (as diesel), mg/L					<0.05	<0.05

B C Analytical

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

LOG NO: G94-08-311

Received: 26 AUG 94

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

Purchase Order: 94-1446346+4370

Requisition: 624880235 Project: FKEP1014L

	REPORT OF	ANALYTICAL	RESULTS	Page 6
LOG NO			08-311-7	08-311-8
DATE SAMPLED SAMPLE DESCRIPTION GROUND WATER			25 AUG 94 MW8L	25 AUG 94 EB
TPH-gas/BTEX (CADHS/8020)				
Date Analyzed			09/01/94	09/01/94
Dilution Factor, Times 1			1	1
Benzene, ug/L			16	<0.5
Toluene, ug/L			<0.5	<0.5
Ethylbenzene, ug/L			2.5	<0.5
Total Xylene Isomers, ug/L	-		<0.5	<0.5
TPH (as Gasoline), ug/L			260	69

B C Analytical

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

LOG NO: G94-08-311

Received: 26 AUG 94

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

Purchase Order: 94-1446346+4370

Requisition: 624880235 Project: FKEP1014L

REPORT OF ANALYTICAL RESULTS

Page 7

LOG NO	08-311-9	
DATE SAMPLED SAMPLE DESCRIPTION GROUND WATER	25 AUG 94 TB	
TPH-gas/BTEX (CADHS/8020)		
Date Analyzed	09/01/94	
Dilution Factor, Times 1	1	
Benzene, ug/L	<0.5	
Toluene, ug/L	<0.5	
Ethylbenzene, ug/L	<0.5	
Total Xylene Isomers, ug/L	<0.5	
TPH (as Gasoline), ug/L	52	

Tom Hargett 500 Grand Avenue, Oakland Alameda County

Dames C. Hein, Laboratory Director

SAMPLES	SAMPLE DESCRIPTION	DETERM	DATE ANALYZED	METHOD	EQUIP.	ватсн	ID.NO
9408311*1	MW8F	IR.O&G	08.30.94	413.2	533-17	9483	8106
		DIESEL.3520.TES	09.03.94	8015M	536-01	94194	7424
		GAS.BTX.TESNC	09.01.94	8015M.TX	536-23	94561	8095
9408311*2	MW8G	IR.O&G	08.30.94	413.2	533-17	9483	8106
		DIESEL.3520.TES	09.03.94	8015M	536-01	94194	7424
		GAS.BTX.TESNC	09.01.94	8015M.TX	536-23	94561	8095
9408311*3	MW8H	IR.O&G	08.30.94	413.2	533-17	9483	8106
		DIESEL.3520.TES	09.03.94	8015M	536-01	94194	7424
		GAS.BTX.TESNC	09.01.94	8015M.TX	536-23	94561	8095
9408311*4	MW8I	IR.O&G	08.30.94		533-17	9483	8106
		DIESEL.3520.TES	09.03.94	8015M	536-01	94194	7424
		GAS.BTX.TESNC		8015M.TX	536-23	94561	8095
9408311*5	MW8J	IR.O&G	08.30.94		533-17	9483	8106
		DIESEL.3520.TES			536-01	94194	7424
		GAS.BTX.TESNC		8015M.TX	536-23	94561	8095
9408311*6	MW8K	IR.O&G	08.30.94		533-17	9483	8106
		D1000001100			536-01	94194	7424
040004417		GAS.BTX.TESNC	-	8015M.TX	536-23	94561	8095
9408311*7	MW8L	IR.O&G	08.30.94		533-17	9483	8106
		DIESEL.3520.TES			536-01	94194	7424
040004440		GAS.BTX.TESNC		8015M.TX	536-23	94561	8095
9408311*8	EB	IR.0&G	08.30.94		533-17	9483	8106
		DIESEL.3520.TES			536-01	94194	7424
040001140	Th	GAS.BTX.TESNC		8015M.TX	536-23	94561	8095
9408311*9	TB	GAS.BTX.TESNC	09.01.94	8015M.TX	536-23	94561	8095

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

ORDER QC REPORT FOR G9408311

DATE REPORTED : 09/09/94

Page 1

LABORATORY CONTROL STANDARDS FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT		PERCENT RECOVERY
· · · · · · · · · · · · · · · · · · ·	08.30.94				ng/L	67
2. TPH-diesel/CADHS/3520 C409354*1		0.110.4	00/02/04	00/02/04	D. L.	A1 / 0
Date Analyzed	09.03.94		09/03/94	09/03/94		N/A
Date Extracted	09.03.94		08/31/94	08/31/94		N/A
TPH (as diesel)	09.03.94		1.16	1.00	mg/L	116
Napthalene reported	09.03.94		0.0679	0.0600	mg/L	113
Napthalene theoretical	09.03.94	94194	0.0600	0.0600	mg/L	100
3. TPH-diese1/CADHS/3520 C409355*1			/ /			
Date Analyzed	09.03.94		09/03/94	09/03/94		N/A
Date Extracted	09.03.94		08/31/94	08/31/94		N/A
TPH (as diesel)	09.03.94		1.21	1.00	mg/L	121
Napthalene reported	09.03.94		0.0786	0.0600	mg/L	131 Q
Napthalene theoretical	09.03.94	94194	0.0600	0.0600	mg/L	100
4. TPH-gas/BTEX (CADHS/80 C409237*)						4
Date Analyzed	09.01.94		09/01/94		Date	N/A
Benzene	09.01.94		11.8	12.5	ug/L	94
Toluene	09.01.94		57.0	55.5	ug/L	103
Ethylbenzene	09.01.94	94561	11.8	12.5	ug/L	94
Total Xylene Isomers	09.01.94	94561	60.4	42.5	ug/L	142 Q
TPH (as Gasoline)	09.01.94	94561	1050	1000	ug/L	105
a,a,a-Trifluorotoluene Reported	09.01.94	94561	55.2	50.0	ug/L	110
a,a,a-Trifluorotoluene Theoretic	09.01.94	94561	50.0	50.0	ug/L	100
5. TPH-gas/BTEX (CADHS/80 C409238*)	1					
Date Ånalyzed	09.01.94	94561	09/01/94	09/01/94	Date	N/A
Benzene	09.01.94	94561	8.56	12.5	ug/L	68
Toluene	09.01.94	94561	54.4	55.5	ug/L	98
Ethylbenzene	09.01.94	94561	12.1	12.5	ug/L	97
Total Xylene Isomers	09.01.94	94561	59.3	42.5	ug/L	140 Q
TPH (as Gasoline)	09.01.94	94561	1060	1000	ug/L	106
a,a,a-Trifluorotoluene Reported	09.01.94	94561	54.9	50.0	ug/L	110
a,a,a-Trifluorotoluene Theoretic		94561	50.0	50.0	ug/L	100

ORDER QC REPORT FOR G9408311

DATE REPORTED: 09/09/94

Page 1

ADDITIONAL LCS PRECISION (DUPLICATES) BATCH QC REPORT

	SAMPLE	DATE	BATCH	LC1	LC2		RELATIVE
PARAMETER	NUMBER	ANALYZED	NUMBER	RESULT	RESULT	UNIT	% DIFF
 TPH-diesel/CADHS/352 	0						
Date Analyzed		09.03.94	94194	09/03/94	09/03/94	Date	N/A
Date Extracted		09.03.94	94194	08/31/94	08/31/94	Date	N/A
TPH (as diesel)		09.03.94	94194	1.16	1.21	mg/L	4
Napthalene reported		09.03.94	94194	0.0679	0.0786	mg/L	15
Napthalene theoretica	1	09.03.94	94194	0.0600	0.0600	mg/L	0
2. TPH-gas/BTEX (CADHS/	80						
Date Analyzed		09.01.94	94561	09/01/94	09/01/94	Date	N/A
Benzene		09.01.94	94561	11.8	8.56	ug/L	32 Q
Toluene		09.01.94	94561	57.0	54.4	ug/L	5
Ethylbenzene		09.01.94	94561	11.8	12.1	ug/L	5 3
Total Xylene Isomers		09.01.94	94561	60.4	59.3	ug/L	2
TPH (as Gasoline)		09.01.94	94561	1050	1060	ug/L	1
a,a,a-Trifluorotoluer	e Reported	09.01.94	94561	55.2	54.9	ug/L	1
a,a,a-Trifluorotoluer				50.0	50.0	ug/L	0

ORDER QC REPORT FOR G9408311

DATE REPORTED: 09/09/94

Page 1

MATRIX QC ACCURACY (SPIKES) BATCH QC REPORT

	SAMPLE	DATE	BATCH	MS	MSD	TRUE		
PARAMETER	NUMBER	ANALYZED	NUMBER	%	%	RESULT	UNIT	
1. Oil & Grease, IR(EP	9408311*8	08.30.94	9483	105	120	4.72	mg/L	
2. TPH-gas/BTEX (CADHS	5/80 9408311*	4					~	
Benzene		09.01.94	94561	87	83	26.5	ug/L	
Toluene		09.01.94	94561	99	96	56.1	ug/L	
Ethylbenzene		09.01.94	94561	NC	NC	42.5	ug/L	NC
Total Xylene Isomers	5	09.01.94	94561	130 Q	130 Q	46.8	ug/L	Q
TPH (as Gasoline)		09.01.94	94561	107	107	1540	uğ/L	•
a,a,a-Trifluorotolu	ene Reported	09.01.94	94561	NC	NC	50.0	uğ/L	NC
a,a,a-Trifluorotolu				ИC	NC	50.0	ua/L	NC

ORDER QC REPORT FOR G9408311

DATE REPORTED: 09/09/94

Page 1

MATRIX QC PRECISION (DUPLICATE SPIKES) BATCH QC REPORT

SAMPLE	DATE BATC	H MS	MSD		RELATIVE
PARAMETER NUMBER		ER RESULT	RESULT	UNIT	% DIFF
1. 0il & Grease, IR(EP 9408311*		4.93	5.51	mg/L	11
TPH-gas/BTEX (CADHS/80 9408	311*4			_	
Date Analyzed	09.01.94 9456	1 09/01/94	09/01/9	94 Date	N/A
Benzene	09.01.94 9456	1 24.9	24.4	ug/L	2
Toluene	09.01.94 9456	1 55.6	53.8	ug/L	3
Ethylbenzene	09.01.94 9456	1 36.0	36.0	ug/L	0
Total Xylene Isomers	09.01.94 9456	1 59.7	59.5	ug/L	0
TPH (as Gasoline)	09.01.94 9456		1610	ug/L	0
a,a,a-Trifluorotoluene Repor	ted 09.01.94 9456	1 52.3	52.0	ug/L	1
a,a,a-Trifluorotoluene Theor	etic 09.01 <mark>.</mark> 94 9456	1 50.0	50.0	ug/L	0

ORDER QC REPORT FOR G9408311

DATE REPORTED: 09/09/94

Page 1

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

PARAMETER 1. 01 % Grease, IR(EP B4081783*1 62. TPH-diesel/CADHS/3520 B409284*	ANALYZED 08.30.94 9		BLANK RESULT O	RDL 0.2	UNIT mg/L	METHOD 413.2
Date Analyzed	09.03.94	94194	09/03/94	NA	Date	8015M
Date Extracted	09.03.94	94194	08/31/94	NA	Date	8015M
TPH (as diesel)	09.03.94	94194	0.091	0.05	mg/L	8015M
Napthalene reported	09.03.94		0.0613	NA	mg/L	8015M
Napthalene theoretical	09.03.94	94194	0.0600	NΑ	mg/L	8015M
3. TPH-gas/BTEX (CADHS/80 B409196*	1 `				_	
Date Analyzed	09.01.94	94561	09/01/94	NA	Date	8015M.TX
Benzene	09.01.94	94561	0	0.5	ug/L	8015M.TX
T o luene	09.01.94	94561	0	0.5	ug/L	8015M.TX
Ethylbenzene	09.01.94	94561	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	09.01.94	94561	0	0.5	ug/L	8015M.TX
TPH (as Gasoline)	09.01.94		0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene Reported	09.01.94	94561	50.9	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene Theoretic	09.01.94	94561	50.0	NΑ	ug/L	8015M.TX

: SURROGATE RECOVERIES : : BC ANALYTÍCAL : GLEN LAB : 12:28:36 09 SEP 1994 - P. 1:

METHOD ANALYTE	ВАТСН	ANALYZED I	REPORTED	TRUE	%REC	FLAG
9408311*1						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/01/94	0.0584 51.0	0.0600 50.0	97 102	
9408311*2						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/01/94	0.0612 51.5	0.0600 50.0	102 103	
9408311*3						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/01/94	0.0609 51.3	0.0600 50.0	102 103	
9408311*4						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/01/94	0.0779 48.8	0.0600 50.0	130 98	
9408311*5						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/01/94	0.0695 51.7	0.0600 50.0	116 103	
9408311*6						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/01/94	0.0555 51.0	0.0600 50.0	93 102	
9408311*7						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/01/94	0.0522 51.0	0.0600 50.0	87 102	
9408311*8						
8015M Napthalene reported 8015M.TXa,a,a-Trifluorotoluene	94194 94561	09/03/94 09/02/94	0.0631 51.5	0.0600 50.0	105 103	
9408311*9						
8015M.TXa,a,a-Trifluorotoluene	94561	09/01/94	51.5	50.0	103	

: SURROGATE RECOVERIES : : BC ANALYTICAL : GLEN LAB : 12:28:47 09 SEP 1994 - P. 1 :

======		========	= === = ====	========	===		
METHOD	ANALYTE	ВАТСН	ANALYZED	REPORTED	TRUE	%REC	FLAG
9408311	*4*R1						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	48.8	50.0	98	
9408311	*4*\$1						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	52.3	50.0	105	NC
9408311	*4*\$2						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	52.0	50.0	104	NC
9408311	*4*T						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	50.0	50.0	100	
9408311	*8*R1						
8015M	Napthalene reported	94194	09/03/94	0.0631	0.0600	105	
B409196	*1*MB						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	50.9	50.0	102	
B409284	*1*MB						
8015M	Napthalene reported	94194	09/03/94	0.0613	0.0600	102	
C409237	*1*LC						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	55.2	50.0	110	
C409237	*1*LT						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	50.0	50.0	100	
C409238	*1*LC						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	54.9	50.0	110	
C409238	*1*LT						
8015M.T	Xa,a,a-Trifluorotoluene	94561	09/01/94	50.0	50.0	100	
C409354	*1*LC						
8015M	Napthalene reported	94194	09/03/94	0.0679	0.0600	113	
C409354	*1*LT						
8015M	Napthalene reported	94194	09/03/94	0.0600	0.0600	100	
C409355	*1*LC						
8015M	Napthalene reported	94194	09/03/94	0.0786	0.0600	131	B C .

Analytical

: SURROGATE RECOVERIES :

METHOD ANALYTE BATCH ANALYZED REPORTED TRUE %REC FLAG

C409355*1*LT

8015M Napthalene reported 94194 09/03/94 0.0600 0.0600 100

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Method of Shipment:							mments	:	-							

Project Name:	53000	// Well Gauging Data		,
		clan	Date:	8/25
Project Number:	940825-1-2		Recorded By:	KCB

Well ID Elev		Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
MW8F	1428	4		974	(197	
MW 86°	1448	4	 	1014	 	
New 8H	1463	4		389		
MW 8I	1454	4		631		
71cm.85	1477	4		601		
MWBK	1698	2		7.00		
(NW 87-	1800	2		234		
					:	
			··			
		·	10.			
TOC = Tan of engine						

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

Project Name 500 Grand	Groun	dwater S	ampling I	Form	HWSF	-	
Project Number 940825-	1<2	=	Well Type		Extraction [
Recorded By Keith Bro		Sampled by	, , ,	/A	Date	8/25/94	
		WELL PU					0.00000000
PURGE VOLUME	<u>Com Process of the grid pleasure.</u>	<u> </u>	IXXIIIX Carrier and a	omerana de la composición del composición de la composición del composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la co		and the second of the second	20000000000000000000000000000000000000
Well casing diameter					METHOD		
2-inch A-inch Other				Dumn - Type	5.5 Elec	feel Cl	
Well Total Depth (TD, ft. below TOC)	1448	-		Other	YEACC.	- Su <i>b</i>	
Depth to Water (WL, ft. below TOC)	1014	-		<u> </u>	INTAKE		
Depth to free phase hydrocarbons (FP, ft.	below TOC)		<u></u>	Near top	Depth (fl)		
Number of well volumes to be purged 3 10 Other			_	Near Bottom Other	Depth (ft)	1400	
PURGE VOLUME CALCULATION		-		Pumping Rate			
434 x	0.66	.	3	Lambud vere		pm	
Water Column Length	Multiplier	_ X	No. Vols			PURGE VOLUME	gals
MULTIPLIER (Casing Di	a.linches) = Ga	linns/linear fi)	and or the property of the	ا ل آ	3		
2 = 0.17 3 = 0.38 4 = 0.6	6 4.5 = 0.83	5 = 1.02 6 = 1.5		1 }		JRGE VOLUME	gals
GROUNDWATER PARAMETER ME	ASUREMENT	Meter Type	Myrand	DDS · Tar	bidiute.	702 70202	
Time/Gallons	рН	Cond.	Temp	deg C	Turbidity	Color/Odor	
1/09 1 3	87	(uomhos/cm)	. 	deo F	(NTU)		
1	8.1	3000	67.6		73.1		
		 	<u> </u>			 	\longrightarrow
1	1	 	 				
/					-		\neg
1	<u> </u>						$\neg \neg$
1	 	<u> </u>					
Comments during well purge	<u> </u>	<u></u>	<u> </u>		<u> </u>		
Well Pumped dry: YES NO	 -					, ——	
	- Millyon Mig., Inc. (Magaga)			Drummed ons	site 🔀	Other	
1 -41		WELL SAN		100	· · · · · ·		
	me Sampled	8/25	1 1450	• .			
Bailer - Type 5. Stee /		-	Sample port		Other [
GROUNDWATER SAMPLE PARAI		UREMENTS			<u>~</u>	•	
Date/Time/% Recharge	pН	Cond. (uomhos/cm)	Temp	deg C	Turbidity	Color/Odor	
8/25 1 1440 181	7.8	2/02	68.8	dea F	(NTU)		
SAMPLING PROGRAM	<u></u>		28.8		کلوی		
Sample No. Contain	er#/Volume	Analysis	Preservatives	Labora	etoni I		
		TPHE/BIEX	461	BC An		Comments	==
	1 liter	Waste O.1	4,504	"	2014 1		\neg
2-	1 lites	TPHD.	None	* *			7
				ļ <u>.</u>			
							
·							_
QUALITY CONTROL SAMPLES	1						
Duplicate Samples					DI1- C	·	
	Duplicate Sam	ple No.	(Ту	Blank S rpe	Samples Sample No.	
			Ţ		пір	200,100	=
				Rins	sale		
							_
			-	Tran Other:	nsfer		_

Project Name 5006	canel	DIL.	Ų.	Mall Ma		MW81	P
Project Number 940	825-1	<2	=	Well Type			
	I Bro.		 Sampled by 	/<_/3	Montor	Extraction Date	Other 8/25/94
		7. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	WELL PU	RGING			
PURGE VOLUME			22.00	order de la companya de la companya de la companya de la companya de la companya de la companya de la companya	Z IJDOS	METHOD	
Well casing diameter						peS,58	
	Other					pe Elec	
Well Total Depth (TD, ft. below	TOC)	1428	-		Other	pe Live	250
Depth to Water (WL, ft. below	TOC)	974	_			PINTAKE	
Depth to free phase hydrocarbo	ons (FP, ft. I	below TOC)		7]	Near top	Depth (ft)	
Number of well volumes to be p	Other		_	_		m Depth (ft)	14
PURGE VOLUME CALCU	and the second property of	· _			Pumping Ra	le	gpm
4.54		0.66	×	.3	=	a	
Water Column	Length	Multiplier		No. Vols	_	CALCULAT	ED PURGE VOLUME
MULTIPLIER (2 = 0.17 3 = 0.3	Casing Dia	[inches] = Ga	llons/linear ft) 5 = 1.02 6 = 1.5	I8 = 2.6			3
GROUNDWATER PARAM	ETER MEA	SUREMENT	Meter Type	Turbilar	∟ 45 ~ //1		PURGE VOLUME
Time/Gallons		pН	Cond.	Temp	deg C	Turbidity	C-1/O-1
1000		<u></u>	(uomhos/cm)	remp	deg F	(NTU)	Color/Odor
1223 1	3	7.3	5100	71.7	/	771.6	1,2/14
							1 32.12
				<u> </u>			
<u></u>							
						1	
1						 	
1							
/ / // Comments during well purge							
/ // Comments during well purge Well Pumped dry: (YES) NO			Purge water sto	reangidispased	Daymond		Town
Well Pumped dry: (YES) NO		0.00.00	Purge water sto		Drummed c	onsite }	Other
Well Pumped dry: (YES) NO		e Samolad	WELLSAN	PLING		onsite \$	 ✓Other
Well Pumped dry: (YES) NO SAMPLING METHOD	Date/Tim	e Sampled		IPLING 1 /5/5		onsite }	ØOther
Well Pumped dry: (YES) NO SAMPLING METHOD Bailer - Type	Date/Tim	e Sampled	WELL SAN	PLING /S/S Sample port		Other	Other
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP	Date/Tim	e Sampled (IETER MEAS	WELL SAN	PLING / /ろ/S Sample port Meter Type	. de abo	Other [Øother
SAMPLING METHOD Bailer - Type	Date/Tim	e Sampled	WELL SAN	PLING /S/S Sample port		Other [Other
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tim	ne Sampled , (METER MEAS pH	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm)	PLING / /S/S Sample port Meter Type Temp	deg C	Other [Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tim	e Sampled (IETER MEAS	WELL SAN	PLING / /ろ/S Sample port Meter Type	deg C	Other []
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/4/ 1 /500 SAMPLING PROGRAM Sample No.	Date/Tim les She, LE PARAM	ne Sampled , (METER MEAS pH 7, S	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800	PLING / S/S Sample port Meter Type Temp	deg C	Other [حے Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/4/ 1 /500 SAMPLING PROGRAM Sample No.	Date/Tim	ne Sampled (IETER MEAS pH 7. S	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800	PLING / /S/S Sample port Meter Type Temp 70. >	deg C deg F	Other [Turbidity (NTU) > کیدے	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/44/ 1/500 SAMPLING PROGRAM Sample No. MUS 8	Date/Tim	ne Sampled (IETER MEAS pH 7. S	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) / SOO Analysis THE / BFEX	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives	deg C deg F	Other [Turbidity (NTU) >2200 oralory	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/44/ 1/500 SAMPLING PROGRAM Sample No.	Date/Tim	PH 7. S Pr#Nolume	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800 Analysis THE /BJEX Wash O. /	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	deg C deg F	Other [Turbidity (NTU) >2250 oralory many fira	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/44/ 1/500 SAMPLING PROGRAM Sample No. MUS 8	Date/Tim	TETER MEAS pH 7. S or #Nolume 1 / item	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) / SOO Analysis THE / BFEX	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives	As along C deg C deg F lab	Other [Turbidity (NTU) >2250 oralory maxly fira	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/44/ 1/500 SAMPLING PROGRAM Sample No. MUS 8	Date/Tim	TETER MEAS pH 7. S or #Nolume 1 / item	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800 Analysis THE /BJEX Wash O. /	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	As along C deg C deg F lab	Other [Turbidity (NTU) >2250 oralory maxly fira	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/44/ 1/500 SAMPLING PROGRAM Sample No. MUS 8	Date/Tim	TETER MEAS pH 7. S or #Nolume 1 / item	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800 Analysis THE /BJEX Wash O. /	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	As along C deg C deg F lab	Other [Turbidity (NTU) >2250 oralory maxly fira	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge 8/25/44/1/500 SAMPLING PROGRAM Sample No. 11 11 11 11 11 11 11 11 11	Date/Tim	TETER MEAS pH 7. S or #Nolume 1 / item	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800 Analysis THE /BJEX Wash O. /	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	As along C deg C deg F lab	Other [Turbidity (NTU) >2250 oralory maxly fira	Color/Odor
SAMPLING METHOD Bailer - Type Sampling Method Date/Time/% Recharge 8/25/44/1/500 SAMPLING PROGRAM Sample No. MUS 6	Date/Time Date/Time Date/Time Date/Time Date/Time Containe 3 - 4 2 - 1 PLES	TETER MEAS pH 7. S or #Nolume 1 / item	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800 Analysis THE /BJEX Wash O. /	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	As along C deg C deg F lab	Other [Turbidity (NTU) >2250 oralory maxly fira	Color/Odor
SAMPLING METHOD Bailer - Type Second	Date/Time Date/Time	PETER MEAS PH 7. S PT#/Volume Youl Vac I liter	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) /800 Analysis THE/BIEX Ukshe O. 1 TPHD.	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	deg C deg F	Other [Turbidity (NTU) >2200 oratory really fire	Color/Odor Clavely Comments Samples
SAMPLING METHOD Bailer - Type Sample Method GROUNDWATER SAMP Date/Time/% Recharge 8/25/44 1 /500 SAMPLING PROGRAM Sample No. /// 8 6	Date/Time Date/Time	TETER MEAS pH 7. S or #Nolume 1 / item	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) / 800 Analysis THE/BIEX Ukshe O. 1 TPHD.	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	deg C deg F	Other [Turbidity (NTU) 2230 oratory rea /y fire Blank Type	Color/Odor Clavely Comments
SAMPLING METHOD Bailer - Type Second GROUNDWATER SAMP Date/Time/% Recharge 8/25/44 1 /500 SAMPLING PROGRAM Sample No. ALL 8 7	Date/Time Date/Time	PETER MEAS PH 7. S PT#/Volume Youl Vac I liter	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) / 800 Analysis THE/BIEX Ukshe O. 1 TPHD.	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	deg C deg F	Other [Turbidity (NTU) >2200 oratory rea /y fica Blank Type Trip	Color/Odor Clavely Comments Samples
SAMPLING METHOD Bailer - Type Second	Date/Time Date/Time	PETER MEAS PH 7. S PT#/Volume Youl Vac I liter	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) / 800 Analysis THE/BIEX Ukshe O. 1 TPHD.	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	Lab	Other [Turbidity (NTU) >2-3-3 oratory run /y fira Blank Type Trip insate	Color/Odor Clavely Comments Samples
SAMPLING METHOD Bailer - Type Second GROUNDWATER SAMP Date/Time/% Recharge 8/25/44 1 /500 SAMPLING PROGRAM Sample No. ALL 8 7	Date/Time Date/Time	PETER MEAS PH 7. S PT#/Volume Youl Vac I liter	WELL SAN 8/25/44 UREMENTS Cond. (uomhos/cm) / 800 Analysis THE/BIEX Ukshe O. 1 TPHD.	PLING I /S /S Sample port Meter Type Temp 70. S Preservatives HC / H, SO-4	Lab	Other [Turbidity (NTU) >2200 oratory rea /y fica Blank Type Trip	Color/Odor Clavely Comments Samples

Project Name 5006	MACK	DIL.	idwater S <u>-</u>	Well No		Mw:	9 11	
Project Number 940	825.1	<2	_ 	Well Type		Extraction		
	I Bro		Sampled by	<u> 18013</u>		_ Date	8/25/94	
			WELL PU	RGING		gagager man hadisələri ili səsəsə Mahami — Məsəsə əsisəsə əsisəsə		*****
PURGE VOLUME			-		PURGE	METHOD		<u> </u>
Well casing diameter					Bailer - Typ			
2-inch 4-inch					Pump - Tyr	ce <u>[=[c</u>	50 S.B	
Well Total Depth (TD, it. below	-	1463			Other			
Depth to Water (WL, ft. below		<u> </u>		_	PUMP	INTAKE		
Depth to free phase hydrocarbo plumber of well volumes to be p	ons (FP, ft.	below TOC)			Near top	Depth (ft)		
3 10	Other	407	4		Near Bottor Other	n Depth (ft)	14	
PURGE VOLUME CALCU			<u></u>		_			
		 کاکے_		7	Pumping Rate		gpm	
Water Column	Length	Multiplier	_ ×	No. Vols	- =	CALCULAT	<u>ス /</u>	Ç
MULTIPLIER (Han War	//	·		ED PURGE VOLUME	
2 = 0.17 3 = 0.1	38 4 = 0.6	6 4.5 = 0.83	5 = 1.02 6 = 1.5		4	ACTUAL	Q / PURGE VOLUME	g
GROUNDWATER PARAM				2.0	_	_ ACTUAL!	ORGE VOLUME	
Time/Gallons		На	Cond.	Temp	deg C			
			(uomhos/cm)	Temp	deg C ⊠deg F	Turbidity (NTU)	Color/Odor	
1340 1 7	,	7,6	1500	75.4	7	74.2		
1343 1 14		<u> 28</u>	1500	75.2		373		
1546 121		 2 /	(202)	3₹2		38.2		
	·		 					
'		 	 			· · · · · ·		
			 				 	
		i						
							-	
Comments during well purge_		·	. 					
Comments during well purge Well Pumped dry: YES NO			Purpe water stor	ane/disposal	Daymord	nciln V		
Well Pumped dry: YES NO		make has processed	Purge water stor	age/disposal	Drummed or	nsite	Other	
Well Pumped dry: YES NO.	er open open er Frank er talen		WELL SAM	PLING	Drummed or	nsite	Other	
Well Pumped dry: YES NO.	er open open er Frank er talen	ne Sampled	Purge water stor WELL SAM 당/2 등	PLING	organism and street an	nsite	Other	<u>-</u>
Well Pumped dry: YES NO. SAMPLING METHOD Bailer - Type	Date/Tin	me Sampled	WELL SAN	PLING	organism and street an	Other [Other	-
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP	Date/Tin	ne Sampled	WELL SAM ピクス GUREMENTS	PLING / /3 55 Sample port Meter Type			Other	
Well Pumped dry: YES NO. SAMPLING METHOD Bailer - Type	Date/Tin	me Sampled	WELL SAM	PLING / /3 55 Sample port	deg C	Other [Other	
SAMPLING METHOD: Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tin	ne Sampled	WELL SAM ピクス GUREMENTS	PLING / /3 55 Sample port Meter Type		Other [
SAMPLING METHOD: Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tin	ne Sampled	WELL SAM	PLING / /3 55 Sample port Meter Type	deg C	Other [,
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM	Date/Tin	METER MEAS	WELL SAM 8/25 SUREMENTS Cond. (uomhos/cm)	PLING / /3.55 Sample port Meter Type Temp	deg C deg F	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tin	me Sampled METER MEAS pH er #/Volume	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis	PLING / /3 55 Sample port Meter Type Temp Preservatives	deg C deg F	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tin	me Sampled METER MEAS pH er #/Volume	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis THE / BIEX	PLING / /3 55 Sample port Meter Type Temp Preservatives #C /	deg C deg F	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tin	METER MEAS PH er #/Volume 4/On/ Van	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis THE /BTEX Ukste O. /	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tin	METER MEAS PH er #/Volume 40~/ Vas / /iden	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis THE / BIEX	PLING / /3 55 Sample port Meter Type Temp Preservatives #C /	deg C deg F Labor	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tin	METER MEAS PH er #/Volume 40~/ Vas / /iden	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis THE /BTEX Ukste O. /	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F Labor	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tin	METER MEAS PH er #/Volume 40~/ Vas / /iden	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis THE /BTEX Ukste O. /	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F Labor	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. YWW SH	Date/Tin	METER MEAS PH er #/Volume 40~/ Vas / /iden	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis THE /BTEX Ukste O. /	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F Labor	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. May 9 #	Date/Tin LE PARAM Containe 3 - 2 - 2 - 4	METER MEAS PH er #/Volume 40~/ Vas / /iden	WELL SAM 8/2 5 SUREMENTS Cond. (uomhos/cm) Analysis THE /BTEX Ukste O. /	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F Labor	Other [Turbidity (NTU)	Color/Odor	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge I SAMPLING PROGRAM Sample No. MANUAR H QUALITY CONTROL SAMP Duplicate 5	Date/Tin LE PARAM / Containe 3 - 4 2 - 7 PLES Samples	METER MEAS pH er#/Volume 40~1 Vas 1 liter	WELL SAM 8/25 SUREMENTS Cond. (uomhos/cm) Analysis IPHC/BFEX Weste O. 1 TPHD.	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F Labor	Other [Turbidity (NTU) ratory ta /y fira	Color/Odor Comments /	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. May 9 #	Date/Tin LE PARAM / Containe 3 - 4 2 - 7 PLES Samples	METER MEAS PH er #/Volume 40~/ Vas / liter	WELL SAM 8/25 SUREMENTS Cond. (uomhos/cm) Analysis IPHC/BFEX Weste O. 1 TPHD.	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F Labor	Other [Turbidity (NTU) ratory to /y fire Blank	Color/Odor Comments	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. YOUNG SH	Date/Tin LE PARAM / Containe 3 - 4 2 - 7 PLES Samples	METER MEAS pH er#/Volume 40~1 Vas 1 liter	WELL SAM 8/25 SUREMENTS Cond. (uomhos/cm) Analysis IPHC/BFEX Weste O. 1 TPHD.	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	deg C deg F Labor	Other [Turbidity (NTU) ratory to /y frica Blank ype	Color/Odor Comments /	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. YOUNG SH	Date/Tin LE PARAM / Containe 3 - 4 2 - 7 PLES Samples	METER MEAS pH er#/Volume 40~1 Vas 1 liter	WELL SAM 8/25 SUREMENTS Cond. (uomhos/cm) Analysis IPHC/BFEX Weste O. 1 TPHD.	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	Labor BC. A.	Other [Turbidity (NTU) ratory to ly fina Blank ype Irip sale	Color/Odor Comments Samples Sample No.	
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge I SAMPLING PROGRAM Sample No. MANUAR H QUALITY CONTROL SAMP Duplicate 5	Date/Tin LE PARAM / Containe 3 - 4 2 - 7 PLES Samples	METER MEAS pH er#/Volume 40~1 Vas 1 liter	WELL SAM 8/25 SUREMENTS Cond. (uomhos/cm) Analysis IPHC/BFEX Weste O. 1 TPHD.	PLING / /3 55 Sample port Meter Type Temp Preservatives HC / 4, 50-4	Labor BC. A.	Other [Turbidity (NTU) ratory to /y frica Blank ype	Color/Odor Comments /	

D-1012 B to Continue to the

Project Name 500	Ground Olek	ndwater S	ampling	Form	Xus	> +-	
Project Number 9408	325-162	<u>~-</u> ~	Well Type				
	Brown	Sampled by	/ <c 3<="" td=""><td>Monitor</td><td>Extraction Date</td><td>Other 8/25/94</td><td></td></c>	Monitor	Extraction Date	Other 8/25/94	
		WELL PU	RGING	72.408200707070	9800 m No. 1421 mm (244, 152		New Year
PURGE VOLUME				PUPCE	METHOD		<u> Meridian</u>
Well casing diameter				Bajler - Typ			
	Other			Deumo - Tv	pe	56	
Well Total Depth (TD, ft. below 1	roc) <u>/454</u>	·.		Other	<u> </u>	200	
Depth to Water (WL, ft. below To				PUMP	INTAKE		
Depth to free phase hydrocarbon Number of well volumes to be pu	s (FP, ft. below TOC)			Near top	Depth (ft)		
	rgea Other			Near Bottor	n Depth (ft)	14	
PURGE VOLUME CALCUL				Pumping Rate			—
8,23	x ,66		$^{\mathcal{C}}$	rumping Kan		gpm	
Water Column 1		×	ر No. Vols	_ =		5. 9 ED PURGE VOLUME	gals
MULTIPLIER (C	asing Dia [inches] = G	allone (linear #1)	90 A 30 300 300 300	₹		6	_
2 = 0.17 3 = 0.38	3 4 = 0.66 4.5 = 0.83	5 = 1.02 6 = 1.5		4		PURGE VOLUME	ga!s
GROUNDWATER PARAME	TER MEASUREMENT	Meter Type	Nym		1,000	THE TOLUME	
Time/Gallons	pН	Cond.	Temp	deg C	Turbidity	Color/Odor	
(((3,6)))		(uomhos/cm)	<u> </u>	Ø deg F	(NTU)	0000000]
1408 1 6	7.6	1800	76.5		87		
1413 1 16	72	(200	74.2		2.8	 	
1	, -	(700)	1,4.6	·	7.4		
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Comments during well purge		· • • • • • • • • • • • • • • • • • • •					
Well Pumped dry: YES NO	-	Purge water sto		Drummed or	nsite §	Other	
		WELL SAM	IPLING	provided the providence of the control of the contr			
SAMPLING METHOD	Date/Time Sampled	8/25	1/425	•			
Bailer - Type	Steel	_	Sample port		Other	7	
GROUNDWATER SAMPL	E PARAMETER MEA	SUREMENTS	Meter Type				_
Date/Time/% Recharge	рH	Cond.	Temp	deg C	Turbidity	Color/Odor	_
, , ,		(uomhos/cm)	-	deg F	(NTU)	<u> </u>	
SAMPLING PROGRAM	<u></u>		<u> </u>	<u></u>			
Sample No.	Container #/Volume	, , , , , , , , , , , , , , , , , , , 					_
MU 8L	3 - 40-1 Vags	Analysis TPHE/BFEX	Preservatives #C/		ratory	Comments	
	2- 1 liter	Waste O.1	4,504	BC Ar	valytical		
	2-1lites	TPHD.	4,304 None	**			
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	2 = 2 + ·						
QUALITY CONTROL SAMP							
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	Duplicate San	inple IVO.		·	ype	Sample No.	=
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Project Name 500	Groun	dwater S	ampling	Form	MWE	T C
Project Number 9408	325-162	<u>~</u>				
	Bon	— Sampled by	Well Type	XIMOUNOR	Extraction Date	Other
		WELL PU		VX.00000.0000.0000.000		
PURGE VOLUME		WILL PU	KGIIVG		oogn fan juge fan vulde gelege. Gebeure	
Well casing diameter				PURGEN		
	Other			Bailer - Type	Ele	
Well Total Depth (TD, ft. below)		– .,		Other	<u> </u>	c 306
Depth to Water (WL, ft, below To				<u> </u>	INTAKE® ®	
Depth to free phase hydrocarbon	s (FP, ft, below TOC)		7	Near top	Depth (ft)	
Number of well volumes to be pu			2	Near Bottom	Depth (ft)	14
/	Other	_		1_Other		
PURGE VOLUME CALCUL			_	Pumping Rate		gpm
8.76 Water Salvan I	x <u>_66</u> _	_ x	3	_ =		?. / gals
Water Column L			No, Vols	_ ا		D PURGE VOLUME
MULTIPLIER (C	asing Dia.[inches] = G	illons/linear ft)		4	<u> 18</u>	gals
GROUNDWATER PARAME	8 4 = 0.66 4.5 = 0.83] , [URGE VOLUME
Time/Gallons			Myon		rdinet-	
TimeGallons	pH	Cond. (uomhos/cm)	Temp	deg C ✓ dea F	Turbidity (NTU)	Color/Odor
1/25 1 77.	1 17.4	1800	77.,	/ July 1	36.2	
1/28 1 75		(800	75		40.9	
1140 175.	7 7.6	ں جو ہم	75.5	7	122.4	
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		<u> </u>				
		-		· · · · · · · · · · · · · · · · · · ·		
,						
Comments during well purge			<u> </u>			
Well Pumped dry: YES NO)	Purge water sto	rape/disposal	Drummed on:	site (Other
				_	<u></u>	
SAMPLING METHOD	Date/Time Sampled	8/25	1 1150			
Bailer - Type	Socol.	- /	Sample port		Other [7
GROUNDWATER SAMPL		- SUREMENTS	Meter Type	_	Other [<u> </u>
Date/Time/% Recharge	l pH	Cond.	Temp	deg C	Turbidity	- C-110 d
		(uomhos/cm)	remp	deg F	(NTU)	Color/Odor
1						
SAMPLING PROGRAM						
Sample No.	Container #/Volume	Analysis	Preservatives	Labor	atory	Comments
MW85	3 - 40-1 Vans	TPHE/BIEX	461	BC An	alytical	1
- (c	2- 1 liter	Waste O. 1	4,504	4		
-	2-11ites	TPHD.	None		<u> </u>	
					-	
			<u> </u>			
QUALITY CONTROL SAME	LES					·
Duplicate S					Blank	Samples
Original Sample No.	Duplicate Sar	nple No.			уре	Sample No.
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				Other:	nsfer	FR 1210
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Project Name 500	2	Groun	dwater S	ampling	Form	1W 8K	
Project Number 9408	225 6	<2	=	Well Type		Extraction	
Recorded By Keirl			— Sampled by	16C13	Missionaler	Date	Other 8/25/94
	3 7 8 8	7	WELL PU	RGING		(Marie de la companion de la c	
PURGE VOLUME	_	-	· · · · · · · · · · · · · · · · · · ·		DIJDCE	METHOD	
Well casing diameter							
2-inch 4-inch	Other				Deumo Tvr	e	25-G-
Well Total Depth (TD, ft. below T		1698	–		Other		ens
Depth to Water (WL, ft. below To		2.00			— ·	INTAKE	
Depth to free phase hydrocarbon	s (FP. ft.	below TOC)		7			
	Other	HEB		=	Near Bottor Other	Depth (ft) n Depth (ft)	
PURGE VOLUME CALCUL	ATION	,			Pumping Rate	2	gpm
1498	х	.17	×	3	-		2
Water Column L	ength	Multiplier	~ ^	No. Vols			D PURGE VOLUME
MULTIPLIER (C 2 = 0.17[3 = 0.38	asing Dia 3 4 = 0.66	[inches] = Ga [4.5 = 0.83]	 	U8 = 2 6		7.	5 98
GROUNDWATER PARAME	TER ME	SUREMENT	Meter Type		- LpDs.	L ACTUAL P	URGE VOLUME
Time/Gallons		рН	Cond.	Temp	deg C	Turbidity	Color/Odor
			(uomhos/cm)		deg F	(NTU)	Color/Obar
1244 1 2-		7.6	1400	77.5		ودور	
1247 1 53		7.6	1400	74.1		72.00	
1250 1 7.5	<u> </u>	7.6	1400	737	· · · · · · · · · · · · · · · · · · ·	7200	
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1			 	-		· · · · · · · · · · · · · · · · · · ·	
				 -			<u> </u>
Comments during well purge			1 + Bul	30-			
Well Pumped dry: YES NO							
7, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	- - (1986) (2) (4) (4)	Control of the second		rage/disposal		isite)	Other
SAMPLING METHOD:		e Sampled					
Bailer - Type		e Sampled	8/25	1 (300			
/ - \	<u> </u>		-	Sample port	_	Other [
GROUNDWATER SAMPLI	EPARAN	ETER MEAS	UREMENTS	Meter Type)		_
Date/Time/% Recharge		pН	Cond.	Temp	deg C	Turbidity	Color/Odor
1 1			(uomhos/cm)	<u> </u>	deg F	(NTU)	
SAMPLING PROGRAM			<u> </u>	I			<u> </u>
Sample No.		r#/Volume	Analysis	Preservatives		ratory	Comments
· · · · · · · · · · · · · · · · · · ·			TPHE /BIEX	461	BC A	calytical	
		liter	Weste O.1	4,504	"		
	2-1	liters	TPHD.	None	* (
· · · · · · · · · · · · · · · · · · ·	 	- <u> </u>					
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QUALITY CONTROL SAMP	LES	. <u> </u>				- i -	<u> </u>
Duplicate Sa						Diag!-	Comelee
Original Sample No.		Ouplicate Sam	ple No.	ì	_	ype Blank	Samples Sample No.
				į		rip	. Comple 190.
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				{	Other:		
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Project Name 5006	and	266	g.a.o. o	Well No	. 01111	1448	71
Project Number 940	825	1<2	=	Well Type			<u> </u>
	I Ba		— Sampled by	<u>/<<!--8</u--></u>		Extraction Date	8/25/94
			WELL PU	RGING	(0.000000000000000000000000000000000000		
PURGE VOLUME			····				
Well easing diameter						METHOD	
-/ -	Other				Bailer - Typ		Mo
Well Total Depth (TD, ft. below		1840	-		Pump - Typ	De	
Depth to Water (WL, ft. below	-	234	-		_		
Depth to free phase hydrocarbo	ons (FP ft			ጎ	Near top	INTAKE	
dumber of well volumes to be p	urged			≝	Near Bottor	n Depth (ft)	
3 📗 10	Other				Other		
PURGE VOLUME CALCU	LATION				Pumping Rate	B .	gpm
_/656		.7	x	3	=		78
Water Column	Length	Multiplier	<u>-</u>	No. Vols	_		ED PURGE VOLUME
MULTIPLIER (Casing Di	a.[inches] = Ga	lions/linear fl) 5 = 1.02 6 = 1.5	Principle of the second second second second second second second second second second second second second se	## 2		B. O
GROUNDWATER PARAM	ETER ME	ASUREMENT	= 1.02 6 = 1.5 Meter Type	<u> 8 = 2.6</u>	ال	ACTUAL	PURGE VOLUME
Time/Gallons		рН	Cond.	Temp	deg C	Turbigity	Calcago
		<u></u>	(uomhos/cm)	, , , ,	deg F	(NTU)	Color/Odor
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/3/3 / 6		7.4	1200	722		> 200	
1316 1 8	, ————	7.4	1200	715		つとい	
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<i>! !</i>							
/ / / Comments during well purge							
)		Durant				
Well Pumped dry: YES NO			Purge water sto	rage/disposal	Drummed or	nsite	Other
Well Pumped dry: YES NO	- S.		WELL SAN	rage/disposal	Drummed or	nsite	Other
Well Pumped dry: YES NO	- S.	ne Sampled	WELL SAN	rage/disposal	Drummed or	nsite	Other
SAMPLING METHOD	Date/Tir	ne Sampled	WELL SAN	PLING	oracle in the latest the second secon	<i></i>	Other
Well Pumped dry: YES NO SAMPLING METHOD Bailer - Type	Date/Tir	ne Sampled	WELL SAN	PLING / /32.5 Sample port		Other [Other
SAMPLING METHOD	Date/Tir	ne Sampled	WELL SAN	PLING / /3/2/5 Sample port Meter Type		Other [
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tir	ne Sampled METER MEAS	WELL SAN	PLING / /32.5 Sample port		Other [Other
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tir	ne Sampled METER MEAS	WELL SAN	PLING / /3/2/5 Sample port Meter Type	deg C	Other [
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge	Date/Tir LE PARAI	ne Sampled METER MEAS	WELL SAN	PLING / /3/2/5 Sample port Meter Type	deg C	Other [
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tir LE PARAI	me Sampled METER MEAS PH er #/Volume	WELL SAN 8/25 UREMENTS Cond. (vomhos/cm) Analysis	PLING / /372.5 Sample port Meter Type Temp	deg C deg F	Other [Turbidity (NTU)	Color/Odor
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SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tir LE PARAI Contain 3 - 2-	METER MEAS PH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (uomhos/cm) Analysis THE / BIEX ULIE O.	PLING / /32.5 Sample port Meter Type Temp Preservatives	deg C deg F	Other [Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tir LE PARAI Contain 3 - 2-	me Sampled METER MEAS pH er #/Volume 40~/ Va	WELL SAN 8/25 UREMENTS Cond. (uomhos/cm) Analysis THE / RIEX	PLING / /32.5 Sample port Meter Type Temp Preservatives #C/	deg C deg F	Other [Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tir LE PARAI Contain 3 - 2-	METER MEAS PH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (uomhos/cm) Analysis THE / BIEX ULIE O.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	deg C deg F Labo	Other [Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tir LE PARAI Contain 3 - 2-	METER MEAS PH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (uomhos/cm) Analysis THE / BIEX ULIE O.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	deg C deg F Labo	Other [Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tir LE PARAI Contain 3 - 2-	METER MEAS PH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (uomhos/cm) Analysis THE / BIEX ULIE O.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	deg C deg F Labo	Other [Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No.	Date/Tir	METER MEAS PH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (uomhos/cm) Analysis THE / BIEX ULIE O.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	deg C deg F Labo	Other [Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. /// SAMPLING PROGRAM	Date/Tir Clar LE PARAI Contain 3 - 2 - 2 - PLES	METER MEAS PH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (uomhos/cm) Analysis THE / BIEX ULIE O.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	deg C deg F Labo	Other [Turbidity (NTU)	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. MW 8L QUALITY CONTROL SAM Duplicate:	Date/Tir Contain 3 - 2- 2- PLES Samples	me Sampled METER MEAS pH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (vomhos/cm) Analysis THE /BTEX ULLE O. 1 TPHD.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	deg C deg F Labo	Other [Turbidity (NTU) ratory ratory	Color/Odor
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. /// SAMPLING PROGRAM	Date/Tir Contain 3 - 2- 2- PLES Samples	METER MEAS PH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (vomhos/cm) Analysis THE /BTEX ULLE O. 1 TPHD.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	deg C deg F Labor	Other [Turbidity (NTU) ratory La /y frica Blank ype	Color/Odor Comments
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SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. MW 8L QUALITY CONTROL SAM Duplicate:	Date/Tir Contain 3 - 2- 2- PLES Samples	me Sampled METER MEAS pH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (vomhos/cm) Analysis THE /BTEX ULLE O. 1 TPHD.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	Labor BC A "	Other [Turbidity (NTU) ratory ratory Blank ype rip sale	Color/Odor Comments Samples Sample No.
SAMPLING METHOD Bailer - Type GROUNDWATER SAMP Date/Time/% Recharge / SAMPLING PROGRAM Sample No. MW SL QUALITY CONTROL SAM Duplicate:	Date/Tir Contain 3 - 2- 2- PLES Samples	me Sampled METER MEAS pH er #Nolume 40~1 Vac 1 liter	WELL SAN 8/25 UREMENTS Cond. (vomhos/cm) Analysis THE /BTEX ULLE O. 1 TPHD.	PLING / /32.5 Sample port Meler Type Temp Preservatives HC / 4, SO-4	Labor BC A "	Other [Turbidity (NTU) ratory ratory Rate by frica Blank ype	Color/Odor Comments Samples

BILL OF LADING SOURCE RECORD 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: Address: City, State, ZIP: Phone: 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

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 #: 62466235

Address:

City, State, ZIP:

Well I.D.	Gals.	147-III D
	··-·•	Well I.D. Gals.
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Total gals.	_72_	added rinse
Total Gals.		water
Recovered	82	
Job #:	9408	25-11
Date	4/	15
Time		> ∂
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REC'D AT:		A.
Date:	1	
Time:	120	
Signature:		

THIRD-QUARTER 1994 PROGRESS REPORT 500 GRAND AVENUE OAKLAND, CALIFORNIA

HISTORY OF INVESTIGATIVE AND REMEDIAL ACTIONS

The site is the former location of a Texaco service station location. Currently the site is a fenced, vacant lot. A site preliminary subsurface investigation was conducted in May 1988. During the initial investigation, a soil gas survey was conducted, 15 soil borings were drilled, and 5 on-site groundwater monitoring wells were installed. In 1989, five off-site wells were installed. The initial five on-site wells have been abandoned and replaced by two wells located at the southern perimeter of the site.

Over 2,400 cubic yards of hydrocarbon-impacted soil have been excavated and removed from within the property boundaries. The waste oil tank, tank backfill material, and impacted soil were excavated and disposed of in September 1990. Clay sewer pipes and contaminated soil from an abandoned utility trench near the former waste oil tank were removed from the site in early 1991. Three underground storage tanks, dispenser islands and associated piping, stockpiled soils, and site structures were removed from the site in April 1992. The excavated area was backfilled and compacted using clean imported material.

WORK PERFORMED THIRD QUARTER 1994

Ground-water monitoring was conducted during the quarter. Results are provided in a separate ground-water monitoring report.

PROPOSED INVESTIGATIONS OR REMEDIATION PLANS

All petroleum impacted soils underlying the site, with a possible exception of a very narrow band along the Grand Avenue sidewalk, have been removed by the extensive soil excavation activities. No further investigation or remediation of the vadose-zone soils is proposed.

Ground water at the site has been affected by gasoline, diesel, and hydrocarbons above the range of diesel. Since the removal of on-site contaminated soils, significant reductions in TPH-g and TPH-d concentrations in groundwater have been reported for samples taken from on- and off-site wells. It is proposed that downgradient wells continue to be monitored to document the biodegradation of the remaining dissolved-phase hydrocarbons in the ground water.

METHOD AND LOCATION OF DISPOSAL

Ground water purged during the quarterly monitoring was transported to the Texaco Terminal in Richmond, California, for disposal.

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.

<u>The Date Taken.</u> 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.