



Texaco Refining
and Marketing Inc

10 Universal City Plaza
Universal City CA 91608

October 12, 1993

STID 1109

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

Dear Ms. Hugo:

This letter will confirm my telephone call to your office in which I tried to expressed Texaco's concerns with items noted in your letter of October 4, 1993. The letter was in reference to your review of the case file for the former Texaco service station facility that was located at 500 Grand Avenue in Oakland, California. I was unable to reach you by phone, so this letter, as outlined below, is intended to express those concerns.

- I. Reference to elevated hydrocarbon levels in the two recently installed onsite monitoring wells. The results quoted in your letter represent the first water samples taken from these newly installed wells. The levels noted indicate a substantial reduction from onsite historical levels previously reported. Further, enclosed is a copy of the latest quarterly report dated September 24, 1993, which indicates that a reduction in contamination levels is continuing. Both onsite wells had no TPH and are now below drinking water standards for hydrocarbon contamination. The offsite wells have also registered a significant reduction, TPH levels were below detection limits and BTEX levels were below detection or were greatly reduced. This reduction can only be attributed to the source removal work performed and gives indication that Texaco's cleanup plan is working.
- II. Submit a corrective action plan (CAP) by November 15, 1993. Texaco has removed all onsite contamination sources and feels that simply monitoring the degradation of any remaining hydrocarbons, both on and offsite, is the prudent course at this time.
- III. Reference to "it will not impede the progress of the ongoing investigation and remediation". In our meeting of April 30, 1993, we discussed the fact that Texaco's lease on the property was expiring and we wanted to advise the owner of any onsite encumbrances that would remain on the property. We presented documents showing the extent of the source removal performed to date and our expectations as to what further action would be required.

500 GRAND AVENUE, OAKLAND, CA
October 12, 1993
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Because all onsite source removal had been completed, the county requested installation of the two additional wells to monitor the onsite conditions. Texaco does not feel that an onsite investigation nor remediation is warranted at this time.

I have instructed Pacific Environmental to immediately arrange for a new sampling round of all wells and to prepare a report to document those results. Please review the enclosed report and call me at (818) 505-2476. I would like to propose a meeting with all parties concerning this matter.

Very truly yours,
Texaco Refining and Marketing Inc.

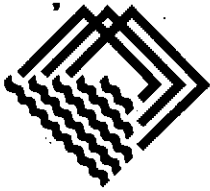

Bob Robles
Environmental Coordinator

RR:rr

Enclosure

Mr. Joe D. Howard - Property Owner
Mr. Rich Hiatt - CRWQCB San Francisco Bay Area Region
Ms. L. Damian - Pacific Environmental Group
DBHill - LKim - RRZielinski

pr: 



PACIFIC
ENVIRONMENTAL
GROUP, INC.

93 OCT 18 PM 3: 56

STID 1109

September 24, 1993
Project 340-34.10

Mr. Bob Robles
Texaco Refining and Marketing, Inc.
10 Universal City Plaza, Suite 724
Universal City, California 91608

Re: Quarterly Report - Third Quarter 1993
Former Texaco Service Station
500 Grand Avenue at Euclid Avenue
Oakland, California


Dear Mr. Robles:

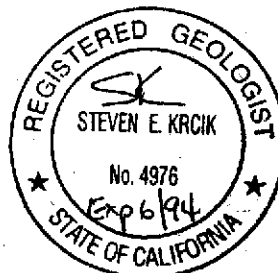
This letter presents the results of the third quarter 1993 groundwater sampling and analytical event conducted by Pacific Environmental Group, Inc. (PACIFIC) on August 16, 1993, at the site referenced above (Figures 1 and 2). Groundwater elevation data are presented in Table 1 and shown on Figure 1. Groundwater analytical data are presented in Table 2 and shown on Figure 2. The certified analytical report and chain-of-custody documentation are presented as Attachment A. The field and laboratory procedures are presented as Attachment B.

If you have any questions regarding the contents of this letter, please do not hesitate to call.

Sincerely,

Pacific Environmental Group, Inc.


Steven E. Krcik
Senior Geologist
RG 4976



**Table 1
Groundwater Elevation Data**

Former Texaco Service Station
500 Grand Avenue at Euclid Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet)	Depth to Water (feet, TOC)	Groundwater Elevation* (feet)	
MW-8A	03/29/91	99.72	2.32	97.40	
	04/23/91		2.31	97.41	
	06/10/91		2.82	96.90	
	06/28/91		2.53	97.19	
	07/23/91		2.35	97.37	
	08/22/91		2.68	97.04	
	10/03/91		2.46	97.26	
	10/24/91		2.53	97.19	
	11/26/91		3.03	96.69	
	12/30/91		2.28	97.44	
	01/23/92		2.57	97.15	
	02/28/92		2.48	97.24	
	03/26/92		2.18	97.59	
	04/30/92		2.10	97.62	
	08/03/92	----- Well Properly Abandoned -----			
	MW-8B	03/29/91	101.11	0.26	100.85
04/23/91			0.31	100.80	
06/10/91			0.42	100.69	
06/28/91			0.41	100.70	
07/23/91			0.52	100.59	
08/22/91			0.62	100.49	
10/03/91			0.52	100.59	
10/24/91			0.62	100.49	
11/26/91			0.73	100.38	
12/30/91			0.30	100.81	
01/23/92			0.54	100.57	
02/28/92			0.29	100.82	
03/26/92			0.07	101.04	
04/30/92			0.60	100.51	
09/28/92		----- Not Monitored -----			
11/19/92		----- Not Monitored -----			
02/12/93	----- Not Monitored -----				
04/01/93	----- Well Properly Abandoned -----				
MW-8C	03/29/91	98.41	6.47	91.94	
	04/23/91		6.67	91.74	
	06/10/91		8.08	90.33	
	06/28/91		7.36	91.05	
	07/23/91		7.37	91.04	
	08/22/91		8.79	89.62	
	10/03/91		7.93	90.48	
	10/24/91		7.68	90.73	
	11/26/91		7.59	90.82	
	12/30/91		7.15	91.26	
	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 Monitored -----			

Table 1 (continued)
Groundwater Elevation Data

Former Texaco Service Station
500 Grand Avenue at Euclid Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet)	Depth to Water (feet, TOC)	Groundwater Elevation* (feet)
MW-8C (cont.)	11/19/92	-----	Not Monitored	-----
	02/12/93	-----	Not Monitored	-----
	04/01/93	-----	Well Properly Abandoned	-----
MW-8E	03/29/91	99.38	3.28	96.10
	04/23/91		3.02	96.36
	06/10/91		3.08	96.30
	06/28/91		3.25	96.13
	07/23/91		3.24	96.14
	08/22/91		3.48	95.90
	10/03/91		3.32	96.06
	10/24/91		3.45	95.93
	11/26/91		3.34	96.04
	12/30/91		3.53	95.85
	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 Properly Abandoned
MW-8F	03/29/91	97.94	8.59	89.35
	04/23/91		8.85	89.09
	06/10/91		9.58	88.36
	06/28/91		9.48	88.46
	07/23/91		9.79	88.15
	08/22/91		11.44	86.50
	10/03/91		11.58	86.36
	10/24/91		11.75	86.19
	11/26/91		11.63	86.31
	12/30/91		10.51	87.43
	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
MW-8G	03/29/91	-----	Well Inaccessible	-----
	04/23/91	97.24	9.44	87.80
	06/10/91		10.29	86.95
	06/28/91		10.30	86.94
	07/23/91		10.74	86.50
	08/22/91		12.56	84.68
	10/03/91		13.09	84.15
	10/24/91		13.42	83.82
	11/26/91		13.02	84.22
	12/30/91		11.94	85.30

Table 1 (continued)
Groundwater Elevation Data

Former Texaco Service Station
500 Grand Avenue at Euclid Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet)	Depth to Water (feet, TOC)	Groundwater Elevation* (feet)
MW-8G (cont.)	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	-----	Well Inaccessible	-----
	02/12/93	-----	Well Inaccessible	-----
	05/06/93		11.18	86.06
	08/16/93	13.32 *	9.51	3.81
	MW-8H	03/29/91	98.90	3.70
04/23/91			6.03	92.87
06/10/91			3.68	95.22
06/28/91			3.83	95.07
07/23/91			3.85	95.05
08/22/91			3.80	95.10
10/03/91			3.79	95.11
10/24/91			4.02	94.88
11/26/91			3.88	95.02
12/30/91			3.84	95.06
01/23/92			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 Inaccessible	-----
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	
MW-8I	03/29/91	98.27	6.15	92.12
	04/23/91		6.29	91.98
	06/10/91		6.11	92.16
	06/28/91		6.30	91.97
	07/23/91		6.41	91.86
	08/22/91		6.44	91.83
	10/03/91		6.47	91.80
	10/24/91		6.57	91.70
	11/26/91		6.58	91.69
	12/30/91		6.41	91.86
	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 Inaccessible	-----
	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	

Table 1 (continued)
Groundwater Elevation Data

Former Texaco Service Station
 500 Grand Avenue at Euclid Avenue
 Oakland, California

Well Number	Date Gauged	Well Elevation (feet)	Depth to Water (feet, TOC)	Groundwater Elevation* (feet)	
MW-8J	03/29/91	97.69	5.71	91.98	
	04/23/91		3.81	93.88	
	06/10/91		6.17	91.52	
	06/28/91		6.31	91.38	
	07/23/91		6.67	91.02	
	08/22/91		6.75	90.94	
	10/03/91		6.77	90.92	
	10/24/91		6.88	90.81	
	11/26/91		6.59	91.10	
	12/30/91		6.41	91.28	
	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 Inaccessible		
	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	
MW-8K	08/16/93	15.18 *	2.08	13.10	
MW-8L	08/16/93	14.44 *	2.47	11.97	

* = New well elevation survey performed on August 16, 1993 based on mean sea level (MSL). Prior data based on arbitrary site data.
 TOC = Top of casing

Table 2
Groundwater Analytical Data
Total Petroleum Hydrocarbons
 (TPH as Gasoline, BTEX Compounds, TPH as Diesel, and TPH as Other*)

Former Texaco Service Station
 500 Grand Avenue at Euclid Avenue
 Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	TPH as Diesel (ppb)	TPH as Other* (ppm)	
MW-8A	06/14/88	NA	<0.5	1.5	<2	6.6	NA	NA	
	10/25/88	NA	<0.5	<1	<2	<1	NA	NA	
	09/28/89	<50	<0.5	<0.5	<0.5	<3	NA	NA	
	11/29/89	<50	<0.5	1.0	<0.5	<0.5	1,200	<50	
	01/24/90	<100	<0.5	<0.5	<0.5	<0.5	NA	2,800	
	04/26/90	<2,500	<0.5	<0.5	<0.5	<0.5	<50	890	
	07/26/90	<50	6.0	<0.5	<0.5	<0.5	<50	<50	
	10/18/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
	01/08/91	<30	<0.3	<0.3	<0.3	<0.3	<50	130	
	04/23/91	<50	<0.5	<0.5	<0.5	<0.5	<50	<500	
	07/23/91	<50	<0.5	<0.5	<0.5	<0.5	<50	<500	
	10/24/91	<50	<0.5	<0.5	<0.5	<0.5	<50	<500	
	01/23/92	<50	<0.5	<0.5	<0.5	<0.5	700	NA	
	04/30/92	<50	<0.5	<0.5	<0.5	<0.5	<50	<500	
08/03/92	----- Well Property Abandoned -----								
MW-8B	06/14/88	NA	<0.5	<1	<2	<1	NA	NA	
	10/21/88	NA	<0.5	<1	<2	3.1	NA	NA	
	09/28/89	<50	<0.5	<0.5	<0.5	<3	NA	NA	
	11/29/89	<50	<0.5	<0.5	<0.5	<0.5	<50	380	
	01/24/90	<100	<0.5	<0.5	<0.5	<0.5	NA	350	
	04/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	110	
	07/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
	10/18/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
	01/08/91	<30	<0.3	<0.3	<0.3	<0.3	<50	180	
	04/23/91	<50	8.4	2.5	<0.5	5.1	<50	<500	
	07/23/91	<50	<0.5	1.1	<0.5	2.0	<50	<500	
	10/24/91	<50	<0.5	<0.5	<0.5	<0.5	<50	<500	
	01/23/92	<50	<0.5	<0.5	<0.5	<0.5	550	NA	
	04/30/92	<50	<0.5	<0.5	<0.5	<0.5	<50	<500	
	09/28/92	----- Not Sampled -----							
	11/19/92	----- Not Sampled -----							
02/12/93	----- Not Sampled -----								
04/01/93	----- Well Property Abandoned -----								
MW-8C	06/14/88	NA	5.3	3.5	2.6	13.0	NA	NA	
	10/21/88	NA	<0.5	<1	<2	<1	NA	NA	
	09/28/89	<50	<0.5	<0.5	<0.5	<3.0	NA	NA	
	11/29/89	<50	<0.5	<0.5	<0.5	<0.5	<50	190	
	01/24/90	<100	0.9	<0.5	<0.5	<0.5	NA	480	
	04/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	160	
	07/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
	10/18/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
	01/08/91	<30	<0.3	<0.3	<0.3	<0.3	76	110	
	04/23/91	800	12	25	3.7	19	<50	<500	
	07/23/91	<50	<0.5	0.6	<0.5	<0.5	<50	<500	
	10/24/91	<50	<0.5	<0.5	<0.5	<0.5	<50	<500	
	01/23/92	<50	1.2	<0.5	<0.5	<0.5	840	NA	

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
 (TPH as Gasoline, BTEX Compounds, TPH as Diesel, and TPH as Other*)

Former Texaco Service Station
 500 Grand Avenue at Euclid Avenue
 Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	TPH as Diesel (ppb)	TPH as Other* (ppm)
MW-8C	04/30/92	<50	<0.5	<0.5	<0.5	<0.5	150	<500
(cont.)	09/28/92	----- Not Sampled -----						
	11/19/92	----- Not Sampled -----						
	02/12/93	----- Not Sampled -----						
	04/01/93	----- Well Properly Abandoned -----						
MW-8E	10/25/88	NA	1,400	510	2.9	420	NA	NA
	09/28/89	22,000	5,600	3,100	<500	<3,000	NA	NA
	11/29/89	15,000	4,900	2,600	<250	1,490	6,800	<50
	01/24/90	36,000	10,100	3,340	540	1,790	NA	4,900
	04/26/90	48,000	11,000	5,700	840	2,800	1,400	<50
	07/26/90	56,000	15,000	6,200	520	4,700	<50	<50
	10/18/90	15,000	1,500	1,300	170	1,800	620	<50
	01/08/91	51,000	14,000	5,400	860	1,700	17,000	520
	04/23/91	50,000	19,000	6,100	750	4,100	4,800	<500
	07/23/91	47,000	16,000	5,400	1,100	4,000	3,500	<500
	10/24/91	40,000	19,000	6,100	1,100	4,900	9,400	<500
	01/23/92	38,000	3,800	2,800	610	4,800	9,800	NA
	04/23/92	41,000	20,000	3,700	500	3,900	9,600	<500
	08/03/92	----- Well Properly Abandoned -----						
MW-8F	04/14/88	NA	<0.5	<1	<2	<1	NA	NA
	09/28/89	<50	<0.5	<0.5	<0.5	<3.0	NA	NA
	11/29/89	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
	01/24/90	<100	<0.5	<0.5	<0.5	<0.5	NA	<300
	04/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	110
	07/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
	10/18/90	<50	<0.5	<0.5	<0.5	<0.5	360	<50
	01/08/91	<30	<0.3	<0.3	<0.3	<0.3	380	620
	04/23/91	<50	5.9	3.1	<0.5	2.7	1,400	3,200
	07/23/91	<50	<0.5	0.8	<0.5	<0.5	60	<500
	10/24/91	<50	<0.5	<0.5	<0.5	<0.5	<50	<500
	01/23/92	<50	4.0	1.3	<0.5	1.9	1,300	NA
	04/30/92	<50	<0.5	<0.5	<0.5	<0.5	<50	<500
	09/28/92	<50	<0.5	<0.5	<0.5	<0.5	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	<100	<50
	08/16/93	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
MW-8G	04/14/88	NA	<0.5	<1	<2	<1	NA	NA
	09/28/89	<50	<0.5	<0.5	<0.5	<3.0	NA	NA
	11/29/89	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
	01/24/90	<100	<0.5	<0.5	<0.5	<0.5	NA	650
	04/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	120
	07/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
	10/18/90	<50	<0.5	<0.5	<0.5	<0.5	460	<50
	01/08/91	<30	<0.3	<0.3	<0.3	<0.3	220	260

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
 (TPH as Gasoline, BTEX Compounds, TPH as Diesel, and TPH as Other*)

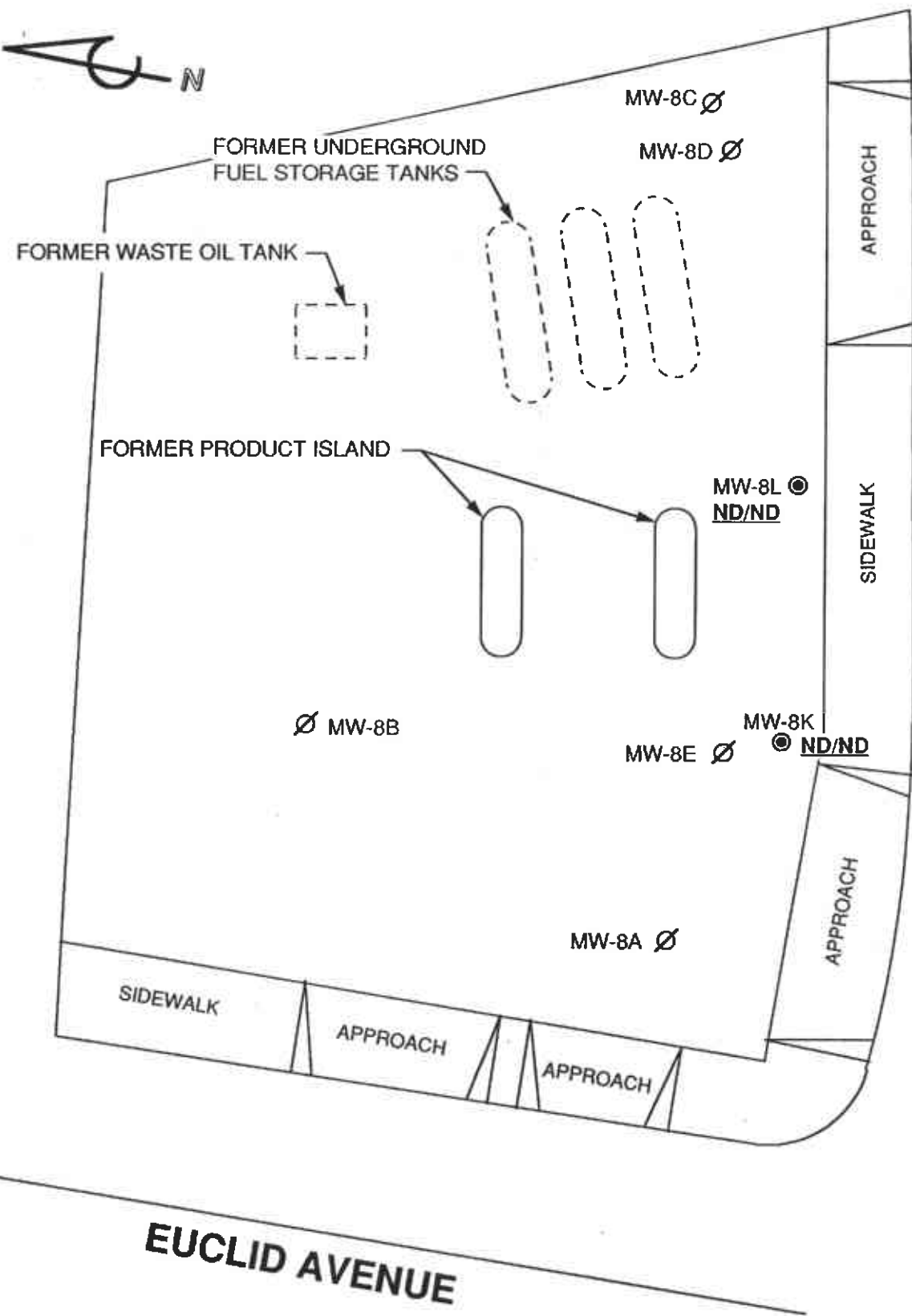
Former Texaco Service Station
 500 Grand Avenue at Euclid Avenue
 Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	TPH as Diesel (ppb)	TPH as Other* (ppm)	
MW-8G (cont.)	04/23/91	<50	0.9	0.9	<0.5	<0.5	1,100	<500	
	07/23/91	<50	0.5	1.5	<0.5	3.0	<50	<500	
	10/24/91	<50	0.6	<0.5	<0.5	<0.5	NA	NA	
	01/24/92	<50	<0.5	<0.5	<0.5	<0.5	980	NA	
	04/30/92	<50	1.7	<0.5	<0.5	<0.5	<50	<500	
	09/28/92	----- Well Dry -----							
	11/19/92	----- Well Inaccessible -----							
	02/12/93	----- Well Inaccessible -----							
	04/29/93	<50	<0.5	<0.5	<0.5	<0.5	64	<250	
	08/16/93	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
MW-8H	01/24/90	460	14.8	14.8	10.8	38.8	NA	<300	
	04/26/90	830	67	19	43	64	<50	820	
	07/26/90	190	45	1.3	12	8.2	<50	<50	
	10/18/90	300	17	2.5	14	8.5	<50	<50	
	01/08/91	320	12	2.2	6.4	4.0	180	89	
	04/23/91	<50	1.5	<0.5	<0.5	<0.5	730	<500	
	07/23/91	270	21	1.8	9.7	2.6	<50	<500	
	10/24/91	120	7.6	1.0	3.5	2.4	70	<500	
	01/23/92	110	7.2	1.2	4.7	3.2	<60	NA	
	04/30/92	190	11	1.5	5.6	3.6	90	<500	
	09/28/92	----- Well Inaccessible -----							
	11/19/92	130	6.8	<0.5	1.1	1.5	NA	NA	
	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	<100	<50		
08/16/93	<50	0.5	<0.5	0.5	1.4	<50	<50		
MW-8I	01/24/90	580	116	2.9	13	30.5	NA	440	
	04/26/90	4,400	2,400	100	230	350	<50	1,400	
	07/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
	10/18/90	530	92	4.1	37	21	<50	<50	
	01/08/91	1,300	500	4.3	36	26	710	210	
	04/23/91	1,500	1,600	17	100	86	1,100	900	
	07/23/91	1,700	1,600	30	140	63	260	<500	
	10/25/91	760	470	6.0	76	13	230	<500	
	01/23/92	820	420	7.2	27	20	210	NA	
	04/30/92	2,200	1,800	19	180	25	430	<500	
	09/28/92	----- Well Inaccessible -----							
	11/19/92	720	120	1.1	29	13	NA	NA	
	02/12/93	4,000	970	9.2	52	36	NA	NA	
05/06/93	1,400	370	2.4	40	8.4	<100	<50		
08/16/93	<50	3.1	<0.5	5.6	<0.5	<50	<50		
MW-8J	01/24/90	<100	2.7	<0.5	1	2.6	NA	<300	
	04/26/90	160	28	7.7	19	24	<50	320	
	07/26/90	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
	10/18/90	<50	8.3	<0.5	2.6	1.5	<50	<50	
	01/08/91	71	0.41	<0.3	<0.3	0.52	<50	69	

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
 (TPH as Gasoline, BTEX Compounds, TPH as Diesel, and TPH as Other*)

Former Texaco Service Station
 500 Grand Avenue at Euclid Avenue
 Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	TPH as Diesel (ppb)	TPH as Other* (ppm)	
MW-8J (cont.)	04/23/91	300	16	2.2	9.3	4.6	550	<500	
	07/23/91	<50	4.6	<0.5	3.1	<0.5	<50	<500	
	10/24/91	<50	0.8	<0.5	<0.5	<0.5	<50	<500	
	01/23/92	<50	0.8	<0.5	<0.5	<0.5	<50	NA	
	04/30/92	<50	2.3	<0.5	<0.5	<0.5	<50	<500	
	09/28/92	----- Well Inaccessible -----							
	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	<100	<50	
	08/16/93	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	
MW-8K	05/21/93	54	12	<0.5	<0.5	<0.5	<50	<50	
	08/16/93	<50	<0.5	<0.5	1	<0.5	<50	<50	
MW-8L	05/21/93	76	1.1	<0.5	<0.5	6	<50	<50	
	08/16/93	<50	<0.5	<0.5	0.7	1.1	<50	<50	
OB-3	11/06/89	4,000	420	8	6	64	NA	NA	
	04/26/90	1,000	160	19	5	8.6	3,200	<50	
	07/26/90	68	<0.5	<0.5	<0.5	0.9	1,200	<50	
	10/18/90	3,200	260	69	35	490	2,100	<50	
----- Well Abandoned -----									
OB-4	11/06/89	4,000	500	11	10	24	NA	NA	
	04/26/90	460	360	10	10	18	3,900	<50	
	07/26/90	200	23	3.7	1.6	5.9	1,600	<50	
	10/18/90	4,300	600	540	83	840	330	<50	
----- Well Abandoned -----									
ppb = Parts per billion									
* = Includes "heavy" petroleum hydrocarbons such as waste oil, mineral spirits, jet fuel, or fuel oil.									
ppm = Parts per million									
NA = Not analyzed									



GRAND AVENUE

MW-8G ●
ND/ND

● MW-8J
ND/ND

MW-8J ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

MW-8A ∅ ABANDONED WELL LOCATION AND DESIGNATION

<50/3.1 TPH-g/BENZENE CONCENTRATION IN GROUNDWATER, IN PARTS PER MILLION, 8-16-93

ND NOT DETECTED



APPROXIMATE DIRECTION OF GROUNDWATER FLOW

MW-8F ●
ND/ND

● MW-8I
ND/3.1

● MW-8H
ND/0.5

MW-8L ●
ND/ND

MW-8K ●
ND/ND

MW-8E ∅

MW-8A ∅

∅ MW-8B

FORMER UNDERGROUND FUEL STORAGE TANKS

FORMER WASTE OIL TANK

FORMER PRODUCT ISLAND

APPROACH

SIDEWALK

APPROACH

SIDEWALK

APPROACH

APPROACH

EUCLID AVENUE



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE



FORMER TEXACO STATION
500 Grand Avenue at Euclid Avenue
Oakland, California

TPH-g/BENZENE CONCENTRATION MAP

FIGURE 2
PROJECT: 340-34.10

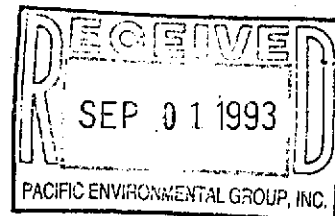
ATTACHMENT A

**CERTIFIED ANALYTICAL REPORT AND
CHAIN-OF-CUSTODY DOCUMENTATION**



MOBILE CHEM LABS INC.

5011 Blum Road, Suite 1 • Martinez, CA 94553
Phone (510) 372-3700 • Fax (510) 372-6955



340-34.01\1718\012912

Pacific Environmental Group, Inc.
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083497

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
MW8F WATER

ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director



MOBILE CHEM LABS INC.

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340-34.01\1718\012912

Pacific Environmental Group, Inc.
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083498

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
MW8G WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH
LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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Ronald G. Evans
Lab Director



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340-34.01\1718\012912

Pacific Environmental Group, Inc.
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083499

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
MW8H WATER

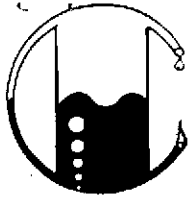
ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	0.5
Toluene	0.5	<0.5
Xylenes	0.5	1.4
Ethylbenzene	0.5	0.5

Note: Analysis was performed using EPA methods 5030 and TPH
LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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2025 Gateway Place, Suite 440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083500

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
MW8I WATER

ANALYSIS

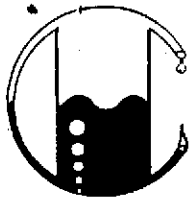
	Detection Limit	Sample Results
	----- ppb	----- ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	3.1
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	5.6

QA/QC: Duplicate Deviation is 6.6%

Note: Analysis was performed using EPA methods 5030 and TPH
LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083501

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
MW8J WATER

ANALYSIS

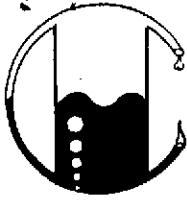
	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

QA/QC: Spike Recovery is 111%

Note: Analysis was performed using EPA methods 5030 and TPH
LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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Pacific Environmental Group, Inc.
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San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083502

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
MW8K WATER

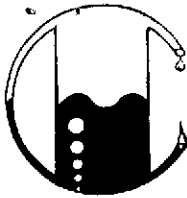
ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	1.0

Note: Analysis was performed using EPA methods 5030 and TPH
LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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Ronald G. Evans
Lab Director



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340-34.01\1718\012912

Pacific Environmental Group, Inc.
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083503

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
MW8L WATER

ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	1.1
Ethylbenzene	0.5	0.7

Note: Analysis was performed using EPA methods 5030 and TPH
LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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340-34.01\1718\012912

Pacific Environmental Group, Inc.
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-27-93

Sample Number

083504

Sample Description

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.
TB-1 WATER

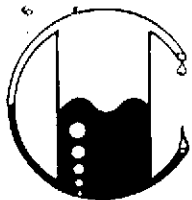
ANALYSIS

	<u>Detection Limit</u>	<u>Sample Results</u>
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH
LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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Ronald G. Evans
Lab Director



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340-34.01\1428\012912

Pacific Environmental Group, Inc.
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

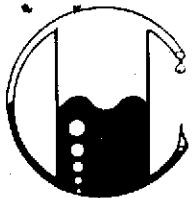
Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-26-93

Sample Number	Sample Description	Detection Limit	WATER
			Total Petroleum Hydrocarbons as Diesel
		ppb	ppb
Texaco - Oakland 500 Grand Avenue Project No.: 340-34.01			
083497	MW8F	50	<50
083498	MW8G	50	<50
083499	MW8H	50	<50
083500	MW8I	50	<50
083501	MW8J	50	<50
083502	MW8K	50	<50
083503	MW8L	50	<50

Note: Analysis was performed using EPA method 3510 and TPH LUFT.
(ppb) = (µg/L)

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340-34.01\1223\012912

Pacific Environmental Group
2025 Gateway Place, #440
San Jose, CA 95110
Attn: Maree Doden
Pacific Contact

Date Sampled: 08-16-93
Date Received: 08-17-93
Date Analyzed: 08-25-93

Sample Number	Sample Description	Detection Limit ppm	WATER Gravimetric Waste Oil as Petroleum Oil ppm
---------------	--------------------	------------------------	---

Project # 340-34.01
Texaco - Oakland
500 Grand Ave.

083497	MW8F	50	<50
083498	MW8G	50	<50
083499	MW8H	50	<50
083500	MW8I	50	<50
083501	MW8J	50	<50
083502	MW8K	50	<50
083503	MW8L	50	<50

QA/QC: Spike Recovery on 083497 is 96%
Duplicate Deviation on 083497 is 2.1%

Note: Analysis was performed using EPA extraction method 3550 with Trichlorotrifluoroethane as solvent, and gravimetric determination by standard methods 5520
(ppm) = (mg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

PROJECT No. 340-34.01

Chain of Custody

1 of 3

Pacific Environmental Group, Inc.
 2025 Gateway Place #440, San Jose CA-95110
 Phone 408 441 7790 Fax 408 441 7539

Facility No. TEXAES Facility Address: 500 GRAND AVE OAKLAND Billing Reference Number:
 CLIENT engineer: BOB ROBLES PACIFIC Point of Contact: M. DODEN Sampler: J. RANSWE Laboratory Name: MOBILE CHEM.

Sample I.D.	Cont. No.	Container Size (ml)	Sample Preserv.	Matrix	Type	Sampling Date	Sampling Time	BTEX/ VPHgas (8015/ 8020)	TPH Diesel (8015)	Oil and Grease (5520)	Total Dislvd. Metals	VOC (EPA 624/ 8240)	SVOC (EPA 627/ 8270)	HVOC (EPA 601/ 8010)	Comments:
MW8F	2	40	HCl	W	G	8/16	1637	X							
↓	1	1000	NP				1639		X						
↓	1	1000	H ₂ SO ₄				1641			X					
MW8G	2	40	HCl				1646	X							
↓	1	1000	NP				1648		X						
↓	1	1000	H ₂ SO ₄				1650			X					
MW8H	2	40	HCl				1543	X							
↓	2	1000	NP				1545		X						
↓	2	1000	H ₂ SO ₄				1546			X					
MW8I	2	40	HCl				1602	X							

Condition of Sample: _____ Temperature Received: ON ICE NO head space

Mail original Analytical Report to: Pacific Environmental Group

Turnaround Time: Priority Rush (1 day) Rush (2 days) Expedited (5 days) Standard (10 days)

Relinquished by: <u>John Ranson</u>	Date: <u>8/16/93</u>	Time: <u>1845</u>	Received by: <u>M. Doden</u>	Date: <u>8/17/93</u>	Time: <u>0736</u>	2025 Gateway Place #440 San Jose, CA 95110	<input checked="" type="checkbox"/>
Relinquished by: <u>M. Doden</u>	Date: <u>8/17/93</u>	Time: <u>1:00</u>	Received by:	Date:	Time:	620 Contra Costa Blvd. #209 Pleasant Hill, CA 94523	<input type="checkbox"/>
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	25725 Jeronimo Rd. #678C Mission Viejo, CA 92622	<input type="checkbox"/>
Relinquished by:	Date:	Time:	Received by laboratory:	Date:	Time:	4020 148th Ave NE #B	<input type="checkbox"/>

PROJECT No. 34-34.01

Chain of Custody

2 of 3

Pacific Environmental Group, Inc.

2025 Gateway Place #440, San Jose CA 95110

Phone 408 441 7790 Fax 408 441 7539

Facility No. TEXARO

Facility Address: 500 GRAND AVE. OAKLAND

Billing Reference Number:

CLIENT engineer: BOB ROBLES

PACIFIC Point of Contact: M. DODEN

Sampler: J. RANSOME

Laboratory Name: MOBILECHEM

Sample I.D.	Cont. No.	Container Size (ml)	Sample Preserv.	Matrix		Sampling Date	Sampling Time	BTEX/ VPHgas (8015/ 8020)	TPH Diesel (8015)	Oil and Grease (5520)	Total Dislvd. Metals	VOC (EPA 824/ 8240)	SVOC (EPA 627/ 8270)	HVOC (EPA 601/ 8010)	Comments:
				W-water S-soil A-air	G-grab D-dlec. C-comp.										
MW8I	2	1000	NP	wl	G	8/16	1604		X						
↓	2	1000	H ₂ SO ₄				1605			X					
MW8J	2	40	Hel				1505	X							
↓	2	1000	NP				1507		X						
↓	2	1000	H ₂ SO ₄				1508			X					
MW8K	2	40	Hel				1355	X							
↓	2	1000	NP				1356		X						
↓	2	1000	H ₂ SO ₄				1358			X					
MW8L	2	40	Hel				1435	X							
↓	2	1000	NP				1437		X						

Condition of Sample:

Temperature Received:

ON ICE NO head space

Mail original Analytical Report to:

Pacific Environmental Group

Turnaround Time:

Relinquished by: John Ransom

Date: 8/16/93 Time: 1845

Received by: M. Doden

Date: 8/17/93 Time: 0930

2025 Gateway Place #440
San Jose, CA 95110

Priority Rush (1 day)

Relinquished by: M. Doden

Date: 8/17/93 Time: 1100

Received by:

Date: Time:

620 Contra Costa Blvd. #209
Pleasant Hill, CA 94523

Rush (2 days)

Relinquished by:

Date: Time:

Received by:

Date: Time:

25725 Jeronimo Rd. #576C
Mission Viejo, CA 92622

Expedited (5 days)

Relinquished by:

Date: Time:

Received by laboratory:

Date: Time:

4020 148th Ave NE #B
Redmond, WA 98052

Standard (10 days)

Dave Levine

8/17/93 1:00

As Contracted

ATTACHMENT B
FIELD AND LABORATORY PROCEDURES

ATTACHMENT B

FIELD AND LABORATORY PROCEDURES

The sampling procedure consisted of first measuring the water level in each well with an electronic water-level indicator, and checking each well for the presence of separate-phase hydrocarbons using a clear Teflon bailer or an oil-water interface probe. The wells were then purged of approximately four casing volumes of water (or until dry) using a bailer or centrifugal pump, during which time temperature, pH, and electrical conductivity were monitored to indicate that a representative sample was obtained. After purging, the water levels in the wells were allowed to restabilize. Groundwater samples were then collected using a Teflon bailer, placed into appropriate EPA-approved containers, labeled, logged onto chain-of-custody documents, and transported on ice to the laboratory.

Water removed from the wells during the sampling event was placed in a 500-gallon water transportation trailer. Upon completion of the work on site, the purge water contained within the trailer was transported to Gibson Oil and Refining Company, Inc., Redwood City facility and injected into the treatment system.

Groundwater samples collected from site monitoring wells were analyzed for the presence of total petroleum hydrocarbons calculated as gasoline (TPH-g) by EPA Methods 8015 (modified) and 5030, and for benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) by EPA Method 8020. The TPH-g and BTEX samples were examined using the purge and trap technique, with final detection by gas chromatography. Samples were also analyzed for total petroleum hydrocarbons calculated as diesel using EPA Methods 8015 and 3510, with final detection by gas chromatography; or by EPA Method 3550 with gravimetric determination by standard Method 5520. All analyses were performed by a state-certified laboratory.