Texaco Refining and Marketing Inc
108 Cutting Boulevard
Richmond CA 94804

April 9, 1997

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ENV - STUDIES, SURVEYS, & REPORTS
930 Springtown Blvd., Livermore, California
Quarterly Monitoring Report

Ms. Eva Chu
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Fl. 2
Alameda, CA 94502-6577

Dear Ms. Chu:

This letter presents the results of groundwater monitoring and sampling conducted by Blaine Tech Services, Inc. on February 14, 1997, at the site referenced above (see Plate 1, Site Vicinity Map). Based on groundwater level measurements, the areal hydraulic gradient was estimated to be northeast (see Plate 2, Groundwater Gradient Map) at .002 ft. per ft. TPHg and benzene concentrations are shown on Plate 3. Tables 1 and 2 list historical groundwater monitoring data and analytical results, respectively. As requested by Alameda County Department of Environmental Health, monitoring wells MW-2, MW-4, MW-6, and MW-8 are sampled semi-annually in February and August; monitoring wells MW-1, MW-3, MW-5, MW-A, and MW-B are sampled quarterly; and monitoring wells MW-A, MW-B, and MW-1 through MW-8 are gauged quarterly.

The certified analytical report, chain-of-custody, field data sheets, bill of lading, and quarterly summary report are in the Appendix. Texaco's Standard Operating Procedures may be found in the fourth quarter, 1994 monitoring report.

If you have any questions or comments regarding this site, please call the Texaco Project Coordinator, Ms. Karen Petryna at (510) 236-9139.

Best Regards,
Texaco Refining and Marketing Inc

Rebecca Digerness
Groundwater Program Analyst

Karen E. Petryna, P. E.
Civil Engineer
Environment, Health and Safety

REGISTERED PROFESSIONAL ENGINEER
KAREN E. PETRYNA
C55126
Exp. 6-30-00
CIVIL
STATE OF CALIFORIA

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Enclosure

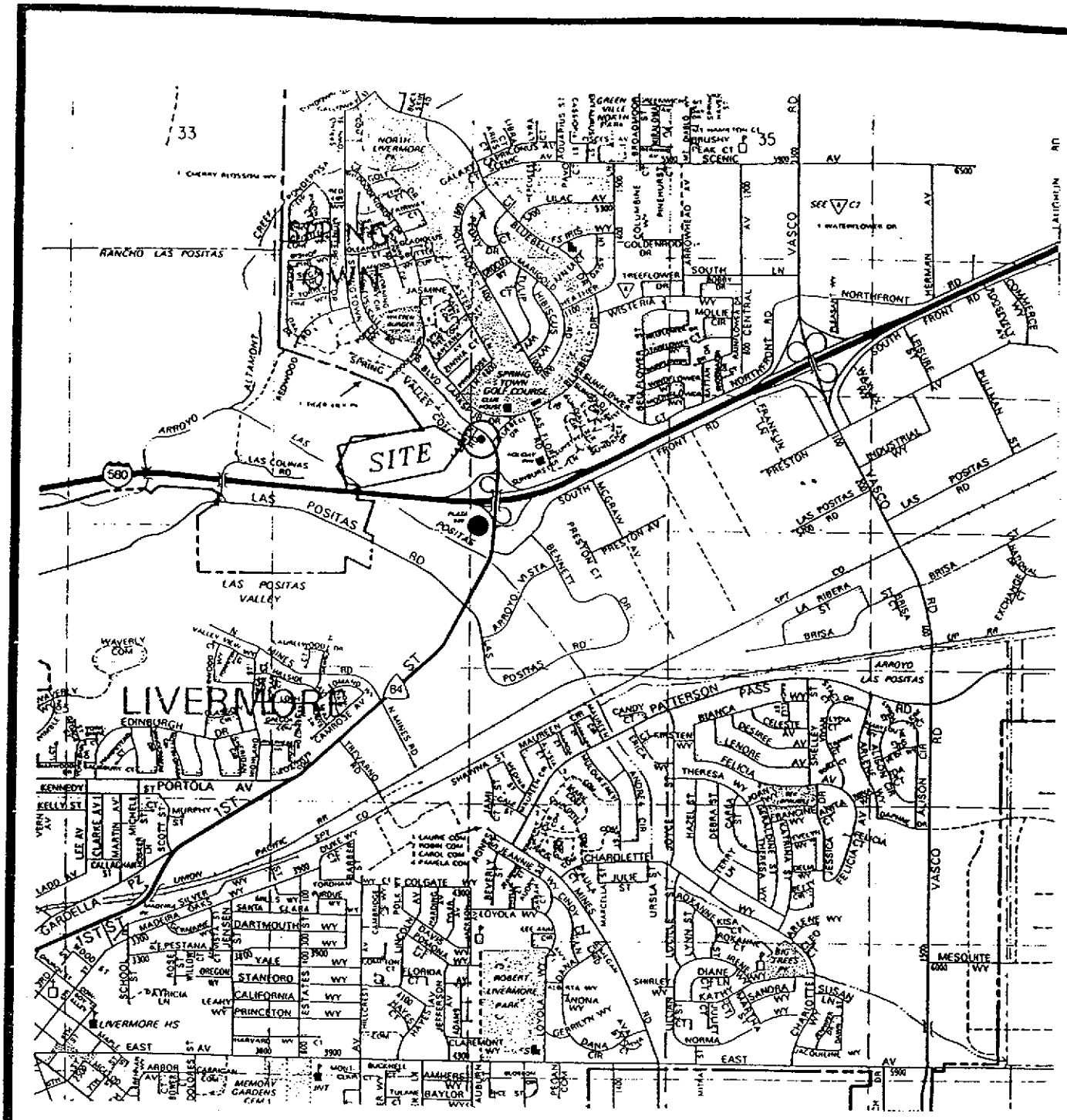
cc: Mr. Timothy Ross
Kaprealian Engineering, Inc.
2401 Stanwell Dr., Suite 400
Concord, CA 94520

Mr. Bob DeNinno
The Southland Corporation
19033 West Valley Hwy., D-104
Kent, WA 98032

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

pr: EG

GROUNDWATER MONITORING AND SAMPLING
First Quarter, 1997
at the
Former Texaco Service Station
930 Springtown Boulevard
Livermore, California



SOURCE:

1993 THE THOMAS GUIDE
ALAMEDA COUNTY, PAGE 51 (C3)

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MILE

1" = 2200'

TEXACO

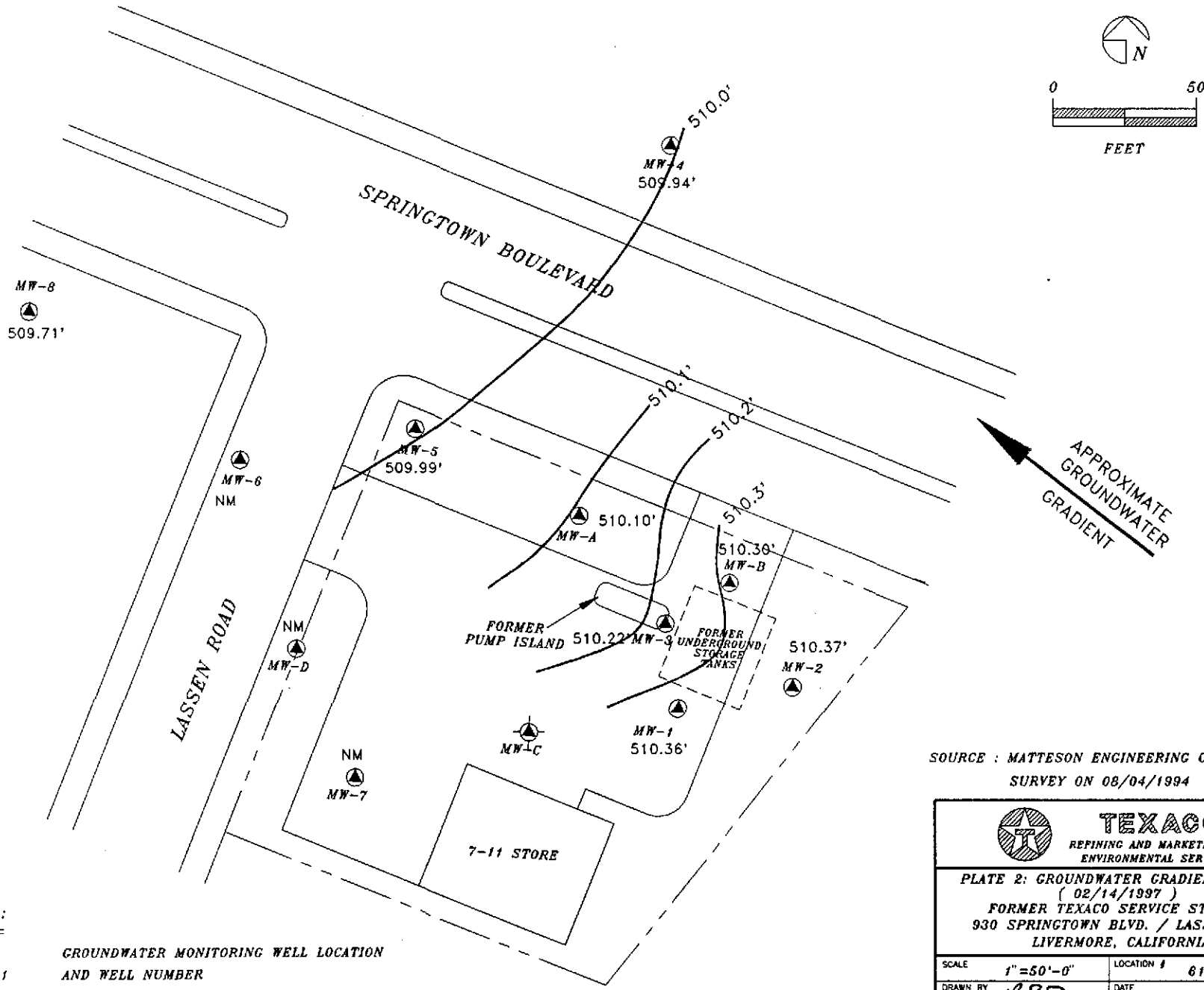
REFINING AND MARKETING, INC.
TEXACO ENVIRONMENTAL SERVICES

PLATE 1

SITE VICINITY MAP

FORMER TEXACO SERVICE STATION

930 SPRINGTOWN BLVD. / LASSEN RD.,
LIVERMORE, CALIFORNIA



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

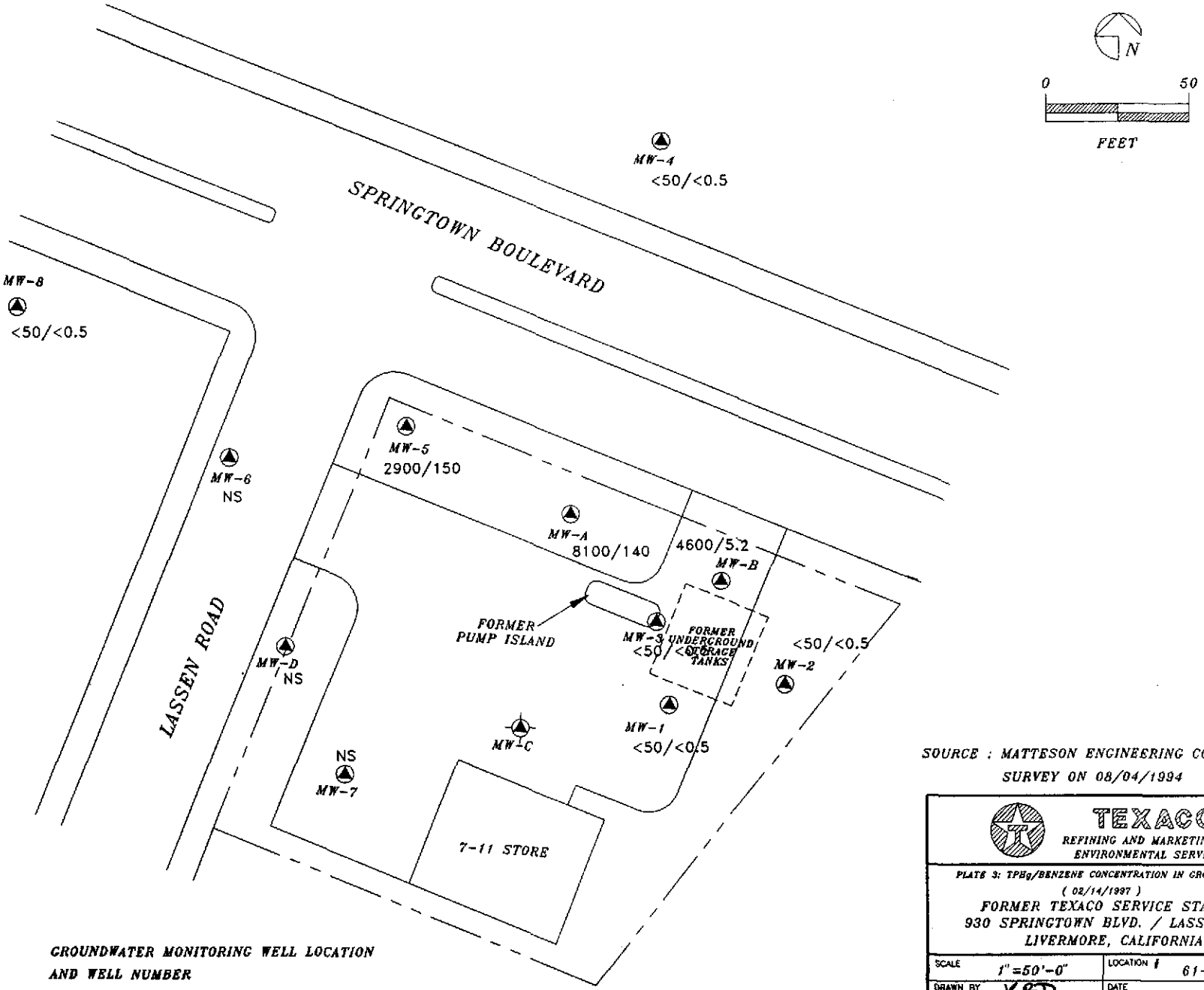
LEGEND :

MW-1	GROUNDWATER MONITORING WELL LOCATION AND WELL NUMBER
510.36'	GROUNDWATER CONTOUR LINE GROUNDWATER ELEVATION (ABOVE MSL)
NM	NOT MEASURED

TEXACO
REFINING AND MARKETING,INC.
ENVIRONMENTAL SERVICES

PLATE 2: GROUNDWATER GRADIENT MAP
(02/14/1997)
FORMER TEXACO SERVICE STATION
930 SPRINGTOWN BLVD. / LASSEN RD.,
LIVERMORE, CALIFORNIA

SCALE	1"=50'-0"	LOCATION #	61-857-1050
DRAWN BY	RBD	DATE	
CHECKED BY	[illegible]	DATE	4-9-97
DRAWING NO.	(LIVERMORE) ST-LA-LI.DWG		



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

LEGEND :

▲	GROUNDWATER MONITORING WELL LOCATION
MW-1	AND WELL NUMBER
<50/<0.5	TPHg/BENZENE CONCENTRATION IN GROUNDWATER (ppb)
NS	NOT SAMPLED

TEXACO
REFINING AND MARKETING,INC.
ENVIRONMENTAL SERVICES

PLATE 3: TPHg/BENZENE CONCENTRATION IN GROUNDWATER
(02/14/1997)
FORMER TEXACO SERVICE STATION
930 SPRINGTOWN BLVD. / LASSEN RD.,
LIVERMORE, CALIFORNIA

SCALE	1"=50'-0"	LOCATION #	61-857-1050
DRAWN BY	KBD	DATE	
CHECKED BY	DOE	DATE	4-9-97
DRAWING NO.	(LIVERMORE) ST-LA-LI.DWG		

Table 1
Groundwater Elevation Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)	Floating Product
MW-A	1/2/92	520.10	13.61	506.49	---
MW-A	4/2/92	520.10	12.44	507.66	---
MW-A	7/21/92	520.10	13.35	506.75	---
MW-A	10/9/92	520.10	12.92	507.18	SD
MW-A	1/11/93	520.10	11.78	508.32	SD
MW-A	5/5/93	520.10	11.39	508.71	SD
MW-A	8/9/93	520.10	12.80	507.30	SD
MW-A	10/14/93	520.10	13.48	506.62	SD
MW-A	1/24/94	520.10	12.74	507.36	SD
MW-A	5/31/94	520.10	12.28	507.82	---
MW-A	8/31/94	520.10	13.20	506.90	SD
MW-A	11/2/94	520.10	13.15	506.95	SD
MW-A	2/20/95	520.10	11.71	508.39	---
MW-A	5/9/95	520.10	12.37	507.73	---
MW-A	8/21/95	520.10	11.37	508.73	---
MW-A	10/20/95	520.10	12.04	508.06	---
MW-A	2/7/96	520.10	10.11	509.99	---
MW-A	4/30/96	520.10	10.28	509.82	---
MW-A	8/14/96	520.10	10.82	509.28	---
MW-A	11/22/96	520.10	10.97	509.13	---
MW-A	2/14/97	520.10	10.00	510.10	---
MW-B	1/2/92	518.05	11.27	506.78	---
MW-B	4/2/92	518.05	10.18	507.87	---
MW-B	7/21/92	518.05	11.27	506.78	---
MW-B	10/9/92	518.05	11.64	506.41	SD
MW-B	1/11/93	518.05	9.65	508.40	SD
MW-B	5/5/93	518.05	9.28	508.77	SD
MW-B	8/9/93	518.05	11.02	507.03	SD
MW-B	10/14/93	518.05	11.34	506.71	SD
MW-B	1/24/94	518.05	10.54	507.51	SD
MW-B	5/31/94	518.05	10.19	507.86	---
MW-B	8/31/94	518.05	10.98	507.07	SD
MW-B	11/2/94	518.05	10.90	507.15	SD
MW-B	2/20/95	518.05	9.47	508.58	---
MW-B	5/9/95	518.05	10.58	507.47	---
MW-B	8/21/95	518.05	9.34	508.71	---
MW-B	10/20/95	518.05	9.83	508.22	---
MW-B	2/7/96	518.05	7.85	510.20	SD
MW-B	4/30/96	518.05	8.02	510.03	---
MW-B	8/14/96	518.05	8.66	509.39	SD
MW-B	11/22/96	518.05	8.70	509.35	SD
MW-B	2/14/97	518.05	7.75	510.30	SD
MW-1	1/2/92	520.61	14.11	506.50	---

Table 1
Groundwater Elevation Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)	Floating Product
MW-1	4/2/92	520.61	12.98	507.63	---
MW-1	7/21/92	520.61	13.92	506.69	---
MW-1	10/9/92	520.61	14.25	506.36	---
MW-1	1/11/93	520.61	12.30	508.31	---
MW-1	5/5/93	520.61	11.88	508.73	---
MW-1	8/9/93	520.61	13.63	506.98	---
MW-1	10/14/93	520.61	13.91	506.70	---
MW-1	1/24/93	520.61	13.12	507.49	---
MW-1	5/31/94	520.61	12.74	507.87	---
MW-1	8/31/94	520.61	13.68	506.93	---
MW-1	11/2/94	520.61	13.48	507.13	---
MW-1	2/20/95	520.61	12.02	508.59	---
MW-1	5/9/95	520.61	12.83	507.78	---
MW-1	8/21/95	520.61	11.93	508.68	---
MW-1	10/20/95	520.61	12.40	508.21	---
MW-1	2/7/96	520.61	10.42	510.19	---
MW-1	4/30/96	520.61	10.48	510.13	---
MW-1	8/14/96	520.61	11.18	509.43	---
MW-1	11/22/96	520.61	11.10	509.51	---
MW-1	2/14/97	520.61	10.25	510.36	---
MW-2	1/2/92	518.29	11.96	506.33	---
MW-2	4/2/92	518.29	10.89	507.40	---
MW-2	7/21/92	518.29	11.55	506.74	---
MW-2	10/9/92	518.29	Not Monitored		
MW-2	1/11/93	518.29	Not Monitored		
MW-2	5/5/93	518.29	Not Monitored		
MW-2	8/9/93	518.29	Not Monitored		
MW-2	10/14/93	518.29	Not Monitored		
MW-2	1/24/94	518.29	Not Monitored		
MW-2	5/31/94	518.29	10.37	507.92	---
MW-2	8/31/94	518.29	11.16	507.13	---
MW-2	11/2/94	518.29	11.07	507.22	---
MW-2	2/20/95	518.29	9.66	508.63	---
MW-2	5/9/95	518.29	10.14	508.15	---
MW-2	8/21/95	518.29	9.58	508.71	---
MW-2	10/20/95	518.29	9.91	508.38	---
MW-2	2/7/96	518.29	8.00	510.29	---
MW-2	4/30/96	518.29	8.21	510.08	---
MW-2	8/14/96	518.29	8.88	509.41	---
MW-2	11/22/96	518.29	8.88	509.41	---
MW-2	2/14/97	518.29	7.92	510.37	---
MW-3	1/2/92	519.60	12.87	506.73	---
MW-3	4/2/92	519.60	11.97	507.63	---

Table 1
Groundwater Elevation Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)	Floating Product
MW-3	7/21/92	519.60	12.60	507.00	---
MW-3	10/9/92	519.60	12.93	506.67	---
MW-3	1/11/93	519.60	11.16	508.44	---
MW-3	5/5/93	519.60	10.72	508.88	---
MW-3	8/9/93	519.60	12.34	507.26	---
MW-3	10/14/93	519.60	12.71	506.89	---
MW-3	1/24/94	519.60	12.03	507.57	---
MW-3	5/31/94	519.60	11.54	508.06	---
MW-3	8/31/94	519.60	12.60	507.00	---
MW-3	11/2/94	519.60	12.16	507.44	---
MW-3	2/20/95	519.60	11.05	508.55	---
MW-3	5/9/95	519.60	11.97	507.63	---
MW-3	8/21/95	519.60	7.60	512.00	---
MW-3	10/20/95	519.60	11.46	508.14	---
MW-3	2/7/96	519.60	9.42	510.18	---
MW-3	4/30/96	519.60	9.60	510.00	---
MW-3	8/14/96	519.60	10.24	509.36	---
MW-3	11/22/96	519.60	10.34	509.26	---
MW-3	2/14/97	519.60	9.38	510.22	---
MW-4	1/2/92	518.79	12.22	506.57	---
MW-4	4/2/92	518.79	11.03	507.76	---
MW-4	7/21/92	518.79	12.36	506.43	---
MW-4	10/9/92	518.79	12.40	506.39	---
MW-4	1/11/93	518.79	10.72	508.07	---
MW-4	5/5/93	518.79	10.21	508.58	---
MW-4	8/9/93	518.79	12.25	506.54	---
MW-4	10/14/93	518.79	12.58	506.21	---
MW-4	1/24/94	518.79	11.72	507.07	---
MW-4	5/31/94	518.79	11.29	507.50	---
MW-4	8/31/94	518.79	12.00	506.79	---
MW-4	11/2/94	518.79	11.96	506.83	---
MW-4	2/20/95	518.79	10.42	508.37	---
MW-4	5/9/95	518.79	11.22	507.57	---
MW-4	8/21/95	518.79	10.51	508.28	---
MW-4	10/20/95	518.79	10.86	507.93	---
MW-4	2/7/96	518.79	8.93	509.86	---
MW-4	4/30/96	518.79	9.03	509.76	---
MW-4	8/14/96	518.79	9.84	508.95	---
MW-4	11/22/96	518.79	9.73	509.06	---
MW-4	2/14/97	518.79	8.85	509.94	---
MW-5	1/2/92	521.19	14.56	506.63	---
MW-5	4/2/92	521.19	13.58	507.61	---
MW-5	7/21/92	521.19	13.77	507.42	---

Table 1
Groundwater Elevation Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)	Floating Product
MW-5	10/9/92	521.19	14.09	507.10	---
MW-5	1/11/93	521.19	12.24	508.95	---
MW-5	5/5/93	521.19	11.90	509.29	---
MW-5	8/9/93	521.19	13.35	507.84	---
MW-5	10/14/93	521.19	13.89	507.30	---
MW-5	1/24/94	521.19	13.32	507.87	---
MW-5	5/31/94	521.19	12.75	508.44	---
MW-5	8/31/94	521.19	14.34	506.85	---
MW-5	11/2/94	521.19	14.22	506.97	---
MW-5	2/20/95	521.19	12.78	508.41	SD
MW-5	5/9/95	521.19	13.41	507.78	---
MW-5	8/21/95	521.19	12.32	508.87	---
MW-5	10/20/95	521.19	13.28	507.91	---
MW-5	2/7/96	521.19	11.31	509.88	---
MW-5	4/30/96	521.19	11.52	509.67	---
MW-5	8/14/96	521.19	12.03	509.16	---
MW-5	11/22/96	521.19	12.22	508.97	SD
MW-5	2/14/97	521.19	11.20	509.99	SD
MW-6	1/2/92	522.18	16.64	505.54	---
MW-6	4/2/91	522.18	15.61	506.57	---
MW-6	7/21/92	522.18	15.53	506.65	---
MW-6	10/9/92	522.18	15.69	506.49	---
MW-6	1/11/93	522.18	Not Monitored		
MW-6	5/5/93	522.18	Not Monitored		
MW-6	8/9/93	522.18	14.50	507.68	---
MW-6	10/14/93	522.18	Not Monitored		
MW-6	1/24/94	522.18	15.09	507.09	---
MW-6	5/31/94	522.18	14.64	507.54	---
MW-6	8/31/94	522.18	15.32	506.86	---
MW-6	11/2/94	522.18	15.32	506.86	---
MW-6	2/20/95	522.18	14.07	508.11	---
MW-6	5/9/95	522.18	14.30	507.88	---
MW-6	8/21/95	522.18	Well Inaccessible		
MW-6	10/20/95	522.18	14.31	507.87	---
MW-6	2/7/96	522.18	Not Monitored		
MW-6	4/30/96	522.18	Not Monitored		---
MW-6	8/14/96	522.18	Not Monitored		
MW-6	11/22/96	522.18	Not Monitored		
MW-6	2/14/97	522.18	Not Monitored		
MW-7	1/2/92	522.19	11.17	511.02	---
MW-7	4/2/92	522.19	10.34	511.85	---
MW-7	7/21/92	522.19	9.02	513.17	---
MW-7	10/9/92	522.19	Not Monitored		

Table 1
Groundwater Elevation Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Gauged	Top of Casing Elevation (feet, MSL)	Depth to Water (feet, TOC)	Elevation of Groundwater (feet, MSL)	Floating Product
MW-7	1/11/93	522.19	Not Monitored		
MW-7	5/5/93	522.19	Not Monitored		
MW-7	8/9/93	522.19	Not Monitored		
MW-7	10/14/93	522.19	Not Monitored		
MW-7	1/24/94	522.19	Not Monitored		
MW-7	5/31/94	522.19	9.42	512.77	—
MW-7	8/31/94	522.19	6.84	515.35	—
MW-7	11/2/94	522.19	6.48	515.71	—
MW-7	2/20/95	522.19	7.71	514.48	—
MW-7	5/9/95	522.19	7.65	514.54	—
MW-7	8/21/95	522.19	7.83	514.36	—
MW-7	10/20/95	522.19	8.61	513.58	—
MW-7	2/7/96	522.19	Not Monitored		
MW-7	4/30/96	522.19	Not Monitored		
MW-7	8/14/96	522.19	Not Monitored		
MW-7	11/22/96	522.19	Not Monitored		
MW-7	2/14/97	522.19	Not Monitored		
MW-8	1/2/92	524.03	18.42	505.61	—
MW-8	4/2/92	524.03	17.39	506.64	—
MW-8	7/21/92	524.03	14.02	510.01	—
MW-8	10/9/92	524.03	Not Monitored		
MW-8	1/11/93	524.03	Not Monitored		
MW-8	5/5/93	524.03	Not Monitored		
MW-8	8/9/93	524.03	Not Monitored		
MW-8	10/14/93	524.03	Not Monitored		
MW-8	1/24/94	524.03	Not Monitored		
MW-8	5/31/94	524.03	19.65	504.38	—
MW-8	8/31/94	524.03	17.40	506.63	—
MW-8	11/2/94	524.03	17.38	506.65	—
MW-8	2/20/95	524.03	15.99	508.04	—
MW-8	5/9/95	524.03	16.54	507.49	—
MW-8	8/21/95	524.03	15.77	508.26	—
MW-8	10/20/95	524.03	16.24	507.79	—
MW-8	2/7/96	524.03	14.42	509.61	—
MW-8	4/30/96	524.03	14.65	509.38	—
MW-8	8/14/96	524.03	15.08	508.95	—
MW-8	11/22/96	524.03	15.35	508.68	—
MW-8	2/14/97	524.03	14.32	509.71	—

MSL = Mean Sea Level
TOC = Top of Casing
— = None Present
SD = Sheen detected in purge water

Table 2
Groundwater Analytical Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE (ppb)
MW-A	1/2/92	SP	SP	SP	SP	SP	NA
MW-A	4/2/92	27,000	1,200	570	1,700	2,300	NA
MW-A	7/21/92	57,000	1,500	1,800	2,700	7,100	NA
MW-A	10/9/92	56,000	2,900	2,600	4,600	12,000	NA
MW-A	1/11/93	NS	NS	NS	NS	NS	NA
MW-A	5/5/93	NS	NS	NS	NS	NS	NA
MW-A	8/9/93	NS	NS	NS	NS	NS	NA
MW-A	10/14/93	NS	NS	NS	NS	NS	NA
MW-A	1/24/94	1,400,000	6,900	2,100	15,000	38,000	NA
MW-A	5/31/94	48,000	1,200	900	1,900	4,200	NA
MW-A	8/31/94	24,000	140	120	830	1,500	NA
MW-A	11/2/94	15,000	230	360	1,100	1,800	NA
MW-A	2/20/95	12,000	290	330	570	1,300	NA
MW-A	5/9/95	1,200	6.1	5.9	12	15	NA
MW-A	8/21/95	9,600	85	140	250	860	160
MW-A	10/20/95	360	5.2	7.9	15	43	NA
MW-A	2/7/96	6,100	130	180	320	840	NA
MW-A	4/30/96	410	1.2	0.67	1.2	1.5	NA
MW-A	8/14/96	3,000	65	75	170	460	57
MW-A	11/22/96	6,300	100	170	310	710	64
MW-A	2/14/97	8,100	140	180	700	1,600	<300
MW-B	1/2/92	SP	SP	SP	SP	SP	NA
MW-B	4/2/92	1,900	ND	39	24	35	NA
MW-B	7/21/92	16,000	180	1,600	270	1,100	NA
MW-B	10/9/92	38,000	490	8,300	1,400	5,100	NA
MW-B	1/11/93	NS	NS	NS	NS	NS	NA
MW-B	5/5/93	NS	NS	NS	NS	NS	NA
MW-B	8/9/93	NS	NS	NS	NS	NS	NA
MW-B	10/14/93	NS	NS	NS	NS	NS	NA
MW-B	1/24/94	23,000	110	1,700	600	1,900	NA
MW-B	5/31/94	13,000	780	310	370	1,400	NA
MW-B	8/31/94	35,000	160	2,800	1,000	4,500	NA
MW-B	11/2/94	2,500	170	3,200	1,100	4,700	NA
MW-B	2/20/95	10,000	46	1,400	330	1,200	NA
MW-B	5/9/95	4,100	9.1	47	26	30	NA
MW-B	8/21/95	4,000	9.6	110	120	270	98
MW-B	10/20/95	9,300	35	1,300	370	1,300	NA
MW-B	2/7/96	8,900	33	700	110	360	NA
MW-B	4/30/96	5,500	17	460	120	400	NA
MW-B	8/14/96	9,000	<5	260	120	320	<300
MW-B	11/22/96	560,000	56	2,400	1,600	5,500	<3000
MW-B	2/14/97	4,600	5.2	110	72	210	<300
MW-1	1/2/92	16	6	ND	ND	ND	NA

Table 2
Groundwater Analytical Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE (ppb)
MW-1	4/2/92	ND	ND	ND	ND	ND	NA
MW-1	7/21/92	<50	3.2	<0.5	<0.5	<0.5	NA
MW-1	10/9/92	<50	8.5	<0.5	<0.5	<0.5	NA
MW-1	1/11/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	5/5/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	8/9/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	10/14/93	440	16	2.9	2.9	11	NA
MW-1	5/31/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	8/31/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	11/2/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	2/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	5/9/95	450	22	25	23	100	NA
MW-1	8/21/95	58	<0.5	1.5	1.8	4.5	<10
MW-1	10/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	2/7/96	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	4/30/96	NS	NS	NS	NS	NS	NA
MW-1	8/14/96	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-1	11/22/96	NS	NS	NS	NS	NS	NA
MW-1	2/14/97	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-2	1/2/92	ND	ND	ND	ND	ND	NA
MW-2	4/2/91	ND	ND	ND	ND	ND	NA
MW-2	7/21/92	NS	NS	NS	NS	NS	NA
MW-2	10/9/92	NS	NS	NS	NS	NS	NA
MW-2	1/11/93	NS	NS	NS	NS	NS	NA
MW-2	5/5/93	NS	NS	NS	NS	NS	NA
MW-2	8/9/93	NS	NS	NS	NS	NS	NA
MW-2	10/14/93	NS	NS	NS	NS	NS	NA
MW-2	1/24/94	NS	NS	NS	NS	NS	NA
MW-2	5/31/94	NS	NS	NS	NS	NS	NA
MW-2	8/31/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-2	11/2/94	NS	NS	NS	NS	NS	NA
MW-2	2/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-2	5/9/95	NS	NS	NS	NS	NS	NA
MW-2	8/21/95	<50	<0.5	<0.5	<0.5	<0.5	<10
MW-2	10/20/95	NS	NS	NS	NS	NS	NA
MW-2	2/7/96	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-2	4/30/96	NS	NS	NS	NS	NS	NA
MW-2	8/14/96	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-2	11/22/96	NS	NS	NS	NS	NS	NA
MW-2	2/14/97	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-3	1/2/92	340	0.4	ND	ND	ND	NA
MW-3	4/2/92	160	5	ND	0.3	0.5	NA
MW-3	7/21/92	260	1.7	<0.5	<0.5	<0.5	NA

Table 2
Groundwater Analytical Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE (ppb)
MW-3	10/9/92	88	<0.5	<0.5	<0.5	<0.5	NA
MW-3	1/11/93	130	<0.5	<0.5	<0.5	<0.5	NA
MW-3	5/5/93	340	1.8	<0.5	1.3	<0.5	NA
MW-3	8/9/93	610	18	<0.5	2.4	0.9	NA
MW-3	10/14/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	1/24/94	320	3.5	<0.5	<0.5	<0.5	NA
MW-3	5/31/94	830	11	12	5.0	1.2	NA
MW-3	8/31/94	660	2	<0.5	1	<0.5	NA
MW-3	11/2/94	1,500	260	36	34	76	NA
MW-3	2/20/95	410	1.2	1.9	1.4	2.2	NA
MW-3	5/9/95	730	23	43	21	95	NA
MW-3	8/21/95	<50	<0.5	<0.5	<0.5	<0.5	<10
MW-3	10/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	2/7/96	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	4/30/96	NS	NS	NS	NS	NS	NA
MW-3	8/14/96	<50	<0.5	0.60	<0.5	<0.5	<30
MW-3	11/22/96	NS	NS	NS	NS	NS	NA
MW-3	2/14/97	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-4	1/2/92	ND	ND	ND	ND	ND	NA
MW-4	4/2/92	ND	ND	ND	ND	ND	NA
MW-4	7/21/92	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	10/9/92	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	1/11/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	5/5/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	8/9/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	10/14/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	1/24/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	5/31/94	NS	NS	NS	NS	NS	NA
MW-4	8/31/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	11/2/94	NS	NS	NS	NS	NS	NA
MW-4	2/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	5/9/95	NS	NS	NS	NS	NS	NA
MW-4	8/21/95	<50	<0.5	<0.5	<0.5	<0.5	<10
MW-4	10/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	2/7/96	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-4	4/30/96	NS	NS	NS	NS	NS	NA
MW-4	8/14/96	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-4	11/22/96	NS	NS	NS	NS	NS	NA
MW-4	2/14/97	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-5	1/2/92	1,800	74	41	84	94	NA
MW-5	4/2/92	ND	ND	ND	ND	ND	NA
MW-5	7/21/92	1,000	69	16	40	31	NA
MW-5	10/9/92	3,400	890	51	110	110	NA

Table 2
Groundwater Analytical Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE (ppb)
MW-5	1/11/93	15,000	460	110	900	370	NA
MW-5	5/5/93	4,500	160	19	280	110	NA
MW-5	8/9/93	2,300	180	19	130	80	NA
MW-5	10/14/93	2,200	160	27	90	64	NA
MW-5	1/24/94	2,600	69	11	65	25	NA
MW-5	5/31/94	3,100	130	64	140	120	NA
MW-5	8/31/94	600	20	2.9	14	7.1	NA
MW-5	11/2/94	2,300	68	18	52	54	NA
MW-5	2/20/95	12,000	130	<30	240	138	NA
MW-5	5/9/95	2,500	57	60	54	37	NA
MW-5	8/21/95	11,000	91	28	140	120	<100
MW-5	10/20/95	2,300	38	3.8	28	19	NA
MW-5	2/7/96	1,800	35	8.1	37	20	NA
MW-5	4/30/96	NS	NS	NS	NS	NS	NA
MW-5	8/14/96	3,500	130	22	170	47	71
MW-5	11/22/96	3,500	160	15	190	28	<200
MW-5	2/14/97	2,900	150	54	330	68	<300
MW-6	1/2/92	23	ND	0.3	0.6	3	NA
MW-6	4/2/92	ND	ND	ND	ND	ND	NA
MW-6	7/21/92	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-6	10/9/92	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-6	1/11/93	NS	NS	NS	NS	NS	NA
MW-6	5/5/93	NS	NS	NS	NS	NS	NA
MW-6	8/9/93	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-6	10/14/93	NS	NS	NS	NS	NS	NA
MW-6	1/24/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-6	5/31/94	NS	NS	NS	NS	NS	NA
MW-6	8/31/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-6	11/2/94	NS	NS	NS	NS	NS	NA
MW-6	2/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-6	5/9/95	NS	NS	NS	NS	NS	NA
MW-6	8/21/95	NS	NS	NS	NS	NS	NA
MW-6	10/20/95	NS	NS	NS	NS	NS	NA
MW-6	2/7/96	NS	NS	NS	NS	NS	NA
MW-6	4/30/96	NS	NS	NS	NS	NS	NA
MW-6	8/14/96	NS	NS	NS	NS	NS	NA
MW-6	11/22/96	NS	NS	NS	NS	NS	NA
MW-6	2/14/97	NS	NS	NS	NS	NS	NA
MW-7	1/2/92	NS	NS	NS	NS	NS	NA
MW-7	4/2/92	ND	ND	ND	ND	ND	NA
MW-7	7/21/92-11/22/96	NS	NS	NS	NS	NS	NA
MW-7	2/14/97	NS	NS	NS	NS	NS	NA

Table 2
Groundwater Analytical Data
930 Springtown Boulevard, Livermore, CA

Well Number	Date Sampled	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE (ppb)
MW-8	1/2/92	12,000	32	980	200	760	NA
MW-8	4/2/92	ND	ND	ND	ND	ND	NA
MW-8	7/21/92	NS	NS	NS	NS	NS	NA
MW-8	10/9/93	NS	NS	NS	NS	NS	NA
MW-8	1/11/93	NS	NS	NS	NS	NS	NA
MW-8	5/5/93	NS	NS	NS	NS	NS	NA
MW-8	8/9/93	NS	NS	NS	NS	NS	NA
MW-8	10/14/93	NS	NS	NS	NS	NS	NA
MW-8	1/24/94	NS	NS	NS	NS	NS	NA
MW-8	5/31/94	NS	NS	NS	NS	NS	NA
MW-8	8/31/94	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-8	11/2/94	NS	NS	NS	NS	NS	NA
MW-8	2/20/95	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-8	5/9/95	NS	NS	NS	NS	NS	NA
MW-8	8/21/95	<50	<0.5	<0.5	0.67	0.62	<10
MW-8	10/20/95	NS	NS	NS	NS	NS	NA
MW-8	2/7/96	<50	7.0	<0.5	<0.5	<0.5	NA
MW-8	4/30/96	61	9.6	<0.5	<0.5	<0.5	NA
MW-8	8/14/96	<50	0.73	<0.5	<0.5	<0.5	<30
MW-8	11/22/96	120	5.9	2.2	2.4	8.3	<30
MW-8	2/14/97	<50	<0.5	<0.5	<0.5	<0.5	<30

NS = Not Sampled
ND = None Detected
SP = Separate-phase petroleum hydrocarbons
TPHg = Total petroleum hydrocarbons as gasoline
< = Less than the detection limit for the specified method of analysis

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

ANALYTICAL REPORT

LOG NO: G97-02-359

Received: 17 FEB 97

Mailed: FEB 25 1997

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

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020)								
		Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Methyl-tert-butylether ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	30	0.5	
1*MW-4	02/14/97	02/20/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
2*MW-8	02/14/97	02/20/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
3*MW-2	02/14/97	02/21/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
4*MW-1	02/14/97	02/21/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
5*MW-3	02/14/97	02/21/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
6*MW-A	02/14/97	02/21/97	10	8100	140	180	700	<300	1600	C6-C12
7*MW-5	02/14/97	02/20/97	10	2900	150	54	330	<300	68	C6-C12
8*MW-B	02/14/97	02/21/97	10	4600	5.2	110	72	<300	210	C6-C12

Karen Petryna
930 Springtown Blvd., Livermore
Alameda County

BCA

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

ANALYTICAL REPORT

LOG NO: G97-02-359

Received: 17 FEB 97

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

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Methyl-tert-butylether ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	30	0.5	
9*EB	02/14/97	02/21/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12

Greta Galoustian, Laboratory Director

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

BCA

ORDER PLACED FOR CLIENT: Texaco Environmental Services 9702359 :
BC ANALYTICAL : GLEN LAB : 09:59:46 25 FEB 1997 - P. 1 :

MPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
02359*1	MW-4	GAS.MTBE.TESNC	02.20.97	8015M.TX	536-23	975014	
02359*2	MW-8	GAS.MTBE.TESNC	02.20.97	8015M.TX	536-23	975014	
02359*3	MW-2	GAS.MTBE.TESNC	02.21.97	8015M.TX	536-23	975014	
02359*4	MW-1	GAS.MTBE.TESNC	02.21.97	8015M.TX	536-23	975014	
02359*5	MW-3	GAS.MTBE.TESNC	02.21.97	8015M.TX	536-23	975015	
02359*6	MW-A	GAS.MTBE.TESNC	02.21.97	8015M.TX	536-23	975014	
02359*7	MW-5	GAS.MTBE.TESNC	02.20.97	8015M.TX	536-21	972029	8866
02359*8	MW-B	GAS.MTBE.TESNC	02.21.97	8015M.TX	536-23	975015	
02359*9	EB	GAS.MTBE.TESNC	02.21.97	8015M.TX	536-23	975015	

*

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

ID.NO = BC Analytical employee identification number of analyst.

AQUEOUS SAMPLES	------ METHOD BLANK ------			---------- LAB CONTROL ----------									---------- MATRIX QC ----------								
				LCS		LCSD					RPD	RPD	MS		MSD					RPD	RPD
	UNITS	RESULT	RDL	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG
Batch: GAS*972029 Method: 8015M.TX - Modified 8015																					
Benzene	ug/L	0	0.5	111	-	-	-	76	155	-	-	-	116	-	116	-	70	153	1	25	-
Toluene	ug/L	0	0.5	57	Q	-	-	72	121	-	-	-	112	-	111	-	69	119	1	25	-
Ethylbenzene	ug/L	0	0.5	472	Q	-	-	72	115	-	-	-	94	-	96	-	68	116	2	25	-
Methyl-tert-butylether	ug/L	0	30	82	-	-	-	62	159	-	-	-	97	-	97	-	80	176	0	25	-
Total Xylene Isomers	ug/L	0	0.5	87	-	-	-	68	115	-	-	-	92	-	94	-	61	118	2	25	-
TPH (Gasoline Range)	ug/L	0	50	88	-	-	-	85	120	-	-	-	87	-	87	-	78	124	1	25	-
[a,a,a-Trifluorotoluene]	Percent	115	-	110	-	-	-	85	118	-	-	-	121	Q	87	-	85	118	-	-	-
Batch: GAS*975014 Method: 8015M.TX - Modified 8015																					
Benzene	ug/L	0	0.5	93	-	-	-	76	155	-	-	-	87	-	81	-	70	153	7	25	-
Toluene	ug/L	0	0.5	95	-	-	-	72	121	-	-	-	90	-	84	-	69	119	6	25	-
Ethylbenzene	ug/L	0	0.5	98	-	-	-	72	115	-	-	-	85	-	83	-	68	116	3	25	-
Methyl-tert-butylether	ug/L	0	30	81	-	-	-	62	159	-	-	-	87	-	90	-	80	176	4	25	-
Total Xylene Isomers	ug/L	0	0.5	99	-	-	-	68	115	-	-	-	92	-	88	-	61	118	4	25	-
TPH (Gasoline Range)	ug/L	0	50	94	-	-	-	85	120	-	-	-	90	-	90	-	78	124	0	25	-
[a,a,a-Trifluorotoluene]	Percent	85	-	100	-	-	-	85	118	-	-	-	90	-	89	-	85	118	-	-	-
Batch: GAS*975015 Method: 8015M.TX - Modified 8015																					
Benzene	ug/L	0	0.5	89	-	100	-	76	155	11	25	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	0	0.5	91	-	106	-	72	121	15	25	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	0	0.5	91	-	103	-	72	115	13	25	-	-	-	-	-	-	-	-	-	-
Methyl-tert-butylether	ug/L	0	30	82	-	88	-	62	159	6	25	-	-	-	-	-	-	-	-	-	-
Total Xylene Isomers	ug/L	0	0.5	92	-	108	-	68	115	16	25	-	-	-	-	-	-	-	-	-	-
TPH (Gasoline Range)	ug/L	0	50	84	Q	92	-	85	120	9	25	-	-	-	-	-	-	-	-	-	-
[a,a,a-Trifluorotoluene]	Percent	88	-	95	-	88	-	85	118	-	-	-	-	-	-	-	-	-	-	-	-

SURROGATE RECOVERIES :
BC ANALYTICAL : GLEN LAB : 10:00:40 25 FEB 1997 - P. 1 :

THOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
02359*1							
15M.TX	a,a,a-Trifluorotoluene	Re975014	02/20/97	42.2	50.0	84	
02359*2							
15M.TX	a,a,a-Trifluorotoluene	Re975014	02/20/97	45.0	50.0	90	
02359*3							
15M.TX	a,a,a-Trifluorotoluene	Re975014	02/21/97	45.2	50.0	90	
02359*4							
15M.TX	a,a,a-Trifluorotoluene	Re975014	02/21/97	43.4	50.0	87	
02359*5							
15M.TX	a,a,a-Trifluorotoluene	Re975015	02/21/97	45.2	50.0	90	
02359*6							
15M.TX	a,a,a-Trifluorotoluene	Re975014	02/21/97	455	500	91	
02359*7							
15M.TX	a,a,a-Trifluorotoluene	Re972029	02/20/97	566	500	113	
02359*8							
15M.TX	a,a,a-Trifluorotoluene	Re975015	02/21/97	488	500	98	
02359*9							
15M.TX	a,a,a-Trifluorotoluene	Re975015	02/21/97	43.5	50.0	87	

G97-02-359

Chain-of-Custody

Page 1 of 1

Texaco Environmental Services
108 Cutting Boulevard
Richmond, California 94804
Phone: (510) 236-3541
FAX: (510) 237-7821

Forward Results to the Attention of Rebecca Digerness

Texaco Project Corordinator: Karen Petryna

Site Name: Texaco Loc.# 618571050
Site Address: 930 Springtown Blvd. Livermore, CA
Contractor Project Number: 970214-W1
Contractor Name: Blaine Tech Services, Inc.
Address: 1680 Rogers Ave., San Jose, CA 95112
Project Contact: Kent Brown
Phone/FAX: (408) 573-0555 / (408) 573-7771

Laboratory: B C Analytical
Turn Around Time: normal (10 day)
Samplers (PRINT NAME): W R Jones
Sampler Signature:
Date Samples Collected: 2/14/97

Sample Number	Lab Sample Number	Date/Time Collected	No. of Containers	Type of Containers	Sample Matrix	Preservative	ANALYSIS: TPH gas/BTEX / MTBE	TPH Diesel	O&G/TRPH (418.1)	TPH Ex. (C8-C36+)	VOCs 8240/624	P. Halocarbons 8010/60	P. Aromatics 8020/602	Organic Lead			Comments
MW4		2/14/97 / 855	3		W		X										
MW8		/ 915															
MW2		/ 930															
MW1		/ 945															
MW3		/ 1000															
MW-A		/ 1020															
MW5		/ 1040															
MW8		/ 1105															
FB		/ 925															

Relinquished by: (Signature)	W R Jones	Date: 2-17-97	Time: 12 25	Received by: (Signature)	Bill Lyons	Date: 2-17-97	Time: 12 25
Relinquished by: (Signature)	Bill Lyons	Date: 2-17-97	Time: 230	Received by: (Signature)	Monica Mather	Date: 2/17/97	Time: 230
Relinquished by: (Signature)	Monica Mather	Date: 2/18/97	Time: 5:30	Received by: (Signature)	[illegible]	Date: 2/19/97	Time: 735
Method of Shipment:				Lab Comments:			

P:\GW\MP\FORMS\TEX-COC.XLS

430 Springtown Blvd, Livermore

Well Gauging Data

Project Name: TEXACO
Project Number: 970214-WJ

Date: 2/14
Recorded By: WJ

Well ID	TOC Elev.	DTB (ft. TOC)	Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
MW A		16.37	2		10.00		
MW B		21.60	2		7.75		odor
MW 1		25.36	4		10.25		
MW 2		22.55	4		7.92		
MW 3		24.52	4		9.38		
MW 4		24.95	3		8.85		
MW 5		21.35	2		11.20		
MW 6		24.15	4		14.32		

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

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TEXACO WELL MONITORING DATA SHEET

Project #: 970214-W1	Texaco ID#: 6185 71050
Sampler: WS	Date: 2/14/97
Well I.D.: MW-A	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 16.37	Depth to Water: 10.00
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius^2 * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer ✓
- Middleburg
- Electric Submersible
- Extraction Pump
- Other: ___

Sampling Method:
- S.S. Bailer
- Teflon Bailer ✓
- Extraction Port
- Other: ___

1.1 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 3.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1011	64.0	7.3	1100	>200	1.5	ODOR
1014	64.4	7.4	1000	>200	3.0	
1016	64.6	7.4	1000	>200	3.5	

Did well dewater? Yes (No) Gallons actually evacuated: 3.5

Sampling Time: 1020 Sampling Date: 2/14

Sample I.D.: MW-A Laboratory: BC Analytical

Analyzed for: (Tph-G BTEX) Tph-D (Other: MTBE)

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 970214-WJ	Texaco ID#: 61857 1050
Sampler: WJ	Date: 2/14/97
Well I.D.: MW-B	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 21.60	Depth to Water: 7.75
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius^2 * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer ✓
- Middleburg
- Electric Submersible
- Extraction Pump
- Other: _____

Sampling Method:
- S.S. Bailer
- Teflon Bailer ✓
- Extraction Port
- Other: _____

2.4	x	3	=	7.2 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1052	63.0	7.6	1800	>200	2.5	STRONG ODOR SHEEN
1057	63.2	7.8	1800	>200	5.0	
1102	62.6	7.8	1800	>20	7.5	

Did well dewater? Yes (No)	Gallons actually evacuated: 7.5
Sampling Time: 1105	Sampling Date: 2/14
Sample I.D.: MW-B	Laboratory: BC Analytical
Analyzed for: (Tph-G BTEX) Tph-D (Other: MTBE)	
Equipment Blank I.D.:	Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 970214-W1	Texaco ID#: 6185 71050
Sampler: WS	Date: 2/14/97
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 25.36	Depth to Water: 10.25
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer
- Middleburg
- Electric Submersible ✓
- Extraction Pump
- Other: _____

Sampling Method:
- S.S. Bailer ✓
- Teflon Bailer
- Extraction Port
- Other: _____

10.0	X	3	=	30.0 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
938	64.2	7.4	2200	34	100	
940	63.4	7.2	2200	>200	200	
941	63.6	7.2	2200	>200	300	

Did well dewater? Yes (No) Gallons actually evacuated: 300

Sampling Time: 945 Sampling Date: 2/14

Sample I.D.: MW-1 Laboratory: BC Analytical

Analyzed for: (Tph-G BTEX) Tph-D (Other: MTBE)

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 970214-W1	Texaco ID#: 6185710SO
Sampler: WS	Date: 2/14/97
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 22.5	Depth to Water: 7.92
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer
- Middleburg
- Electric Submersible ✓
- Extraction Pump
- Other: _____

Sampling Method:
- S.S. Bailer ✓
- Teflon Bailer
- Extraction Port
- Other: _____

1 Case Volume (Gals.)		Specified Volumes		Calculated Volume
9.7	X	3	=	29.1 Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
922	64.6	7.4	1800	>200	10.0	- Roots in Well
924	64.2	7.4	2000	>200	20.0	
925	64.2	7.4	1900	>200	29.5	

Did well dewater? Yes (No) Gallons actually evacuated: 29.5

Sampling Time: 930 Sampling Date: 2/14

Sample I.D.: MW-2 Laboratory: BC Analytical

Analyzed for: (Tph-G BTEX) Tph-D (Other: MTBE)

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 970214-W1	Texaco ID#: 6185 71050
Sampler: WS	Date: 2/14/97
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 24.52	Depth to Water: 9.38
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer / Teflon Bailer / Middleburg / Electric Submersible ✓ / Extraction Pump / Other: _____

Sampling Method: S.S. Bailer ✓ / Teflon Bailer / Extraction Port / Other: _____

10.0	x	3	=	30.0 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
951	65.0	7.2	1800	36	10.0	
952	65.6	7.2	1800	39	20.0	
954	65.2	7.1	1800	40	30.0	

Did well dewater? Yes (No) Gallons actually evacuated: 30.0

Sampling Time: 1000 Sampling Date: 2/14

Sample I.D.: MW-3 Laboratory: BC Analytical

Analyzed for: (Tph-G BTEX) Tph-D (Other:) MTBE

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 970214-W1	Texaco ID#: 6185 71050
Sampler: WS	Date: 2/14/97
Well I.D.: MW4	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 24.95	Depth to Water: 8.85
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer
- Middleburg ✓
- Electric Submersible
- Extraction Pump
- Other: _____

Sampling Method:
- S.S. Bailer ✓
- Teflon Bailer
- Extraction Port
- Other: _____

1 Case Volume (Gals.)		Specified Volumes		Calculated Volume
6.1	x	3	=	18.3 Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
~~800~~	65.4	6.4	1400	121	6.5	
844	65.2	7.0	1400	142	13.0	
850	65.	7	1400	117	18.5	

Did well dewater? Yes (No)

Gallons actually evacuated: 18.5

Sampling Time: 855

Sampling Date: 2/14

Sample I.D.: MW4

Laboratory: BC Analytical

Analyzed for: (Tph-G BTEX) Tph-D (Other:) MTBE

Equipment Blank I.D.:

Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 970214-W1	Texaco ID#: 6185 71050
Sampler: WS	Date: 2/14/97
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 21.35	Depth to Water: 11.20
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method: S.S. Bailer / Teflon Bailer ✓ / Middleburg / Electric Submersible / Extraction Pump / Other: ____

Sampling Method: S.S. Bailer / Teflon Bailer ✓ / Extraction Port / Other: ____

1.7 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 5.1 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1029	65.0	7.8	1100	>200	2.0	
1033	64.6	7.4	1200	>200	4.0	
1036	65.2	7.4	1300	>200	5.5	

Did well dewater? Yes (No) Gallons actually evacuated: 5.5

Sampling Time: 1040 Sampling Date: 2/14

Sample I.D.: MW5 Laboratory: BC Analytical

Analyzed for: (Tph-G BTEX) Tph-D (Other: MTBE)

Equipment Blank I.D.: Analyzed for same as primary sample

TEXACO WELL MONITORING DATA SHEET

Project #: 970214-W1	Texaco ID#: 6185 71050
Sampler: WS	Date: 2/14/97
Well I.D.: MW8	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 24.15	Depth to Water: 14.32
Depth to Free Product:	Thickness of Free Product:

All Measurements are referenced to TOC. Meter used is Myron LpDS pH/EC Meter. All temperatures taken in degrees Fahrenheit.

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.17	5"	1.02
3"	0.38	6"	1.50
4"	0.66	8"	2.60
4.5"	0.83	Other	radius² * 0.164

Purge Method:
- S.S. Bailer
- Teflon Bailer
- Middleburg
- Electric Submersible ✓
- Extraction Pump
- Other: _____

Sampling Method:
- S.S. Bailer ✓
- Teflon Bailer
- Extraction Port
- Other: _____

6.5	x	3	=	19.5 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
909	62.8	7.3	1600	67	6.5	
910	62.6	7.2	1600	37	13.0	
911	62.6	7.2	1600	14	19.5	

Did well dewater? Yes (No) Gallons actually evacuated: 19.5

Sampling Time: 915 Sampling Date: 2/14

Sample I.D.: MW8 Laboratory: BC Analytical

Analyzed for: (Tph-G BTEX) Tph-D (Other: MTBE)

Equipment Blank I.D.: EB @ 905 Analyzed for same as primary sample

SOURCE RECORD

BILL OF LADING

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT TEXACO FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE-WATER WHICH HAS BEEN RECOVERED FROM GROUND-WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED TO THE DESTINATION DESIGNATED BY TEXACO ENVIRONMENTAL SERVICES (TES).

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

is authorized by Texaco Environmental Services to recover, collect, apportion into loads, and haul the NON-HAZARDOUS WELL PURGEWATER that is drawn from wells at the Texaco facility listed below and to deliver that purgewater to an appropriate destination designated by TEXACO ENVIRONMENTAL SERVICES in either Redwood City, California or in Richmond, California. Transport routing of the Non-Hazardous Well Purgewater may be directed from one Texaco facility to the designated desitnation point; from one Texaco facility to the designated destination point via another Texaco facility; from a Texaco facility via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of Texaco Environmental Services (TES).

This SOURCE RECORD BILL OF LADING was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Texaco facility described below:

TEXACO #:
Address:
City, State, ZIP:

Texaco #618571050
930 Springtown Blvd.
Livermore, CA

Well I.D.	Gals.	Well I.D.	Gals.
/		/	
PurgeWater	≈ 144.0	/	
/		/	
/		/	
/		/	
/		/	
/		/	
/		/	
/		/	
/		/	

Total gals: ~~150~~

added rinse water 15.0

Total Gals. Recovered ≈ 159.0

Job #: 970214-WJ
Date 2/14/97
Time 1130
Signature: [signature]

REC'D AT: BTS
Date: 2/14/97
Time: 1330
Signature: [signature]

QUARTERLY SUMMARY REPORT

Former Texaco Service Station/Current Seven-Eleven Store
930 Springtown, Livermore, California
Alameda County
Fourth Quarter 1996

HISTORY OF INVESTIGATIVE AND REMEDIAL ACTIONS

Subsurface investigation was initiated in September, 1984 with the installation of two groundwater monitoring wells (MW-A and MW-B). Underground fuel storage tanks were removed in June 1985. Plume definition investigation continued through 1989. Monitoring wells MW-1 through MW-3 were installed in June 1985, MW-4 was installed in September 1985, and MW-5 and MW-6 were installed in November 1986. One soil boring was drilled and two additional monitoring wells (MW-7 and MW-8) were installed in December 1989 in order to fully define the extent of subsurface hydrocarbons. Monitoring wells MW-6 and MW-7 were destroyed in December 1995 and January 1996. A vapor extraction system operated at the site from September 1994 through October 1995.

WORK PERFORMED DURING THIS QUARTER

Ground water monitoring and sampling was performed.

CHARACTERIZATION STATUS

SOIL: The extent of hydrocarbons in soil has been defined laterally.

GROUND WATER: The extent of dissolved hydrocarbons in ground water is defined.

REMEDIATION STATUS

A soil vapor extraction system previously operated (see above). The system was turned off after obtaining permission from the ACDEH.

WORK TO BE PERFORMED NEXT QUARTER

Continuation of the ground water monitoring and sampling program.

COMPANY CONTACT:

Texaco:	Karen Petryna (510) 236-9139
Property Owner:	Southland Corp., Bob Vasquez (916) 852-6880
Lead Agency:	Eva Chu (510) 567-6762 (ACDEH)