Texaco Refining
and Marketing Inc

108 Cutting Boulevard
Richmond, CA 94804

March 4, 1998

ENV - STUDIES, SURVEYS, & REPORTS
Former Texaco Service Station/Current 7-11 Store
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 **July 25th** and **October 31st, 1997**, at the site referenced above (see Plate 1, Site Map). Based on groundwater level measurements, the areal hydraulic gradient was estimated to be northwest (see Plates 2 and 3, Groundwater Data) for both events at 0.002 ft. per ft. TPHg and benzene concentrations are shown on Plates 4 and 5. Table 1 lists historical groundwater monitoring data and analytical results. 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-1A, and MW-1B are sampled quarterly;** and monitoring wells MW-1A, MW-1B, and MW-1 through MW-8 are gauged quarterly.

The certified analytical reports, chains-of-custody, field data sheets, bills of lading, and quarterly summary report for the fourth quarter, 1997 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

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Enclosure

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

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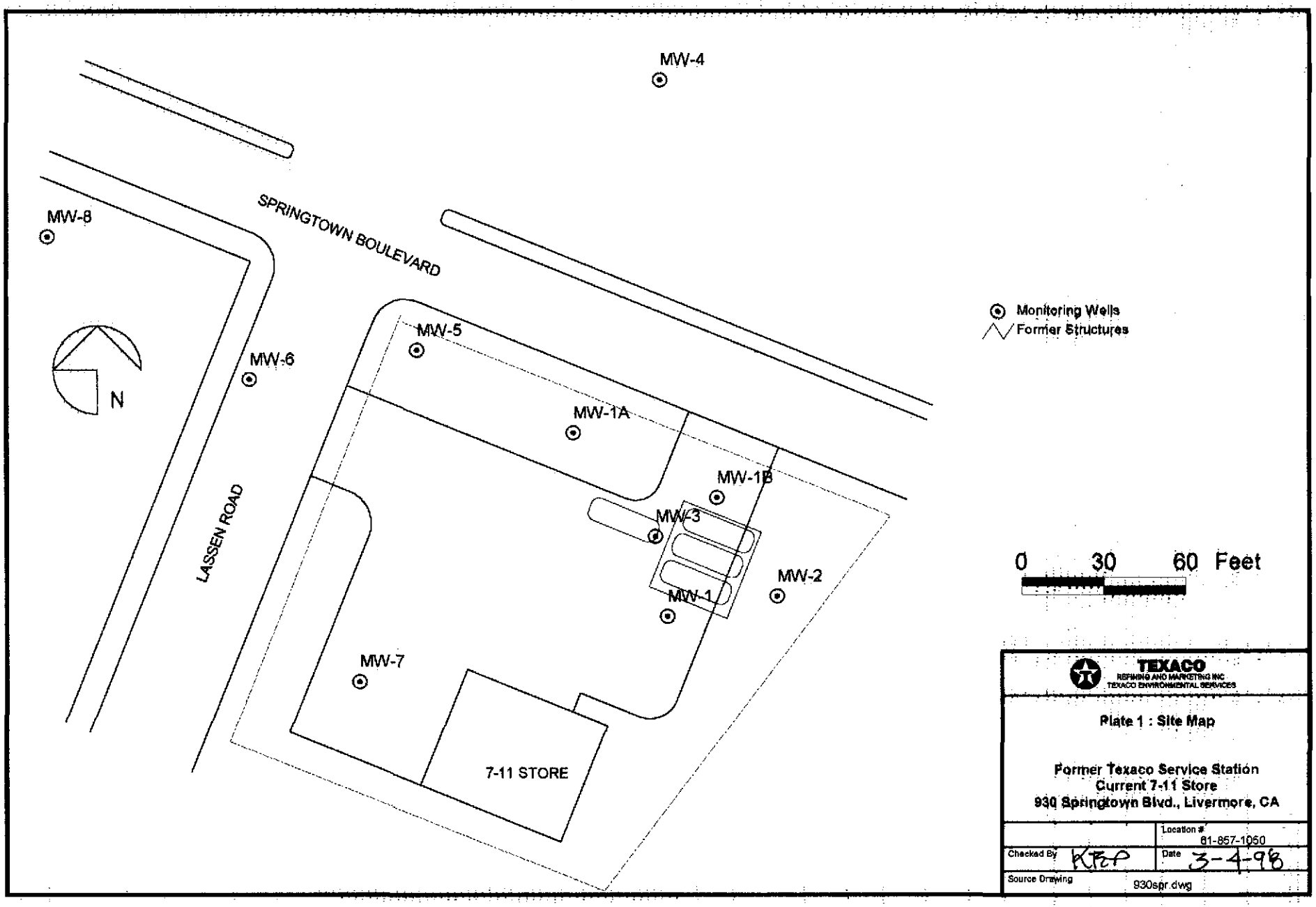
GROUNDWATER MONITORING AND SAMPLING
Third and Fourth Quarter, 1997
at the
Former Texaco Service Station/Current 7-11 Store
930 Springtown Boulevard
Livermore, California

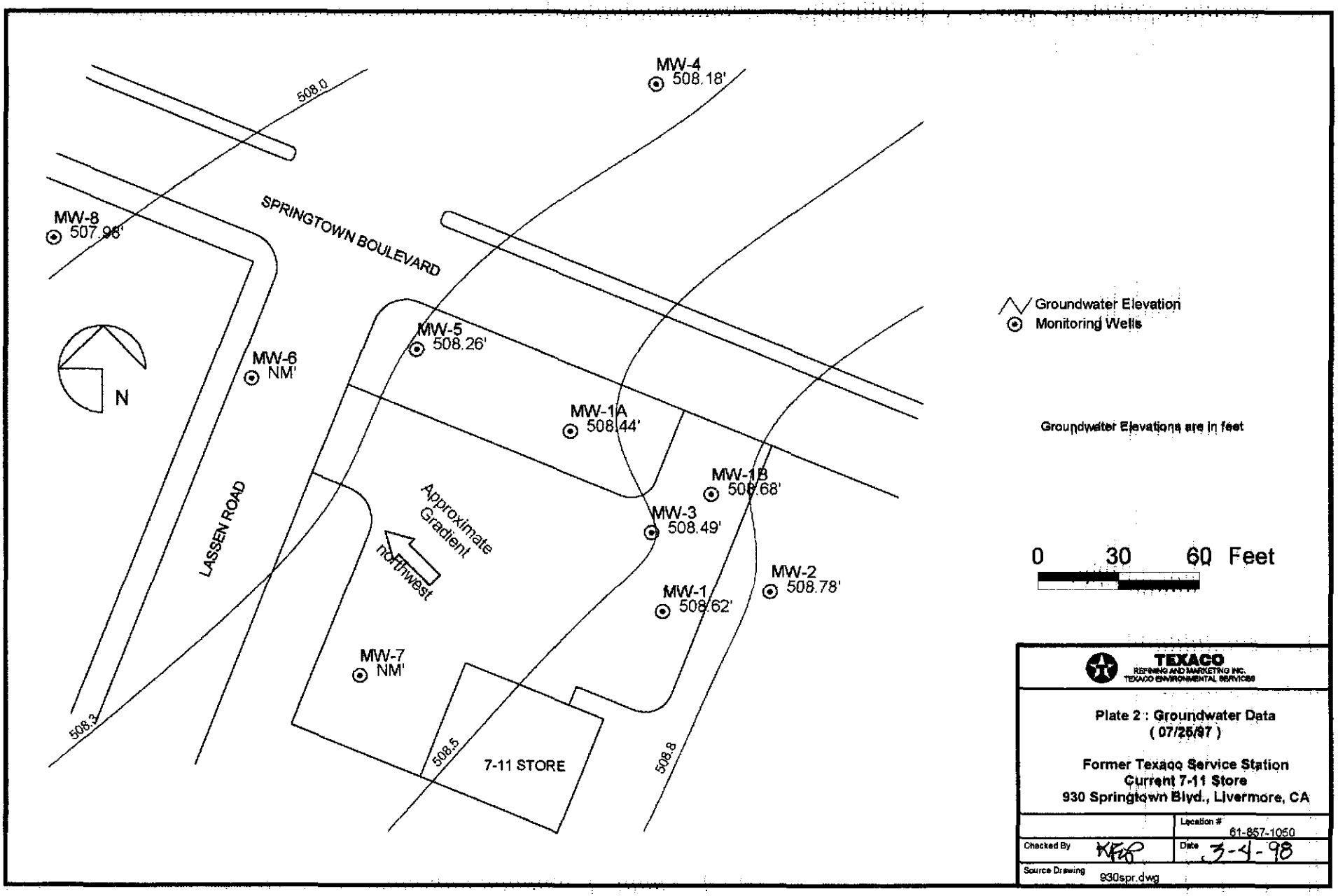


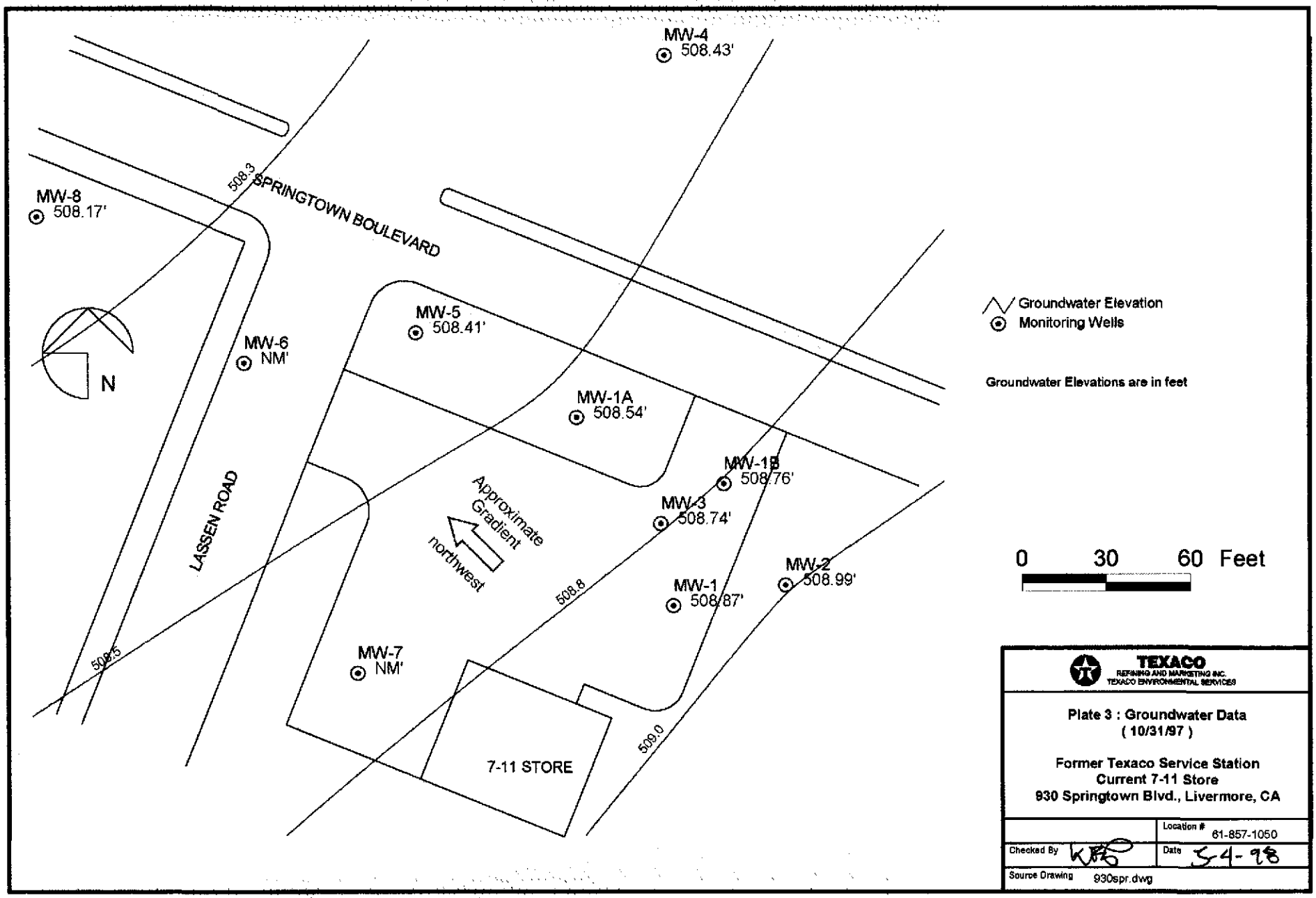
TEXACO
REFINING AND MARKETING INC
TEXACO ENVIRONMENTAL SERVICES

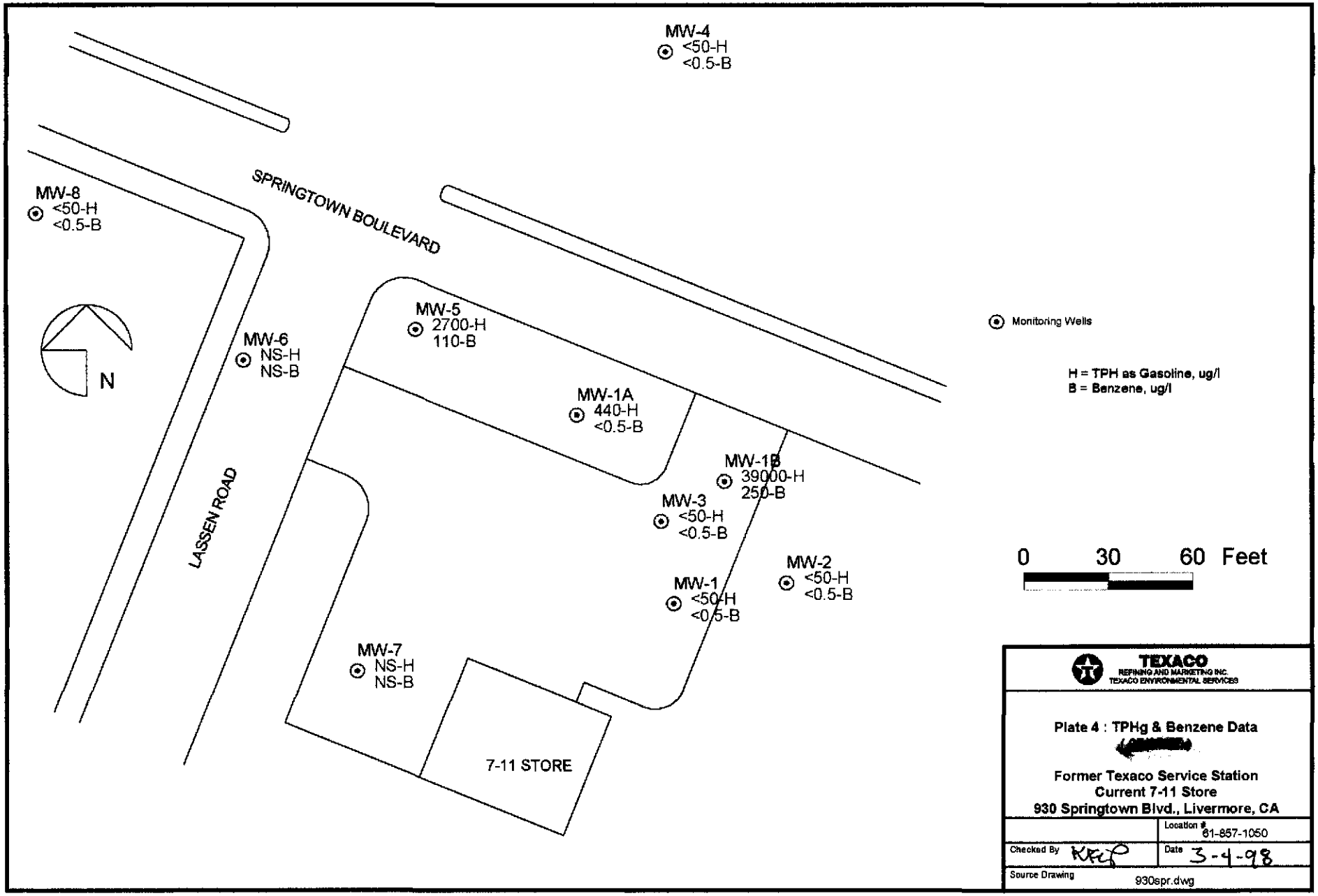
Plate 1 : Site Map

Former Texaco Service Station
Current 7-11 Store
930 Springtown Blvd., Livermore, CA

	Location # 61-857-1050
Checked By KTP	Date 3-4-98
Source Drawing 930spr.dwg	


MW-4
508.18'
508.0
SPRINGTOWN BOULEVARD
MW-8
507.96'
MW-5
508.26'
MW-6
NM'
N
MW-1A
508.44'
MW-1B
508.68'
LASSEN ROAD
Approximate
Gradient
northwest
MW-3
508.49'
MW-2
508.78'
MW-1
508.62'
MW-7
NM'
508.3
508.5
7-11 STORE
508.8
Groundwater Elevation
Monitoring Wells
Groundwater Elevations are in feet
0
30
60 Feet
TEXACO
REFINING AND MARKETING INC.
TEXACO ENVIRONMENTAL SERVICES
Plate 2 : Groundwater Data
(07/25/97)
Former Texaco Service Station
Current 7-11 Store
930 Springtown Blvd., Livermore, CA
Location #
61-857-1050
Checked By
Date
3-4-98
Source Drawing
930spr.dwg


MW-4
508.43'
MW-8
508.17'
508.3
SPRINGTOWN BOULEVARD
MW-5
508.41'
MW-6
NM'
N
MW-1A
508.54'
MW-1B
508.76'
LASSEN ROAD
Approximate
Gradient
northwest
MW-3
508.74'
MW-2
508.99'
508.8
MW-1
508.87'
MW-7
NM'
508.5
509.0
7-11 STORE
Groundwater Elevation
Monitoring Wells
Groundwater Elevations are in feet
0 30 60 Feet
TEXACO
REFINING AND MARKETING INC.
TEXACO ENVIRONMENTAL SERVICES
Plate 3 : Groundwater Data
(10/31/97)
Former Texaco Service Station
Current 7-11 Store
930 Springtown Blvd., Livermore, CA
Location # 61-857-1050
Checked By KBS
Date 5-4-98
Source Drawing 930spr.dwg


MW-4
<50-H
<0.5-B
SPRINGTOWN BOULEVARD
MW-8
<50-H
<0.5-B
N
MW-6
NS-H
NS-B
LASSEN ROAD
MW-5
2700-H
110-B
MW-1A
440-H
<0.5-B
MW-1B
39000-H
250-B
MW-3
<50-H
<0.5-B
MW-2
<50-H
<0.5-B
MW-1
<50-H
<0.5-B
MW-7
NS-H
NS-B
7-11 STORE
Monitoring Wells
H = TPH as Gasoline, ug/l
B = Benzene, ug/l
0 30 60 Feet
TEXACO
REFINING AND MARKETING INC.
TEXACO ENVIRONMENTAL SERVICES
Plate 4 : TPHg & Benzene Data
[redacted]
Former Texaco Service Station
Current 7-11 Store
930 Springtown Blvd., Livermore, CA
Location # 61-857-1050
Checked By KRC
Date 3-4-98
Source Drawing 930spr.dwg

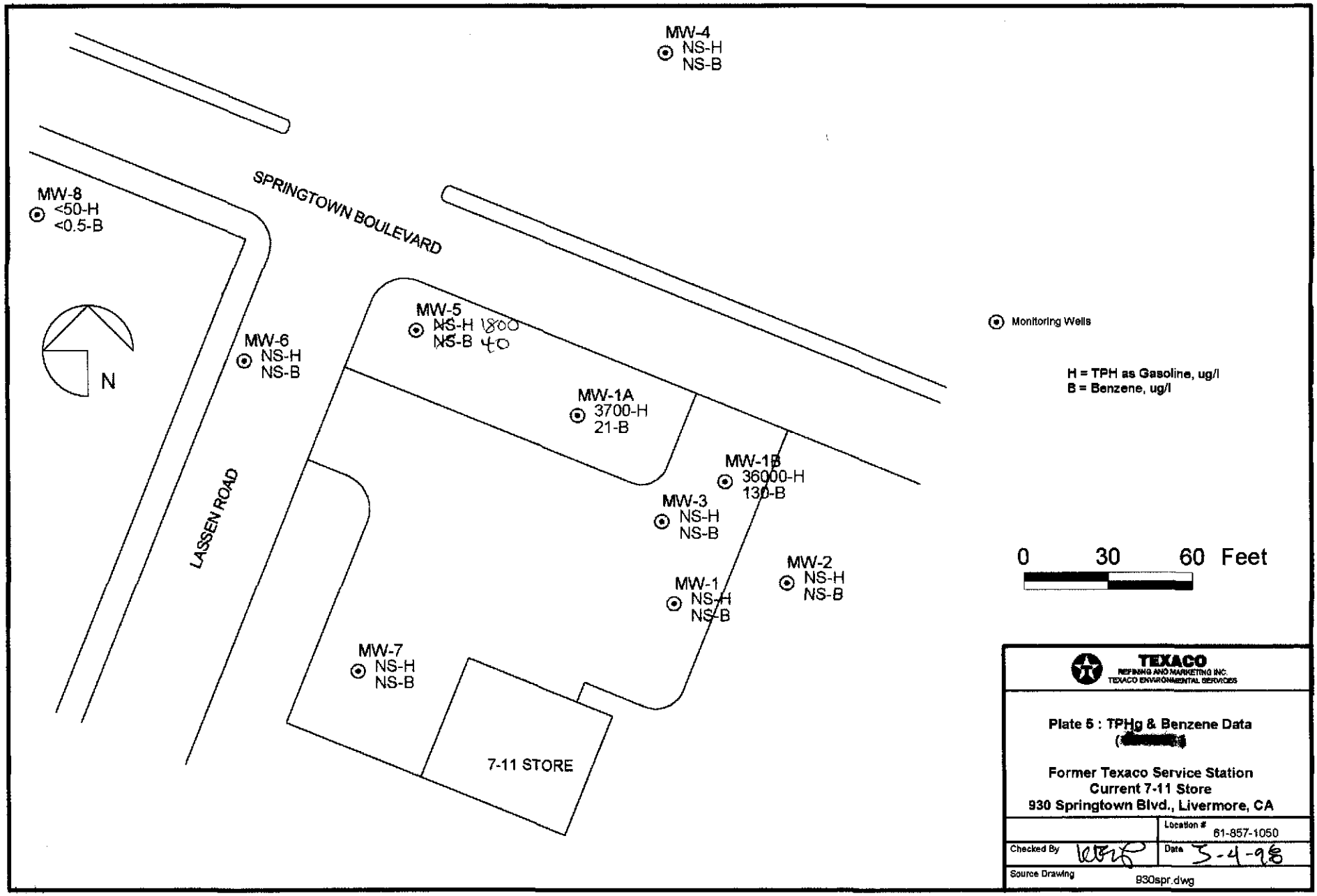

MW-4
NS-H
NS-B
SPRINGTOWN BOULEVARD
MW-8
<50-H
<0.5-B
MW-5
NS-H 1800
NS-B 40
MW-6
NS-H
NS-B
N
MW-1A
3700-H
21-B
MW-1B
36000-H
130-B
MW-3
NS-H
NS-B
LASSEN ROAD
MW-2
NS-H
NS-B
MW-1
NS-H
NS-B
MW-7
NS-H
NS-B
7-11 STORE
Monitoring Wells
H = TPH as Gasoline, ug/l
B = Benzene, ug/l
0 30 60 Feet
TEXACO
REFINING AND MARKETING INC.
TEXACO ENVIRONMENTAL SERVICES
Plate 5 : TPHg & Benzene Data
([redacted])
Former Texaco Service Station
Current 7-11 Store
930 Springtown Blvd., Livermore, CA
Location # 61-857-1050
Checked By
Date 5-4-98
Source Drawing 930spr.dwg

Table 1
Groundwater Elevation Data and Analytical Results
930 Springtown Blvd., Livermore, CA

WELL	SDATE	TOC	DTW	DTP	GWE	TPHg	Benzene	Toluene	Ebenzene	Xylenes	MtBE
MW-1	01/02/92	520.61	14.11	14.11	506.50	16	6	ND	ND	ND	NS
MW-1	04/02/92	520.61	12.98	12.98	507.63	ND	ND	ND	ND	ND	NS
MW-1	07/21/92	520.61	13.92	13.92	506.69	<50	3.2	<0.5	<0.5	<0.5	NS
MW-1	10/09/92	520.61	14.25	14.25	506.36	<50	8.5	<0.5	<0.5	<0.5	NS
MW-1	01/11/93	520.61	12.30	12.30	508.31	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	05/05/93	520.61	11.88	11.88	508.73	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	08/09/93	520.61	13.63	13.63	506.98	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	10/14/93	520.61	13.91	13.91	506.70	440	16	2.9	2.9	11	NS
MW-1	05/31/94	520.61	12.74	12.74	507.87	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	08/31/94	520.61	13.68	13.68	506.93	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	11/02/94	520.61	13.48	13.48	507.13	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	02/20/95	520.61	12.02	12.02	508.59	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	05/09/95	520.61	12.83	12.83	507.78	450	22	25	23	100	NS
MW-1	08/21/95	520.61	11.93	11.93	508.68	58	<0.5	1.5	1.8	4.5	<10
MW-1	10/20/95	520.61	12.40	12.40	508.21	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	02/07/96	520.61	10.42	10.42	510.19	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-1	04/30/96	520.61	10.48	10.48	510.13	NS	NS	NS	NS	NS	NS
MW-1	08/14/96	520.61	11.18	11.18	509.43	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-1	11/22/96	520.61	11.10	11.10	509.51	NS	NS	NS	NS	NS	NS
MW-1	02/14/97	520.61	10.25	10.25	510.36	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-1	05/23/97	520.61	11.48	11.48	509.13	NS	NS	NS	NS	NS	NS
MW-1	07/25/97	520.61	11.99	11.99	508.62	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-1	10/31/97	520.61	11.74	11.74	508.87	NS	NS	NS	NS	NS	NS
MW-1A	01/02/92	520.10	13.61	13.61	506.49	NS	NS	NS	NS	NS	NS
MW-1A	04/02/92	520.10	12.44	12.44	507.66	27000	1200	570	1700	2300	NS
MW-1A	07/21/92	520.10	13.35	13.35	506.75	57000	1500	1800	2700	7100	NS
MW-1A	10/09/92	520.10	12.92	SD	507.18	56000	2900	2600	4600	12000	NS
MW-1A	01/24/94	520.10	12.74	SD	507.36	1400000	6900	2100	15000	38000	NS
MW-1A	05/31/94	520.10	12.28	12.28	507.82	48000	1200	900	1900	4200	NS
MW-1A	08/31/94	520.10	13.20	SD	506.90	24000	140	120	830	1500	NS
MW-1A	11/02/94	520.10	13.15	SD	506.95	15000	230	360	1100	1800	NS
MW-1A	02/20/95	520.10	11.71	11.71	508.39	12000	290	330	570	1300	NS
MW-1A	05/09/95	520.10	12.37	12.37	507.73	1200	6.1	5.9	12	15	NS
MW-1A	08/21/95	520.10	11.37	11.37	508.73	9600	85	140	250	860	160
MW-1A	10/20/95	520.10	12.04	12.04	508.06	360	5.2	7.9	15	43	NS

TOC = Top of Casing Elevation, Feet.
DTW = Depth to Water, feet below TOC.
DTP = Depth to Product, feet below TOC.
GWE = Groundwater Elevation, feet.
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MTBE = Methyl-tert-butylether, ug/l.

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ug/l = micrograms/liter
mg/l = miligrams/liter
< = Less than the specified detection limit.
ND = Not Detected
NM = Not Measured
NS = Not Sampled
SD = Sheen Detected

Table 1-p. 2
Groundwater Elevation Data and Analytical Results
930 Springtown Blvd., Livermore, CA

WELL	SDATE	TOC	DTW	DTP	GWE	TPHg	Benzene	Toluene	Ebenzene	Xylenes	MtBE
MW-1A	02/07/96	520.10	10.11	10.11	509.99	6100	130	180	320	840	NS
MW-1A	04/30/96	520.10	10.28	10.28	509.82	410	1.2	0.67	1.2	1.5	NS
MW-1A	08/14/96	520.10	10.82	10.82	509.28	3000	65	75	170	460	57
MW-1A	11/22/96	520.10	10.97	10.97	509.13	6300	100	170	310	710	64
MW-1A	02/14/97	520.10	10.00	10.00	510.10	8100	140	180	700	1600	<300
MW-1A	05/23/97	520.10	11.36	SD	508.74	24000	340	520	1600	3800	<2000
MW-1A	07/25/97	520.10	11.66	11.66	508.44	440	<0.5	<0.5	<0.5	<0.5	<30
MW-1A	10/31/97	520.10	11.56	11.56	508.54	3700	21	48	200	430	35
MW-1B	01/02/92	518.05	11.27	11.27	506.78	NS	NS	NS	NS	NS	NS
MW-1B	04/02/92	518.05	10.18	10.18	507.87	1900	ND	39	24	35	NS
MW-1B	07/21/92	518.05	11.27	11.27	506.78	16000	180	1600	270	1100	NS
MW-1B	10/09/92	518.05	11.64	SD	506.41	38000	490	8300	1400	5100	NS
MW-1B	01/24/94	518.05	10.54	SD	507.51	23000	110	1700	600	1900	NS
MW-1B	05/31/94	518.05	10.19	10.19	507.86	13000	780	310	370	1400	NS
MW-1B	08/31/94	518.05	10.98	SD	507.07	35000	160	2800	1000	4500	NS
MW-1B	11/02/94	518.05	10.90	SD	507.15	2500	170	3200	1100	4700	NS
MW-1B	02/20/95	518.05	9.47	9.47	508.58	10000	46	1400	330	1200	NS
MW-1B	05/09/95	518.05	10.58	10.58	507.47	4100	9.1	47	26	30	NS
MW-1B	08/21/95	518.05	9.34	9.34	508.71	4000	9.6	110	120	270	98
MW-1B	10/20/95	518.05	9.83	9.83	508.22	9300	35	1300	370	1300	NS
MW-1B	02/07/96	518.05	7.85	SD	510.20	8900	33	700	110	360	NS
MW-1B	04/30/96	518.05	8.02	8.02	510.03	5500	17	460	120	400	NS
MW-1B	08/14/96	518.05	8.66	SD	509.39	9000	<5	260	120	320	<300
MW-1B	11/22/96	518.05	8.70	SD	509.35	560000	56	2400	1600	5500	<3000
MW-1B	02/14/97	518.05	7.75	SD	510.30	4600	5.2	110	72	210	<300
MW-1B	05/23/97	518.05	9.05	SD	509.00	34000	75	1700	590	2100	1800
MW-1B	07/25/97	518.05	9.37	9.37	508.68	39000	250	5200	1600	5900	<800
MW-1B	10/31/97	518.05	9.29	9.29	508.76	36000	130	2600	1200	4800	<800
MW-2	04/02/92	518.29	10.89	10.89	507.40	ND	ND	ND	ND	ND	NS
MW-2	01/02/92	518.29	11.96	11.96	506.33	ND	ND	ND	ND	ND	NS
MW-2	07/21/92	518.29	11.55	11.55	506.74	NS	NS	NS	NS	NS	NS
MW-2	10/09/92	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-2	01/11/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-2	05/05/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-2	08/09/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS

TOC = Top of Casing Elevation, Feet.
DTW = Depth to Water, feet below TOC.
DTP = Depth to Product, feet below TOC.
GWE = Groundwater Elevation, feet.
TPHg = Total Petroleum Hydrocarbons as Gasoline, ug/l.
MTBE = Methyl-tert-butylether, ug/l.

Benzene, Toluene, Ethylbenzene, and Xylenes are measured in ug/l.
ug/l = micrograms/liter
mg/l = miligrams/liter
< = Less than the specified detection limit.
ND = Not Detected
NM = Not Measured
NS = Not Sampled
SD = Sheen Detected

Table 1-p. 3
Groundwater Elevation Data and Analytical Results
930 Springtown Blvd., Livermore, CA

WELL	SDATE	TOC	DTW	DTP	GWE	TPHg	Benzene	Toluene	Ebenzene	Xylenes	MtBE
MW-2	10/14/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-2	01/24/94	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-2	05/31/94	518.29	10.37	10.37	507.92	NS	NS	NS	NS	NS	NS
MW-2	08/31/94	518.29	11.16	11.16	507.13	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-2	11/02/94	518.29	11.07	11.07	507.22	NS	NS	NS	NS	NS	NS
MW-2	02/20/95	518.29	9.66	9.66	508.63	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-2	05/09/95	518.29	10.14	10.14	508.15	NS	NS	NS	NS	NS	NS
MW-2	08/21/95	518.29	9.58	9.58	508.71	<50	<0.5	<0.5	<0.5	<0.5	<10
MW-2	10/20/95	518.29	9.91	9.91	508.38	NS	NS	NS	NS	NS	NS
MW-2	02/07/96	518.29	8.00	8.00	510.29	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-2	04/30/96	518.29	8.21	8.21	510.08	NS	NS	NS	NS	NS	NS
MW-2	08/14/96	518.29	8.88	8.88	509.41	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-2	11/22/96	518.29	8.88	8.88	509.41	NS	NS	NS	NS	NS	NS
MW-2	02/14/97	518.29	7.92	7.92	510.37	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-2	05/23/97	518.29	9.25	9.25	509.04	NS	NS	NS	NS	NS	NS
MW-2	07/25/97	518.29	9.51	9.51	508.78	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-2	10/31/97	518.29	9.30	9.30	508.99	NS	NS	NS	NS	NS	NS
MW-3	01/02/92	519.60	12.87	12.87	506.73	340	0.4	ND	ND	ND	NS
MW-3	04/02/92	519.60	11.97	11.97	507.63	160	5	ND	0.3	0.5	NS
MW-3	07/21/92	519.60	12.60	12.60	507.00	260	1.7	<0.5	<0.5	<0.5	NS
MW-3	10/09/92	519.60	12.93	12.93	506.67	88	<0.5	<0.5	<0.5	<0.5	NS
MW-3	01/11/93	519.60	11.16	11.16	508.44	130	<0.5	<0.5	<0.5	<0.5	NS
MW-3	05/05/93	519.60	10.72	10.72	508.88	340	1.8	<0.5	1.3	<0.5	NS
MW-3	08/09/93	519.60	12.34	12.34	507.26	610	18	<0.5	2.4	0.9	NS
MW-3	10/14/93	519.60	12.71	12.71	506.89	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-3	01/24/94	519.60	12.03	12.03	507.57	320	3.5	<0.5	<0.5	<0.5	NS
MW-3	05/31/94	519.60	11.54	11.54	508.06	830	11	12	5.0	1.2	NS
MW-3	08/31/94	519.60	12.60	12.60	507.00	660	2	<0.5	1	<0.5	NS
MW-3	11/02/94	519.60	12.16	12.16	507.44	1500	260	36	34	76	NS
MW-3	02/20/95	519.60	11.05	11.05	508.55	410	1.2	1.9	1.4	2.2	NS
MW-3	05/09/95	519.60	11.97	11.97	507.63	730	23	43	21	95	NS
MW-3	08/21/95	519.60	7.60	7.60	512.00	<50	<0.5	<0.5	<0.5	<0.5	<10
MW-3	10/20/95	519.60	11.46	11.46	508.14	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-3	02/07/96	519.60	9.42	9.42	510.18	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-3	04/30/96	519.60	9.60	9.60	510.00	NS	NS	NS	NS	NS	NS

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Table 1-p. 4
Groundwater Elevation Data and Analytical Results
930 Springtown Blvd., Livermore, CA

WELL	SDATE	TOC	DTW	DTP	GWE	TPHg	Benzene	Toluene	Ebenzene	Xylenes	MtBE
MW-3	08/14/96	519.60	10.24	10.24	509.36	<50	<0.5	0.60	<0.5	<0.5	<30
MW-3	11/22/96	519.60	10.34	10.34	509.26	NS	NS	NS	NS	NS	NS
MW-3	02/14/97	519.60	9.38	9.38	510.22	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-3	05/23/97	519.60	10.67	10.67	508.93	NS	NS	NS	NS	NS	NS
MW-3	07/25/97	519.60	11.11	11.11	508.49	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-3	10/31/97	519.60	10.86	10.86	508.74	NS	NS	NS	NS	NS	NS
MW-4	01/02/92	518.79	12.22	12.22	506.57	ND	ND	ND	ND	ND	NS
MW-4	04/02/92	518.79	11.03	11.03	507.76	ND	ND	ND	ND	ND	NS
MW-4	07/21/92	518.79	12.36	12.36	506.43	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	10/09/92	518.79	12.40	12.40	506.39	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	01/11/93	518.79	10.72	10.72	508.07	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	05/05/93	518.79	10.21	10.21	508.58	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	08/09/93	518.79	12.25	12.25	506.54	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	10/14/93	518.79	12.58	12.58	506.21	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	01/24/94	518.79	11.72	11.72	507.07	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	05/31/94	518.79	11.29	11.29	507.50	NS	NS	NS	NS	NS	NS
MW-4	08/31/94	518.79	12.00	12.00	506.79	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	11/02/94	518.79	11.96	11.96	506.83	NS	NS	NS	NS	NS	NS
MW-4	02/20/95	518.79	10.42	10.42	508.37	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	05/09/95	518.79	11.22	11.22	507.57	NS	NS	NS	NS	NS	NS
MW-4	08/21/95	518.79	10.51	10.51	508.28	<50	<0.5	<0.5	<0.5	<0.5	<10
MW-4	10/20/95	518.79	10.86	10.86	507.93	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	02/07/96	518.79	8.93	8.93	509.86	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-4	04/30/96	518.79	9.03	9.03	509.76	NS	NS	NS	NS	NS	NS
MW-4	08/14/96	518.79	9.84	9.84	508.95	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-4	11/22/96	518.79	9.73	9.73	509.06	NS	NS	NS	NS	NS	NS
MW-4	02/14/97	518.79	8.85	8.85	509.94	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-4	05/23/97	518.79	10.15	10.15	508.64	NS	NS	NS	NS	NS	NS
MW-4	07/25/97	518.79	10.61	10.61	508.18	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-4	10/31/97	518.79	10.36	10.36	508.43	NS	NS	NS	NS	NS	NS
MW-5	01/02/92	521.19	14.56	14.56	506.63	1800	74	41	84	94	NS
MW-5	04/02/92	521.19	13.58	13.58	507.61	ND	ND	ND	ND	ND	NS
MW-5	07/21/92	521.19	13.77	13.77	507.42	1000	69	16	40	31	NS
MW-5	10/09/92	521.19	14.09	14.09	507.10	3400	890	51	110	110	NS
MW-5	01/11/93	521.19	12.24	12.24	508.95	15000	460	110	900	370	NS

TOC = Top of Casing Elevation, Feet.
DTW = Depth to Water, feet below TOC.
DTP = Depth to Product, feet below TOC.
GWE = Groundwater Elevation, feet.
TPHg = Total Petroleum Hydrocarbons as Gasoline, ug/l.
MTBE = Methyl-tert-butylether, ug/l.

Benzene, Toluene, Ethylbenzene, and Xylenes are measured in ug/l.
ug/l = micrograms/liter
mg/l = miligrams/liter
< = Less than the specified detection limit.
ND = Not Detected
NM = Not Measured
NS = Not Sampled
SD = Sheen Detected

Table 1-p. 5
Groundwater Elevation Data and Analytical Results
930 Springtown Blvd., Livermore, CA

WELL	SDATE	TOC	DTW	DTP	GWE	TPHg	Benzene	Toluene	Ebenzene	Xylenes	MtBE
MW-5	05/05/93	521.19	11.90	11.90	509.29	4500	160	19	280	110	NS
MW-5	08/09/93	521.19	13.35	13.35	507.84	2300	180	19	130	80	NS
MW-5	10/14/93	521.19	13.89	13.89	507.30	2200	160	27	90	64	NS
MW-5	01/24/94	521.19	13.32	13.32	507.87	2600	69	11	65	25	NS
MW-5	05/31/94	521.19	12.75	12.75	508.44	3100	130	64	140	120	NS
MW-5	08/31/94	521.19	14.34	14.34	506.85	600	20	2.9	14	7.1	NS
MW-5	11/02/94	521.19	14.22	14.22	506.97	2300	68	18	52	54	NS
MW-5	02/20/95	521.19	12.78	SD	508.41	12000	130	<30	240	138	NS
MW-5	05/09/95	521.19	13.41	13.41	507.78	2500	57	60	54	37	NS
MW-5	08/21/95	521.19	12.32	12.32	508.87	11000	91	28	140	120	<100
MW-5	10/20/95	521.19	13.28	13.28	507.91	2300	38	3.8	28	19	NS
MW-5	02/07/96	521.19	11.31	11.31	509.88	1800	35	8.1	37	20	NS
MW-5	04/30/96	521.19	11.52	11.52	509.67	NS	NS	NS	NS	NS	NS
MW-5	08/14/96	521.19	12.03	12.03	509.16	3500	130	22	170	47	71
MW-5	11/22/96	521.19	12.22	SD	508.97	3500	160	15	190	28	<200
MW-5	02/14/97	521.19	11.20	SD	509.99	2900	150	54	330	68	<300
MW-5	05/23/97	521.19	12.55	12.55	508.64	10000	170	98	380	68	<200
MW-5	07/25/97	521.19	12.93	12.93	508.26	2700	110	<0.5	33	<0.5	<30
MW-5	10/31/97	521.19	12.78	12.78	508.41	~~NS~~ 800	NS 40	NS 6.5	NS 77	NS 12	NS 31
MW-6	01/02/92	522.18	16.64	16.64	505.54	23	ND	0.3	0.6	3	NS
MW-6	04/02/92	NM	NM	NM	NM	ND	ND	ND	ND	ND	NS
MW-6	07/21/92	522.18	15.53	15.53	506.65	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-6	10/09/92	522.18	15.69	15.69	506.49	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-6	01/11/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-6	05/05/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-6	08/09/93	522.18	14.50	14.50	507.68	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-6	10/14/93	522.18	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-6	01/24/94	522.18	15.09	15.09	507.09	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-6	05/31/94	522.18	14.64	14.64	507.54	NS	NS	NS	NS	NS	NS
MW-6	08/31/94	522.18	15.32	15.32	506.86	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-6	11/02/94	522.18	15.32	15.32	506.86	NS	NS	NS	NS	NS	NS
MW-6	02/20/95	522.18	14.07	14.07	508.11	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-6	07/25/97	522.18	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-6	10/31/97	522.18	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-7	01/02/92	522.19	11.17	11.17	511.02	NS	NS	NS	NS	NS	NS

TOC = Top of Casing Elevation, Feet.
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GWE = Groundwater Elevation, feet.
TPHg = Total Petroleum Hydrocarbons as Gasoline, ug/l.
MTBE = Methyl-tert-butylether, ug/l.

Benzene, Toluene, Ethylbenzene, and Xylenes are measured in ug/l.
ug/l = micrograms/liter
mg/l = miligrams/liter
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ND = Not Detected
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NS = Not Sampled
SD = Sheen Detected

Table 1-p. 6
Groundwater Elevation Data and Analytical Results
930 Springtown Blvd., Livermore, CA

WELL	SDATE	TOC	DTW	DTP	GWE	TPHg	Benzene	Toluene	Ebenzene	Xylenes	MtBE
MW-7	04/02/92	522.19	10.34	10.34	511.85	ND	ND	ND	ND	ND	NS
MW-7	07/25/97	522.19	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-7	10/31/97	522.19	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-8	01/02/92	524.03	18.42	18.42	505.61	12000	32	980	200	760	NS
MW-8	04/02/92	524.03	17.39	17.39	506.64	ND	ND	ND	ND	ND	NS
MW-8	07/21/92	524.03	14.02	14.02	510.01	NS	NS	NS	NS	NS	NS
MW-8	01/11/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-8	05/05/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-8	08/09/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-8	10/09/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-8	10/14/93	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-8	01/24/94	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS
MW-8	05/31/94	524.03	19.65	19.65	504.38	NS	NS	NS	NS	NS	NS
MW-8	08/31/94	524.03	17.40	17.40	506.63	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-8	11/02/94	524.03	17.38	17.38	506.65	NS	NS	NS	NS	NS	NS
MW-8	02/20/95	524.03	15.99	15.99	508.04	<50	<0.5	<0.5	<0.5	<0.5	NS
MW-8	05/09/95	524.03	16.54	16.54	507.49	NS	NS	NS	NS	NS	NS
MW-8	08/21/95	524.03	15.77	15.77	508.26	<50	<0.5	<0.5	0.67	0.62	<10
MW-8	10/20/95	524.03	16.24	16.24	507.79	NS	NS	NS	NS	NS	NS
MW-8	02/07/96	524.03	14.42	14.42	509.61	<50	7.0	<0.5	<0.5	<0.5	NS
MW-8	04/30/96	524.03	14.65	14.65	509.38	61	9.6	<0.5	<0.5	<0.5	NS
MW-8	08/14/96	524.03	15.08	15.08	508.95	<50	0.73	<0.5	<0.5	<0.5	<30
MW-8	11/22/96	524.03	15.35	15.35	508.68	120	5.9	2.2	2.4	8.3	<30
MW-8	02/14/97	524.03	14.32	14.32	509.71	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-8	05/23/97	524.03	13.35	13.35	510.68	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-8	07/25/97	524.03	16.05	16.05	507.98	<50	<0.5	<0.5	<0.5	<0.5	<30
MW-8	10/31/97	524.03	15.86	15.86	508.17	<50	<0.5	<0.5	<0.5	<0.5	<30

TOC = Top of Casing Elevation, Feet.
DTW = Depth to Water, feet below TOC.
DTP = Depth to Product, feet below TOC.
GWE = Groundwater Elevation, feet.
TPHg = Total Petroleum Hydrocarbons as Gasoline, ug/l.
MTBE = Methyl-tert-butylether, ug/l.

Benzene, Toluene, Ethylbenzene, and Xylenes are measured in ug/l.
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mg/l = miligrams/liter
< = Less than the specified detection limit.
ND = Not Detected
NM = Not Measured
NS = Not Sampled
SD = Sheen Detected

VOC Analytical

ANALYTICAL REPORT

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

LOG NO: G97-07-601

Received: 29 JUL 97

Mailed: AUG 11 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-A	07/25/97	08/01/97	1	440	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
2*MW-B	07/25/97	08/04/97	25	39000	250	5200	1600	<800	5900	C6-C12
3*MW-1	07/25/97	08/04/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
4*MW-2	07/25/97	08/01/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
5*MW-3	07/25/97	08/01/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
6*MW-4	07/25/97	08/01/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12
7*MW-5	07/25/97	08/01/97	1	2700	110	<0.5	33	<30	<0.5	C6-C12
8*MW-8	07/25/97	08/02/97	1	<50	<0.5	<0.5	<0.5	<30	<0.5	C6-C12

Ms. Karen Petryna
930 Springtown Blvd.
Livermore, CA

BCA

VOC Analytical

ANALYTICAL REPORT

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

LOG NO: G97-07-601

Received: 29 JUL 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 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	
9*EB	07/25/97	08/02/97	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.

ELAP
ACA

: ORDER PLACED FOR CLIENT: Texaco Environmental Services 9707601 :
: VOC ANALYTICAL : GLEN LAB : 13:21:44 11 AUG 1997 - P. 1 :
==========

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9707601*1	MW-A	GAS.MTBE.TESNC	08.01.97	8015M.TX	536-44	9711065	8866
9707601*2	MW-B	GAS.MTBE.TESNC	08.04.97	8015M.TX	536-44	9711066	6843
9707601*3	MW-1	GAS.MTBE.TESNC	08.04.97	8015M.TX	536-44	9711065	8866
9707601*4	MW-2	GAS.MTBE.TESNC	08.01.97	8015M.TX	536-44	9711065	8866
9707601*5	MW-3	GAS.MTBE.TESNC	08.01.97	8015M.TX	536-44	9711065	8866
9707601*6	MW-4	GAS.MTBE.TESNC	08.01.97	8015M.TX	536-44	9711065	8866
9707601*7	MW-5	GAS.MTBE.TESNC	08.01.97	8015M.TX	536-44	9711065	8866
9707601*8	MW-8	GAS.MTBE.TESNC	08.01.97	8015M.TX	536-44	9711065	8866
9707601*9	EB	GAS.MTBE.TESNC	08.02.97	8015M.TX	536-44	9711065	8866

***

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

ID.NO = VOC 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	FLG	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG
Batch: GAS*9711065 Method: 8015M.TX - Modified 8015																						
Benzene	ug/L	0	0.5	-	99	-	-	-	76	155	-	-	-	88	-	86	-	70	153	3	25	-
Toluene	ug/L	0	0.5	-	99	-	-	-	72	121	-	-	-	89	-	87	-	69	119	2	25	-
Ethylbenzene	ug/L	0	0.5	-	97	-	-	-	72	115	-	-	-	89	-	87	-	68	116	2	25	-
Methyl-tert-butylether	ug/L	0	30	-	92	-	-	-	62	159	-	-	-	96	-	97	-	80	176	1	25	-
Total Xylene Isomers	ug/L	0	0.5	-	100	-	-	-	68	115	-	-	-	78	-	76	-	61	118	2	25	-
TPH (Gasoline Range)	ug/L	0	50	-	104	-	-	-	85	120	-	-	-	96	-	96	-	78	124	0	25	-
[a,a,a-Trifluorotoluene]	Percent	96	-	-	100	-	-	-	85	118	-	-	-	98	-	93	-	85	118	-	-	-
Batch: GAS*9711066 Method: 8015M.TX - Modified 8015																						
Benzene	ug/L	0	0.5	-	107	-	-	-	76	155	-	-	-	106	-	99	-	70	153	6	25	-
Toluene	ug/L	0	0.5	-	106	-	-	-	72	121	-	-	-	94	-	89	-	69	119	6	25	-
Ethylbenzene	ug/L	0	0.5	-	105	-	-	-	72	115	-	-	-	96	-	89	-	68	116	7	25	-
Methyl-tert-butylether	ug/L	0	30	-	91	-	-	-	62	159	-	-	-	109	-	101	-	80	176	8	25	-
Total Xylene Isomers	ug/L	0	0.5	-	108	-	-	-	68	115	-	-	-	80	-	74	-	61	118	8	25	-
TPH (Gasoline Range)	ug/L	15	50	-	107	-	-	-	85	120	-	-	-	105	-	103	-	78	124	2	25	-
[a,a,a-Trifluorotoluene]	Percent	96	-	-	96	-	-	-	85	118	-	-	-	122	Q	114	-	85	118	-	-	-

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 13:22:14 11 AUG 1997 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9707601*1							
8015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/01/97	49.6	50.0	99	
9707601*2							
8015M.TX	a,a,a-Trifluorotoluene	Re9711066	08/04/97	1440	1250	115	
9707601*3							
8015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/04/97	49.1	50.0	98	
9707601*4							
8015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/01/97	48.0	50.0	96	
9707601*5							
8015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/01/97	49.4	50.0	99	
9707601*6							
8015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/01/97	49.4	50.0	99	
9707601*7							
8015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/01/97	52.4	50.0	105	
9707601*8							
8015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/01/97	49.3	50.0	99	
9707601*9							
3015M.TX	a,a,a-Trifluorotoluene	Re9711065	08/02/97	44.9	50.0	90	

697076O1

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 Digernes

Texaco Project Coordinator: Karen Petryna

Site Name: Texaco Loc.# 618571050
Site Address: 930 Springtown Blvd. Livermore, CA
Contractor Project Number: 970725-L1
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): LAD GUCHRIST
Sampler Signature:
Date Samples Collected: 7-25-97

KEP
618571050
FKEP 9023L

Sample Number	Sample Matrix	Date Collected	Time Collected	# of Containers	Preservative	Sample Matrix	Preservative	TPH gas/BTEX / MTBE	TPH Diesel	O&G/TRPH (418.1)	TPH Ex. (C8-C36+)	VOCs 8240/624	P. Halocarbons 8010/80	P. Aromatics 8020/602	Organic Lead			Comments
MW-A		7-25	1232	3	40ml		HCL	X	-									
MW-B			1214	3	HCL			X	-									
MW-1			1115	3	VOA			X	-									
MW-2			1052	3				X	-									
MW-3			1136	3				X	-									
MW-4			1006	3				X	-									
MW-5			1155	3				X	-									
MW-8			1033	3				X	-									
EB			1020	3				X			-							

Relinquished by: (Signature)	Date: 7/29/97	Time: 1245	Received by: (Signature) John Van Ripsel
Relinquished by: (Signature) J. Van Ripsel	Date:	Time:	Received by: (Signature) Flynn
Relinquished by: (Signature) Flynn	Date: 7/30/97	Time:	Received by: (Signature) Sharon Malone
Method of Shipment: EB MAIL / DEL. # 19276			Lab Comments:

Date: 7/29/97 Time: 1245
Date: 7/29/97 Time:
Date: 7/31/97 Time: 0800

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

ANALYTICAL REPORT

Our Quality Control Is Your Quality Assurance

LOG NO: G97-11-027

Received: 03 NOV 97

Mailed: NOV 14 1997

Ms. Rebecca Digerness
Texaco Refining and Marketing
108 Cutting Boulevard
Richmond, CA 94804

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

LOG NO	11-027-1	11-027-2	11-027-3
DATE SAMPLED	31 OCT 97	31 OCT 97	31 OCT 97
SAMPLE DESCRIPTION	MW-A	MW-B	MW-5
AQUEOUS			
GRO (8015M.TX)			
Date Analyzed	11/11/97	11/08/97	11/11/97
Dilution Factor, Times	1	25	1
Benzene, ug/L	21	130	40
Toluene, ug/L	48	2600	6.8
Ethylbenzene, ug/L	200	1200	77
Methyl-tert-butylether, ug/L	35	<800	31
Total Xylene Isomers, ug/L	430	4800	12
Carbon Range, .	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	3700	36000	1800
Other GRO (8015M.TX)	---	---	---
Surrogates **			
a,a,a-Trifluorotoluene Rep., ug/L	58.3	1250	61.1
a,a,a-Trifluorotoluene Th., ug/L	50.0	1250	50.0

Karen Petryna
930 Springtown Blvd., Livermore
Alameda County

LOG NO: G97-11-027

Received: 03 NOV 97

Ms. Rebecca Digerness
Texaco Refining and Marketing
108 Cutting Boulevard
Richmond, CA 94804

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

LOG NO	11-027-1	11-027-2	11-027-3
DATE SAMPLED	31 OCT 97	31 OCT 97	31 OCT 97
SAMPLE DESCRIPTION	MW-A	MW-B	MW-5
AQUEOUS			
Data Review , Date	11/14/97	11/14/97	11/14/97

LOG NO: G97-11-027

Received: 03 NOV 97

Ms. Rebecca Digerness
Texaco Refining and Marketing
108 Cutting Boulevard
Richmond, CA 94804

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

LOG NO		11-027-4	
DATE SAMPLED		31 OCT 97	
SAMPLE DESCRIPTION		MW-8	
AQUEOUS			
GRO (8015M.TX)			
Date Analyzed		11/08/97	
Dilution Factor, Times		1	
Benzene, ug/L		<0.5	
Toluene, ug/L		<0.5	
Ethylbenzene, ug/L		<0.5	
Methyl-tert-butylether, ug/L		<30	
Total Xylene Isomers, ug/L		<0.5	
Carbon Range, .		C6-C12	
TPH (Gasoline Range), ug/L		<50	
Other GRO (8015M.TX)		---	
Surrogates **			
a,a,a-Trifluorotoluene Rep., ug/L		46.7	

LOG NO: G97-11-027

Received: 03 NOV 97

Ms. Rebecca Digerness
Texaco Refining and Marketing
108 Cutting Boulevard
Richmond, CA 94804

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

LOG NO		11-027-4	
DATE SAMPLED		31 OCT 97	
SAMPLE DESCRIPTION		MW-8	
AQUEOUS			
a,a,a-Trifluorotoluene Th., ug/L		50.0	
Data Review , Date		11/14/97	

LOG NO: G97-11-027

Received: 03 NOV 97

Ms. Rebecca Digerness
Texaco Refining and Marketing
108 Cutting Boulevard
Richmond, CA 94804

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

LOG NO	11-027-5	
DATE SAMPLED	31 OCT 97	
SAMPLE DESCRIPTION	EB	
AQUEOUS		
GRO (8015M.TX)		
Date Analyzed	11/08/97	
Dilution Factor, Times	1	
Benzene, ug/L	<0.5	
Toluene, ug/L	<0.5	
Ethylbenzene, ug/L	<0.5	
Methyl-tert-butylether, ug/L	<30	
Total Xylene Isomers, ug/L	<0.5	
Carbon Range, .	C6-C12	
TPH (Gasoline Range), ug/L	<50	
Other GRO (8015M.TX)	---	
Surrogates **		
a,a,a-Trifluorotoluene Rep., ug/L	46.3	

LOG NO: G97-11-027

Received: 03 NOV 97

Ms. Rebecca Digerness
Texaco Refining and Marketing
108 Cutting Boulevard
Richmond, CA 94804

Purchase Order: 94-1446346+4370

Requisition: 618571050
Project: FKEP9023L

REPORT OF ANALYTICAL RESULTS

LOG NO		11-027-5	
DATE SAMPLED		31 OCT 97	
SAMPLE DESCRIPTION		EB	
AQUEOUS			
a,a,a-Trifluorotoluene Th., ug/L		50.0	
Data Review , Date		11/14/97	

Greta Galoustian, Laboratory Director

: ORDER PLACED FOR CLIENT: Texaco Refining and Marketing 9711027 :
: VOC ANALYTICAL : GLEN LAB : 11:14:43 14 NOV 1997 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9711027*1	MW-A	GAS.MTBE.TESNC	11.11.97	8015M.TX	536-23	975158	7424
		DATA.REVIEW	11.14.97				7524
9711027*2	MW-B	GAS.MTBE.TESNC	11.08.97	8015M.TX	536-23	975157	7424
		DATA.REVIEW	11.14.97				7524
9711027*3	MW-5	GAS.MTBE.TESNC	11.11.97	8015M.TX	536-23	975159	7424
		DATA.REVIEW	11.14.97				7524
9711027*4	MW-8	GAS.MTBE.TESNC	11.08.97	8015M.TX	536-23	975157	7424
		DATA.REVIEW	11.14.97				7524
9711027*5	EB	GAS.MTBE.TESNC	11.08.97	8015M.TX	536-23	975157	7424
		DATA.REVIEW	11.14.97				7524

***

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

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

VOC ANALYTICAL, GLENDALE
QC REPORT FOR 9711027
DATE PRINTED: 14 NOV 1997

AQUEOUS SAMPLES

		------ METHOD BLANK ------			---------- LAB CONTROL ----------								---------- MATRIX QC ----------							
	UNITS	RESULT	RDL	FLG	LCS %REC	FLG	LCSD %REC	FLG	LCL	UCL	RPD	RPD UCL	RPD FLG	MS %REC	FLG	MSD %REC	FLG	LCL	UCL	RPD	RPD UCL	RPD FLG
Batch: GAS*975157 Method: 8015M.TX - Modified 8015																						
Benzene	ug/L	0	0.5	-	94	-	-	-	76	155	-	-	-	73	-	82	-	70	153	12	25	-
Toluene	ug/L	0	0.5	-	95	-	-	-	72	121	-	-	-	73	-	76	-	69	119	4	25	-
Ethylbenzene	ug/L	0	0.5	-	95	-	-	-	72	115	-	-	-	78	-	79	-	68	116	1	25	-
Methyl-tert-butylether	ug/L	2.9	30	-	83	-	-	-	62	159	-	-	-	130	-	136	-	80	176	4	25	-
Total Xylene Isomers	ug/L	0	0.5	-	99	-	-	-	68	115	-	-	-	71	-	73	-	61	118	2	25	-
TPH (Gasoline Range)	ug/L	0	50	-	95	-	-	-	85	120	-	-	-	95	-	90	-	78	124	5	25	-
[a,a,a-Trifluorotoluene]	Percent	100	-	-	99	-	-	-	85	118	-	-	-	106	-	114	-	85	118	-	-	-
Batch: GAS*975158 Method: 8015M.TX - Modified 8015																						
Benzene	ug/L	0	0.5	-	92	-	-	-	76	155	-	-	-	70	-	77	-	70	153	9	25	-
Toluene	ug/L	0	0.5	-	93	-	-	-	72	121	-	-	-	70	-	72	-	69	119	2	25	-
Ethylbenzene	ug/L	0	0.5	-	93	-	-	-	72	115	-	-	-	79	-	78	-	68	116	1	25	-
Methyl-tert-butylether	ug/L	0	30	-	84	-	-	-	62	159	-	-	-	120	-	127	-	80	176	6	25	-
Total Xylene Isomers	ug/L	0.31	0.5	-	97	-	-	-	68	115	-	-	-	70	-	71	-	61	118	0	25	-
TPH (Gasoline Range)	ug/L	0	50	-	97	-	-	-	85	120	-	-	-	95	-	95	-	78	124	1	25	-
[a,a,a-Trifluorotoluene]	Percent	99	-	-	99	-	-	-	85	118	-	-	-	101	-	101	-	85	118	-	-	-
Batch: GAS*975159 Method: 8015M.TX - Modified 8015																						
Benzene	ug/L	0	0.5	-	86	-	-	-	76	155	-	-	-	79	-	72	-	70	153	9	25	-
Toluene	ug/L	0	0.5	-	88	-	-	-	72	121	-	-	-	73	-	73	-	69	119	0	25	-
Ethylbenzene	ug/L	0	0.5	-	87	-	-	-	72	115	-	-	-	77	-	80	-	68	116	4	25	-
Methyl-tert-butylether	ug/L	0	30	-	99	-	-	-	62	159	-	-	-	131	-	131	-	80	176	0	25	-
Total Xylene Isomers	ug/L	0	0.5	-	92	-	-	-	68	115	-	-	-	70	-	72	-	61	118	3	25	-
TPH (Gasoline Range)	ug/L	0	50	-	93	-	-	-	85	120	-	-	-	93	-	94	-	78	124	1	25	-
[a,a,a-Trifluorotoluene]	Percent	98	-	-	90	-	-	-	85	118	-	-	-	107	-	101	-	85	118	-	-	-

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 11:14:28 14 NOV 1997 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9711027*1							
8015M.TX	a,a,a-Trifluorotoluene	Re975158	11/11/97	58.3	50.0	117	
9711027*2							
8015M.TX	a,a,a-Trifluorotoluene	Re975157	11/08/97	1250	1250	100	
9711027*3							
8015M.TX	a,a,a-Trifluorotoluene	Re975159	11/11/97	61.1	50.0	122	
9711027*4							
8015M.TX	a,a,a-Trifluorotoluene	Re975157	11/08/97	46.7	50.0	93	
9711027*5							
8015M.TX	a,a,a-Trifluorotoluene	Re975157	11/08/97	46.3	50.0	93	

Chain-of-Custody

Page 1 of 1

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

Forward Results to the Attention of Rebecca Digeness

Texaco Project Coordinator: Karen Petryna

Site Name: Texaco Loc.# 618571050
Site Address: 930 Springtown Blvd. Livermore, CA
Contractor Project Number: 971031-F2
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)
Sampler (PRINT NAME): Tim Graf
Sampler Signature: Tim Graf
Date Samples Collected: 10/31/97

Sample ID	Field Point Name	Collection Date/Time	# Containers	Sample Type	Preservation	Matrix	TPH gas/BTEX	TPH Diesel	O&G/TRPH (418.1)	TPH Ex. (C8-C36+)	VOCs 8240/624	P. Halocarbons 8010/60	P. Aromatics 8020/602	Organic Lead			Comments
MW-A		10/31 - 1505	3			W	HCl	X									
MW-B		- 1446	3					X									
MW-5		- 1410	3					X									
MW-8		- 1340	3					X									
EB		10/31 - 1345	3			W	HCl	X									

KEP
618571050
FKEP9023
Alameda

Relinquished by: (Signature) Tim Graf — Date: 11/3/97 — Time: 11:35
Relinquished by: (Signature) — Date: — Time:
Relinquished by: (Signature) — Date: — Time:
Method of Shipment:

Received by: (Signature) Monica Martin — Date: 11/3/97 — Time: 11:35
Received by: (Signature) — Date: — Time:
Received by: (Signature) — Date: — Time:
Lab Comments:

P:\GWMP\FORMS\TEX-COC.XLS

930 Springtown
Livermore

Well Gauging Data

Project Name: TEX #6185710 50
Project Number: 970725-L1

Date: 7-25-97
Recorded By: LAD

Well ID	TOC Elev.	DTB (ft. TOC)	Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
MW-A		16.44	2.0		11.56		
MW-B		21.32	2.0		9.29		
MW-1		25.36	4.0		11.74		
MW-2		22.60	4.0		9.30		
MW-3		24.49	4.0		10.86		
MW-5		21.35	2.0		12.78		
MW-8		24.10	4.0		15.86		
MW-4		24.95	3.0		10.36		

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

TEXACO WELL MONITORING DATA SHEET

Project #: 970725-C1	Texaco ID#: 6185710S0
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-A	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 16.44	Depth to Water: 11.56
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: DISPOS. BAILER

Sampling Method: S.S. Bailer / Teflon Bailer / Extraction Port / Other: DISPOS. BAILER

0.8 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 2.4 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1220	68.0	7.8	1100	>200.	1	
1223	62.8	7.5	1200.	>200	2	
1226	62.6	7.4	1200	>200.	3	

Did well dewater? Yes (No) Gallons actually evacuated: 3

Sampling Time: 1232 Sampling Date: 7-25-97

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 #: 970725-LJ	Texaco ID#: 618571050
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-B	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 21.32	Depth to Water: 9.29
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: _____

1.9 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 5.7 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1202	69.0	7.1	1600.	>200.	2.	ODOR
1207	64.8	7.0	1600.	>200	4.	
1210	64.6	7.1	1600	>200	6.	

Did well dewater? Yes (No) Gallons actually evacuated: 6.

Sampling Time: 1214 Sampling Date: 7-25-97

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 #: 970725-L1	Texaco ID#: 6185710 50
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 25.36	Depth to Water: 11.74
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 X
- Extraction Pump
- Other: _____

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

8.9 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 26.7 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1107	70.6	7.0	1900.	7200.	9.	
1109	69.4	6.9	2000.	7200.	18.	
1111	69.2	6.8	2000.	7200.	27.	

Did well dewater? Yes (No) Gallons actually evacuated: 27

Sampling Time: 1115 Sampling Date: 7-25-97

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 #: 970725-L1	Texaco ID#: 6185710 50
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 22.60	Depth to Water: 9.30
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: ___

8.6 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 26.4 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1044	70.8	7.1	1600.	>200.	9.	
1046	66.6	7.0	1700.	>200.	18.	
1048	66.0	7.0	1700.	>200.	27.	

Did well dewater? Yes (No) Gallons actually evacuated: 27

Sampling Time: 1052 Sampling Date: 7-25-97

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 #: 970725-L1	Texaco ID#: 6185710 50
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 24.49	Depth to Water: 10.86
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 X
- Extraction Pump
- Other: _____

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

8.9 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 26.7 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1127	726	7.0	2200.	>200	9.	
1129	~~722~~ 728	7.0	2000.	>200.	18.	
1131	720	6.9	2000.	>200.	27.	

Did well dewater? Yes (No) Gallons actually evacuated: 27

Sampling Time: 1136 Sampling Date: 7-25-97

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 #: 970725-L1	Texaco ID#: 618571050
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-4	Well Diameter: ~~2~~ (3) 4 6 8 ___
Total Well Depth: 24.95	Depth to Water: 10.36
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: _____

~~2.35~~ 5.4 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = ~~6.9~~ 16.2 Gals. (Calculated Volume)

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
949	68.0	7.1	1500.	138.	~~3.6~~	
955	66.6	7.0	1600	62.	~~5.12~~	
1001	67.2	7.1	1600.	27.	~~7.17~~	

Did well dewater? Yes (No) Gallons actually evacuated: 17.

Sampling Time: 1006 Sampling Date: 7-25-97

Sample I.D.: MW-4 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 #: 970725-L1	Texaco ID#: 618571050
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 21.35	Depth to Water: 12.78
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 (X) — Teflon Bailer — Middleburg — Electric Submersible — Extraction Pump — Other: ___

Sampling Method: S.S. Bailer (X) — Teflon Bailer — Extraction Port — Other: ___

1.4 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 4.2 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1147	68.0	7.2	1800.	>200.	2.	ODOR
1149	63.8	7.2	1900.	>200	3.	
1152	63.6	7.2	1900.	>200	5.	

Did well dewater? Yes (No) Gallons actually evacuated: 5

Sampling Time: 1155 Sampling Date: 7-25-97

Sample I.D.: MW-5 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 #: 970725-L1	Texaco ID#: 618 57 1050
Sampler: LAD	Date: 7-25-97
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 24.10	Depth to Water: 15.86
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 X / Extraction Pump / Other: _____

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

5.3 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 15.9 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1026	69.4	7.1	1200.	>200.	6.	
1028	66.6	6.9	1400.	184.	11.	
1030	66.8	6.8	1500.	7200.	16.	

Did well dewater? Yes (No) Gallons actually evacuated: 16

Sampling Time: 1033 Sampling Date: 7-25-97

Sample I.D.: MW-8 Laboratory: BC Analytical

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

Equipment Blank I.D.: EB @ 1020 AFTER MW-4 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: 1680 Rogers Avenue
City, State, ZIP: San Jose, CA 95112
Phone: (408) 573-0555

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 #: 6185710 50
Address: 930 SPRINGTOWN BLVD
City, State, ZIP: LIVERMORE CA

Well I.D.	Gals.	Well I.D.	Gals.
	/		/
MW-1			/
↓	/		/
	/		/
MW-8, 12	8		/
	/		/
	/		/
	/		/
	/		/
	/		/

Total gals. _____

added rinse water 12

Total Gals. Recovered 140

Job #: 970725-C1
Date 7-25-97
Time 950
Signature: [signature]

REC'D AT: BTS
Date: 7-25-97
Time: 1700
Signature: [signature]

Well Gauging Data

Project Name: 6185710.50
Project Number: 971031-F2

Date: 10/31/97
Recorded By: TG

Well ID	TOC Elev.	DTB (ft. TOC)	Well Dia. (in.)	DTP (ft.)	DTW (ft.)	PT (ft.)	Comments
mw-A		16.35	2		11.66		
mw-B		21.58	2		9.37		
mw-1		24.55	4		11.99		
mw-2		22.46	4		9.51		
mw-3		24.50	4		11.11		
mw-4		24.63	3		10.61		
mw-5		21.10	2		12.93		
mw-8		25.15	4		16.05		

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

P:\GWMP\FORMS\TEX-WL.WK1

930 Springtown
Livermore, CA

TEXACO WELL MONITORING DATA SHEET

Project #: 971031-F2	Texaco ID#: 6185710050
Sampler: TT	Date: 10/31
Well I.D.: mw-A	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 16.35	Depth to Water: 11.66
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: ____

0.8 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 2.4 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1450	70.6	7.0	1500	>200	1.0	SLIGHT ODOR
1454	71.8	7.0	1500	>200	1.75	
1458	71.8	7.0	1500	>200	2.5	

Did well dewater? Yes (No) Gallons actually evacuated: 2.5

Sampling Time: 1505 Sampling Date: 10/31

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 #: 971031-F2	Texaco ID#: 6185 71050
Sampler: TG	Date: 10/31
Well I.D.: mw-B	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 21.58	Depth to Water: 9.37
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: ____

2.1	x	3	=	6.3 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1424	69.4	7.1	2000	>200	2.25	
1428	69.6	7.1	2000	>200	4.25	
1432	70.4	7.0	2000	>200	6.5	

Did well dewater? Yes (No) Gallons actually evacuated: 6.5

Sampling Time: 1440 Sampling Date: 10/31

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 #: 971031-F2	Texaco ID#: 6185711050
Sampler: TG	Date: 10/31
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 21.10	Depth to Water: 12.93
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: _____

1.4	x	3	=	4.2 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1358	70.2	7.0	1400	>200	1.5	odor
1400	69.8	6.9	1400	>200	3.0	
1402	69.8	7.0	1500	>200	4.25	

Did well dewater? Yes (No)	Gallons actually evacuated: 4.25
Sampling Time: 1410	Sampling Date: 10/31
Sample I.D.: MW-5	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 #: 971031-F2	Texaco ID#: 6185 71050
Sampler: TC	Date: 10/31
Well I.D.: mw-8	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 25.15	Depth to Water: 16.05
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 x
- Extraction Pump
- Other: _____

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

6.0 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 18.0 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Color/Odor
1329	67.0	7.1	2200	>200	6	
1330	67.0	7.0	2200	>200	12	
1331	66.4	7.0	2000	68	18	

Did well dewater? Yes (No) Gallons actually evacuated: 18.0

Sampling Time: 1340 Sampling Date: 10/31

Sample I.D.: mw-8 Laboratory: BC Analytical

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

Equipment Blank I.D.: EB @ 1345 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 #: 618571050
Address: 930 SPRINGTOWN
City, State, ZIP: LIVERMORE, CA

Well I.D.	Gals.	Well I.D.	Gals.
PURGE	1		1
WATER	31.25		1
	1		1
	1		1
	1		1
	1		1
	1		1
	1		1
	1		1
	1		1

Total gals. 31.25

added rinse water 5.0

Total Gals. Recovered 36.25

Job #: 971031-F2
Date 10/31/97
Time 1505
Signature: Tim Hanf

REC'D AT: BTS
Date: 10/31/97
Time: 1600
Signature: Tim Hanf

QUARTERLY SUMMARY REPORT

Former Texaco Service Station/Current Seven-Eleven Store
930 Springtown, Livermore, California
Alameda County
Fourth Quarter 1997

HISTORY OF INVESTIGATIVE AND REMEDIAL ACTIONS

Subsurface investigation was initiated in September, 1984 with the installation of two groundwater monitoring wells (MW-1A and MW-1B). 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. A work plan was submitted to conduct Risk Based Corrective Action analysis in the third quarter of 1997. The analysis was performed and a report was submitted to Alameda County during the fourth quarter of 1997 along with an additional correspondence detailing the input parameters for the analysis.

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 not fully defined.

WATER WELL SURVEY

Based on the water well survey conducted at the Department of Water Resources on May 19, 1997, there is only one water producing well within 1/2-mile of the site. An irrigation well is located approximately 650-feet north of the site. The predominant ground water flow direction is to the northwest.

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 will proceed. Based on the results of the RBCA analysis, Texaco will evaluate whether to obtain more vadose zone soil samples or accept a conditional closure and produce a Risk Management Plan.

PERMITS

A private access agreement is in effect with the Southland Corporation.

CONTACTS

TRMI EH&S (Texaco)	Karen Petryna Project Manager (510) 236-9139
Property Owner	Bob DeNinno Environmental Manager Southland Corporation (206) 251-9155
Lead Regulatory Agency	Eva Chu Alameda County Department of Environmental Health (510) 567-6762

930qsr.974