

**Hazardous Waste Management Permit
6NYCRR Part 373
NYSDEC ID#3-1330-48/3-0
EPA ID#091894899**

**POST-CLOSURE PERMIT
1995 ANNUAL REPORT
March 28, 1996**

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NYSDEC

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TABLE OF CONTENTS

INTRODUCTION 1

GROUNDWATER MONITORING 1

ANALYSES OF THE GROUNDWATER SAMPLES..... 2

POST-CLOSURE CARE INSPECTIONS 3

POST-CLOSURE COST ESTIMATE..... 3

Groundwater Elevations and Well DepthsATTACHMENT I

Summary Tables of the Analytical ResultsATTACHMENT II

Quarterly Analytical Results for Each WellATTACHMENT III

Post-Closure Cost Estimate ATTACHMENT IV

INTRODUCTION

This annual report is being submitted as required by the 6NYCRR PART 373 DEC Hazardous Waste Management Permit #3-1330-00048/3-0 (Post Closure Permit). The Permit requires quarterly monitoring of the well network. The monitoring in 1995 completed the fifth year of the required twenty-three (23) years.

Quarterly monitoring reports were submitted to the NYSDEC and the U.S. EPA as required by the Permit. The first, second, third and fourth quarter reports were submitted on April 12, 1995, August 14, 1995, December 11, 1995 and February 22, 1996, respectively. Each report contained a narrative describing the groundwater monitoring and other related activities conducted during the quarter; groundwater elevation and well depth information in tabular form; comparison of the analytical results with the Groundwater Protection Concentrations; the Groundwater Sampling and Inspection Logs; the analytical data from the laboratory; and the Post-closure Care Field Inspection Log.

GROUNDWATER MONITORING

Groundwater monitoring was conducted on the following dates: January 30, 1995 through February 2, 1995 for the first quarter; May 22, 1995 through May 25, 1995 for the second quarter; August 21, 1995 through August 24, 1995 for the third quarter; and October 26, 1995 through October 31, 1995 for the fourth quarter. The groundwater level, well depth and PID meter readings were taken at all wells except TRCB-1. The construction of this well prohibits measurement of water level and well depth. The 1995 groundwater elevations and well depths are presented in ATTACHMENT I. Temperature, pH, and specific conductance measurements were taken and recorded for each well from which a sample was collected. Field blanks were poured at each group of wells and were retained until the groundwater samples were analyzed. The field blanks were discarded without being analyzed since no unusual results were obtained. One (1) trip blank was used per day per cooler. One (1) blind duplicate sample was collected during each quarter. UL-1, the upgradient well, had insufficient water to collect samples in the second and third quarters so UL-2 was used as a substitute. UL-1 was sampled in the first and fourth quarters.

During the field monitoring, a sheen was observed on standing water in the field between well UC-1A and wells DL-7A and DL-7B at the Recreation Area. The water had a musty stale odor rather than a chemical or petroleum odor. The sheen broke into plates when disturbed. Water samples were collected from two (2) locations and were submitted to the laboratory for analysis. The analytical results from these samples are discussed below (see ANALYSES OF THE GROUNDWATER SAMPLES). Photographs were taken to document the sheen.

Monitoring wells TF-7, TF-18 and TF-22 at the Tank Farm were sampled in conjunction with the facility's Major Petroleum Facility License (#03-2780) and the groundwater remediation activities at the Tank Farm. The Post Closure Permit requires that all information obtained from these wells

be reported in the quarterly reports. TF-7 was sampled four (4) times, TF-18 was sampled seven (7) times and TF-22 was sampled twelve (12) times in 1995.

ANALYSES OF THE GROUNDWATER SAMPLES

Groundwater samples from the required monitoring wells were analyzed using EPA Method 8010 for halogenated volatile organics, EPA Method 8020 for aromatic volatile organics and EPA Method 7421 for lead during all sampling events. Envirotest Laboratories in Newburgh, NY conducted the analyses for all four (4) quarters.

ATTACHMENT II contains a summary table of the volatile organics analytical results. The summary table compares the total concentration of volatile organics to the concentration of volatile organics that exceed the Groundwater Protection Concentrations (GPC). DC-1 had the highest total concentration of volatile organics in every sampling period, ranging from 65.5 micrograms/liter (ppb) in the fourth quarter to 138.5 ppb in the first quarter. The total volatile organics concentration never exceeded 35 ppb for any other well during any sampling event. The summary table also compares the total number of constituents detected to the number of constituents with concentrations exceeding the respective GPC. Eight (8) of the seventeen (17) wells had at least one (1) constituent concentration that exceeded the respective GPC during at least one (1) sampling event. These wells are DL-1, DL-3, DL-6, DL-8, OR-2, DB-8A, UC-1A and DC-1. Only one (1) constituent was detected at a level below its respective GPC for only one (1) quarter in each of the following wells: OS-2, DC-2, TRCB-1. In DB-17, one (1) constituent was detected in the second quarter and two (2) constituents were detected in the fourth quarter, with all concentrations below the respective GPC. During the fourth quarter, methylene chloride was detected below 1 ppb in nine (9) of the seventeen (17) wells. It was the only constituent detected in five (5) of the wells including the upgradient well, UI-1. Methylene chloride was not detected in any of the wells during the first, second and third quarter monitoring events. Therefore, it is believed that the presence of methylene chloride in the fourth quarter samples was a laboratory artifact and was not present in the groundwater. Based on this assumption, no constituents were detected in wells UL-1/UL-2, DB-6A, TF-5, TF-9A and TF-23 during any of the sampling events. The results of the quarterly sampling for each well are presented in ATTACHMENT III.

During the first quarter monitoring event, two (2) surface water samples were collected from standing water at the Recreation Area (see GROUNDWATER MONITORING above). These samples were analyzed using EPA Method 8010 for halogenated volatile organics and EPA Method 8020 for aromatic volatile organics. No constituents were detected in either sample. Based on these results and the platy nature of the sheen, it is assumed that the sheen is biogenic and is unrelated to the former activities at Recreation Area.

During the past five (5) years, the lead levels have been inconsistent in the majority of the well samples. In an effort to determine if the lead concentrations are actual dissolved lead or are a result

of the turbidity of the samples, two (2) lead samples from each well were collected and analyzed during each monitoring event. The first sample was preserved in the field and analyzed as sampled. The second sample was filtered and preserved in the laboratory prior to analysis. Thus, the first sample, (unfiltered) represents both dissolved lead and lead adsorbed to the sediment in the sample whereas the second sample (filtered) represent only dissolved lead.

ATTACHMENT II contains a summary table of the lead results. Although seven (7), ten (10) eleven (11) and six (6) wells in the first, second, third and fourth quarters, respectively, had lead concentrations of the unfiltered samples exceeding the GPC of 25 ppb, none of the filtered samples exceed the GPC. The highest concentration in a filtered sample was 3.3 ppb and forty-five (45) of the sixty-six (66) filtered samples were reported at the detection limit. These results suggest the lead concentrations in the unfiltered samples are associated with sample turbidity and do not reflect dissolved lead in the groundwater.

POST-CLOSURE CARE INSPECTIONS

The quarterly post-closure care inspections of the former sludge lagoon area were conducted on February 1, 1995, May 24, 1995, August 29, 1995 and October 18, 1995. No major deficiencies were observed.

POST-CLOSURE COST ESTIMATE

The post-closure cost estimate has been updated from the 1995 estimate. The costs of the analytical services are based on the cost estimate for the first quarter sampling event for 1996. Thus, the inflation factor was not applied to the analytical costs since they are in 1996 dollars. An inflation factor of 1.025 was applied to the other 1995 costs figures. The annual cost was multiplied by eighteen (18) to reflect the remaining eighteen (18) years of monitoring required by the permit. The cost of the installation of the additional wells and piezometers at the Recreation Area was added as one-time costs to the eighteen (18) year monitoring and maintenance costs. The total post-closure cost estimate is \$1,236,529. The details of post-closure care cost estimate are presented in ATTACHMENT IV.

TEXACO RESEARCH & DEVELOPMENT
BEACON, NEW YORK

HAZARDOUS WASTE MANAGEMENT PERMIT
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ATTACHMENT I

1995 GROUNDWATER ELEVATIONS
AND WELL DEPTHS
RECREATION AREA AND TANK FARM

**TEXACO RESEARCH & DEVELOPMENT
BEACON, NEW YORK**

**1995 GROUNDWATER LEVELS AT THE RECREATION AREA
AND TANK FARM**

WELL I.D.	TOP OF CASING ELEVATION	FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
		FIELD DATA	GRNDWTR ELEV.	FIELD DATA	GRNDWTR ELEV.	FIELD DATA	GRNDWTR ELEV.	FIELD DATA	GRNDWTR ELEV.
UL-1	312.27	17.42	294.85	DRY	-----	DRY	-----	25.85	286.42
DL-1	277.18	3.96	273.22	9.90	267.28	11.87	265.31	4.37	272.81
DL-2	277.24	3.52	273.72	9.93	267.31	13.35	263.89	6.00	271.24
DL-3	278.02	5.04	272.98	11.34	266.68	12.79	265.23	5.91	272.11
DL-4	280.12	4.52	275.60	12.50	267.62	13.51	266.61	6.28	273.84
DL-6	265.52	12.30	253.22	14.22	251.30	14.80	250.72	12.90	252.62
DL-7A	246.32	4.82	241.50	9.12	237.20	13.90	232.42	16.26	230.06
DL-7B	245.53	4.63	240.90	9.82	235.71	14.22	231.31	DRY	-----
DL-8	239.59	2.90	236.69	7.04	232.55	11.98	227.61	11.06	228.53
OR-1	262.20	1.83	260.37	6.78	255.42	12.60	249.60	7.34	254.86
OS-1	262.82	4.80	258.02	7.93	254.89	13.19	249.63	7.82	255.00
OR-2	222.25	5.90	216.35	8.48	213.77	14.82	207.43	11.17	211.08
OS-2	222.00	5.48	216.52	5.73	216.27	9.86	212.14	5.63	216.37
OR-3	233.15	19.74	213.41	25.64	207.51	36.34	196.81	32.40	200.75
OS-3	233.32	2.30	231.02	4.59	228.73	9.45	223.87	0.96	232.36
OR-4	271.93	22.50	249.43	31.84	240.09	41.39	230.54	40.02	231.91
OS-4	273.79	0.00	273.79	1.00	272.79	1.85	271.94	0.00	273.79
DB-6A	235.92	10.58	225.34	11.77	224.15	14.70	221.22	11.70	224.22
DB-7A	236.90	3.04	233.86	6.80	230.10	9.22	227.68	6.14	230.76
DB-8A	232.68	6.44	226.24	7.17	225.51	9.87	222.81	7.42	225.26
DB-10A	237.42	5.02	232.40	5.52	231.90	6.41	231.01	6.26	231.16
DB-11	231.26	NM	-----	8.34	222.92	11.41	219.85	7.89	223.37
DB-12	230.73	4.74	225.99	5.40	225.33	9.72	221.01	5.58	225.15
DB-13A	237.30	10.70	226.60	12.89	224.41	DRY	-----	12.59	224.71
DB-14	243.05	9.04	234.01	11.51	231.54	17.95	225.10	19.07	223.98
DB-16	240.53	14.86	225.67	DRY	-----	DRY	-----	DRY	-----
DB-17	231.84	NM	-----	9.24	222.60	DRY	-----	8.11	223.73
DB-18	231.51	2.45	229.06	3.64	227.87	7.90	223.61	2.89	228.62
DB-32	235.38	8.08	227.30	9.18	226.20	DRY	-----	9.21	226.17
UC-1A	237.62	1.88	235.74	5.22	232.40	10.20	227.42	10.54	227.08
DC-1	229.30	2.50	226.80	4.03	225.27	6.30	223.00	4.29	225.01
DC-2	229.00	1.14	227.86	3.10	225.90	6.30	222.70	3.50	225.50
TF-5	207.63	5.64	201.99	7.15	200.48	8.61	199.02	6.43	201.20
TF-9A	204.51	6.10	198.41	7.78	196.73	8.14	196.37	6.78	197.73
TF-23	207.21	7.48	199.73	7.80	199.41	9.33	197.88	7.08	200.13

NM = Not Measured

Water was flowing out of the top of well OS-4 during the first and fourth quarter monitoring events.

**TEXACO RESEARCH & DEVELOPMENT
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**1995 WELL DEPTHS AT THE RECREATION AREA
AND THE TANK FARM**

Well I.D.	Original Depth (ft)	FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
		Field Data	Calculated Depth (ft)	Field Data	Calculated Depth (ft)	Field Data	Calculated Depth (ft)	Field Data	Calculated Depth (ft)
UL-1	30	31.14	29.07	31.18	29.11	31.22	29.15	31.14	29.07
DL-1	18	17.20	15.02	17.80	15.62	17.23	15.05	17.19	15.01
DL-2	25	25.86	-----	25.84	23.50	25.94	23.60	25.84	23.50
DL-3	25	25.98	23.76	25.60	23.38	26.00	23.78	26.94	24.72
DL-4	25	25.40	23.08	26.11	23.79	26.19	23.87	26.11	23.79
DL-6	16.8	17.30	14.68	17.30	14.68	17.36	14.74	17.30	14.68
DL-7A	25.5	26.02	23.50	26.02	23.50	26.18	23.66	26.00	23.48
DL-7B	17	17.07	15.04	17.08	15.05	17.14	15.11	17.09	15.06
DL-8	16	18.10	16.41	18.13	16.44	18.20	16.51	18.12	16.43
OR-1	77	75.29	75.64	75.00	75.35	77.85	78.20	75.00	75.35
OS-1	35	33.60	33.86	33.44	33.70	33.60	33.86	33.31	33.57
OR-2	48	44.26	44.59	44.30	44.63	44.40	44.73	44.39	44.72
OS-2	16	15.23	15.68	15.22	15.67	15.22	15.67	15.32	15.77
OR-3	76	76.19	76.68	73.00	73.49	76.60	77.09	72.64	73.13
OS-3	16	13.55	13.87	13.52	13.84	13.61	13.93	13.45	13.77
OR-4	83	80.22	81.08	80.30	81.16	83.69	84.55	77.58	78.44
OS-4	16	13.68	14.01	13.70	14.03	13.76	14.09	13.70	14.03
DB-6A	15.5	15.42	14.10	15.30	13.98	15.47	14.15	15.36	14.04
DB-7A	13	15.18	13.18	15.18	13.18	15.23	13.23	15.16	13.16
DB-8A	15.3	16.42	15.54	16.40	15.52	16.49	15.61	16.41	15.53
DB-10A	30	29.34	26.72	29.36	26.74	28.00	25.38	28.00	25.38
DB-11	28	NM	-----	33.36	30.88	33.44	30.96	33.11	30.63
DB-12	35	35.80	34.17	35.80	34.17	35.90	34.27	35.80	34.17
DB-13A	12.6	13.56	11.66	13.58	11.68	13.54	11.64	13.55	11.65
DB-14	32	25.18	23.33	25.15	23.30	25.21	23.36	25.15	23.30
DB-16	12.8	16.08	12.35	15.00	11.27	15.13	11.40	15.09	11.36
DB-17	6.4	NM	-----	9.24	6.06	9.30	6.12	9.24	6.06
DB-18	12	11.52	10.11	11.50	10.09	11.59	10.18	11.50	10.09
DB-32	10.5	13.02	10.54	13.10	10.62	13.19	10.71	13.10	10.62
UC-1A	18	15.84	14.12	15.84	14.12	15.91	14.19	15.83	14.11
DC-1	15	14.76	12.36	12.90	10.50	13.00	10.60	13.07	10.67
DC-2	17.5	12.90	10.90	13.69	11.69	13.69	11.69	13.61	11.61
TF-5	9	9.48	8.75	9.50	8.77	9.58	8.85	9.49	8.76
TF-9A	9	11.30	8.99	11.28	8.97	11.34	9.03	11.27	8.96
TF-23	12	12.96	11.05	12.96	11.05	12.98	11.07	12.92	11.01

NM = Not measured

* Original depth is the bottom of the well or the depth of the well point if applicable.

Field data is the measurement from the top of casing elevation to the bottom of the well.

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ATTACHMENT II

1995 SUMMARY TABLES
OF THE ANALYTICAL RESULTS FOR THE GROUNDWATER SAMPLES
FROM THE RECREATION AREA AND TANK FARM

TEXACO RESEARCH AND DEVELOPMENT BEACON, NEW YORK

1995 SUMMARY OF VOLATILE ORGANICS RESULTS FOR THE GROUNDWATER SAMPLES FROM THE RECREATION AREA AND TANK FARM

WELL I.D.	FIRST QUARTER				SECOND QUARTER			
	Concentration		Number of Constituents		Concentration		Number of Constituents	
	Total	> GPC	Detected	> GPC	Total	> GPC	Detected	> GPC
UL-1/UL-2	ND	ND	0	0	ND	ND	0	0
DL-1	2	0	1	0	6	1.6	3	1
DL-3	1.1	0	1	0	4.2	2	2	1
DL-6	17	15.5	3	2	13.1	5.5	4	1
DL-8	1.9	0.6	2	1	13.6	12.8	3	2
OR-2	4	3.3	3	2	6.9	3.4	4	2
OS-2	ND	ND	0	0	ND	ND	0	0
DB-6A	ND	ND	0	0	ND	ND	0	0
DB-8A	4.6	0	1	0	8.7	8	2	1
DB-17	NS	NS	0	0	1.4	0	1	0
UC-1A	6.7	0.6	4	1	11.2	5.2	3	1
DC-1	138.5	136.3	8	6	78.6	75.6	7	4
DC-2	0.7	0	1	0	ND	ND	0	0
TF-5	ND	ND	0	0	ND	ND	0	0
TF-9A	ND	ND	0	0	ND	ND	0	0
TF-23	ND	ND	0	0	ND	ND	0	0
TRCB1	0.6	0	1	0	ND	ND	0	0

WELL I.D.	THIRD QUARTER				FOURTH QUARTER			
	Concentration		Number of Constituents		Concentration		Number of Constituents	
	Total	> GPC	Detected	> GPC	Total	> GPC	Detected	> GPC
UL-1/UL-2	ND	ND	0	0	0.6	0	1	0
DL-1	31.5	22	6	2	2.5	0.5	2	1
DL-3	25.2	15.3	6	2	4.7	0.8	3	1
DL-6	19.2	8.4	5	1	24.6	19.6	4	2
DL-8	26.7	23.9	4	2	12.3	11.6	3	2
OR-2	3.9	2.8	4	2	6.3	2.3	4	2
OS-2	ND	ND	0	0	1.4	0	1	0
DB-6A	ND	ND	0	0	0.5	0	1	0
DB-8A	18.6	14.7	4	2	11.1	6.1	6	1
DB-17	NS	NS	0	0	2.2	0	2	0
UC-1A	15.1	9.7	3	1	10.9	5.6	4	1
DC-1	72.8	70.6	6	3	65.5	63.5	7	4
DC-2	ND	ND	0	0	0.5	0	1	0
TF-5	ND	ND	0	0	0.5	0	1	0
TF-9A	ND	ND	0	0	0.6	0	1	0
TF-23	ND	ND	0	0	ND	ND	0	0
TRCB1	ND	ND	0	0	ND	ND	0	0

GPC=Groundwater Protection Concentration; ND=None Detected; NS=Not Sampled; Concentrations=micrograms /liter(ppb).

The "Total" concentrations are sum of the detected volatile organics concentrations.

Concentrations "> GPC" are the sum of the concentrations of the constituents that exceed the GPC.

Number of constituents ">GPC" are the number of constituents that exceeded the GPC.

UL-1 was sampled in the first and fourth quarters; UL-2 was sampled in the second and third quarters.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

**1995 LEAD RESULTS FROM THE WELLS
AT THE RECREATION AREA AND TANK FARM**

WELL ID.	FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
UL-1/UL-2	12	1	2.7	2	64.8	0.8	3.1	1.3
DL-1	15.2	1.1	51.3	1.4	7.6	0.8	0.7	0.76
DL-3	3.1	1	6.7	1.4	3.8	0.8	0.55	0.74
DL-6	14.7	1	27.8	1.4	18.8	0.8	2	1.3
DL-8	25.2	1	44.7	1.4	25.5	0.8	4.7	0.56
OR-2	4.6	1.1	3.2	1.4	2	1.1	4.6	0.56
OS-2	30.5	1.1	32	1.4	65.7	1.2	21.7	0.56
DB-6A	6.1	1	30.1	1.4	54.8	0.8	5.6	0.56
DB-8A	13	1	16.4	1.4	27.1	0.8	10	0.56
DB-17	NS	NS	118	1.4	NS	NS	25.6	0.56
UC-1A	14.8	1	1.6	1.4	86	0.8	57	0.56
DC-1	233	1	125	1.4	148	0.8	28	1.3
DC-2	30.3	1	129	1.4	158	0.8	63.1	1.1
TF-5	39.4	2.8	22.8	3	67.3	1.6	18.4	0.56
TF-9A	44.6	2.7	35	3.3	27.6	0.9	90.7	0.56
TF-23	75.2	1.7	52.4	1.5	99.6	0.9	52	0.56
TRCB1	1	2	2.9	1.4	3.2	0.8	1.1	0.56

NS = Not Sampled

All concentrations are in micrograms/liter(ppb)

Concentrations in bold type exceed the Groundwater Protection Concentration of 25 ppb.

Filtered samples were filtered and preserved in the laboratory.

TEXACO RESEARCH & DEVELOPMENT
BEACON, NEW YORK

HAZARDOUS WASTE MANAGEMENT PERMIT
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ATTACHMENT III

1995
QUARTERLY ANALYTICAL RESULTS
FOR EACH WELL
AT THE RECREATION AREA AND TANK FARM

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DL-1

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	2.5	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	1.6	11	0.5
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	1.3	ND
1,2-Dichloroethene (total)	5	ND	1	1	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	11	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	2	3.4	4.7	2
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	15.2	51.3	7.6	0.7
Lead, filtered in lab	25	1.1	1.4	0.8	0.76

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DL-3

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	3.9	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	2	ND	0.8
1,2-Dichloroethane	5	ND	ND	5.9	ND
1,1-Dichloroethene	5	ND	ND	0.5	ND
1,2-Dichloroethene (total)	5	ND	ND	1.9	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	3.6	0.7
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	1.1	2.4	9.4	3.2
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	3.1	6.7	3.8	0.55
Lead, filtered in lab	25	1	1.4	0.8	0.74

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DL-6

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	8.3	5.5	8.4	12
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	0.6	ND
1,2-Dichloroethene (total)	5	ND	0.7	1.1	1.1
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	7.2	4	4.9	7.6
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	1.5	2.9	4.2	3.9
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	14.7	27.8	18.8	2
Lead, filtered in lab	25	1	1.4	0.8	1.3

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DL-8

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	0.6	4.9	8.9	4.7
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	1.7	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	1.3	7.9	15	6.9
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	0.8	1.1	0.7
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	25.2	44.7	25.5	4.7
Lead, filtered in lab	25	1	1.4	0.8	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL UL-1/UL-2

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.6
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	12	2.7	64.8	3.1
Lead, filtered in lab	25	1	2	0.8	1.3

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

UL-1 was sampled in the 1st and 4th quarters; UL-2 was sampled in the 2nd and 3rd quarters.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL OR-2

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	1.3	1.4	1.3	ND
1,2-Dichloroethane	5	ND	ND	ND	2
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	1.7	0.5	ND
1,2-Dichloropropane	0.5	2	2	1.5	2.3
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.9
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	0.7	1.8	0.6	1.1
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	4.6	3.2	2	4.6
Lead, filtered in lab	25	1.1	1.4	1.1	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL OS-2

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	1.4
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	30.5	32	65.7	21.7
Lead, filtered in lab	25	1.1	1.4	1.2	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DB-6A

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.5
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	6.1	30.1	54.8	5.6
Lead, filtered in lab	25	1	1.4	0.8	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DB-8A

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	0.7	2.9	1.9
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	0.7	2.9	1.9
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	0.7	0.6
CIS-1,3-Dichloropropene	5	ND	ND	1	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.6
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	1.3
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	0.6
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	4.6	8	14	6.1
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	13	16.4	27.1	10
Lead, filtered in lab	25	1	1.4	0.8	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DB-17

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	NS	ND	NS	0.6
Benzene	ND	NS	ND	NS	ND
Bromodichloromethane	#	NS	ND	NS	ND
Bromoform	#	NS	ND	NS	ND
Bromomethane	5	NS	ND	NS	ND
Carbon Tetrachloride	5	NS	ND	NS	ND
Chlorobenzene	5	NS	ND	NS	ND
Chloroethane	5	NS	ND	NS	ND
2-Chloroethylvinyl Ether	5	NS	ND	NS	ND
Chloroform	#	NS	ND	NS	0.6
Chloromethane	5	NS	ND	NS	ND
Dibromochloromethane	#	NS	ND	NS	ND
1,2-Dichlorobenzene	4.7	NS	ND	NS	ND
1,3-Dichlorobenzene	5	NS	ND	NS	ND
1,4-Dichlorobenzene	4.7	NS	ND	NS	ND
1,1-Dichloroethane	0.4	NS	ND	NS	ND
1,2-Dichloroethane	5	NS	ND	NS	ND
1,1-Dichloroethene	5	NS	ND	NS	ND
1,2-Dichloroethene (total)	5	NS	ND	NS	ND
1,2-Dichloropropane	0.5	NS	ND	NS	ND
CIS-1,3-Dichloropropene	5	NS	ND	NS	ND
Trans-1,3-Dichloropropene	5	NS	ND	NS	ND
Ethylbenzene	5	NS	ND	NS	ND
Methylene Chloride	4.7	NS	ND	NS	ND
1,1,2,2-Tetrachloroethane	1.8	NS	ND	NS	ND
Tetrachloroethene	5	NS	1.4	NS	1.6
Toluene	5	NS	ND	NS	ND
1,1,1-Trichloroethane	5	NS	ND	NS	ND
1,1,2-Trichloroethane	5	NS	ND	NS	ND
Trichloroethene	5	NS	ND	NS	ND
Trichlorofluoromethane	5	NS	ND	NS	ND
Vinyl Chloride	2	NS	ND	NS	ND
Xylene (Total)	5	NS	ND	NS	ND
Lead, unfiltered	25	NS	118	NS	25.6
Lead, filtered in lab	25	NS	1.4	NS	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

NS = Not Sampled

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL UC-1A

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	0.6	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	2	2.4	2.2	2.1
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.6
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	1.3	5.2	9.7	5.6
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	2.8	3.6	3.2	2.6
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	14.8	1.6	86	57
Lead, filtered in lab	25	1	1.4	0.8	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

NOTE: The fourth quarter results for UC-1A were taken from TRCB-1 due to mislabeling of samples.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DC-1

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	1	1	0.8
Benzene	ND	1.2	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	9.6	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	1	1	0.8
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	22	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	1.5	1	0.6	0.7
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	25	ND
1,2-Dichloroethene (total)	5	30	25	ND	21
1,2-Dichloropropane	0.5	ND	1.6	ND	0.8
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.6
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	1.1	0.5	0.6	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	1.1	1.5	0.6	0.6
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	72	48	45	41
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	233	125	148	28
Lead, filtered in lab	25	1	1.4	0.8	1.3

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL DC-2

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.5
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	0.7	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	30.3	129	158	63.1
Lead, filtered in lab	25	1	1.4	0.8	1.1

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL TF-5

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.5
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	39.4	22.8	67.3	18.4
Lead, filtered in lab	25	2.8	3	1.6	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL TF-9A

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	0.6
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	44.6	35	27.6	90.7
Lead, filtered in lab	25	2.7	3.3	0.9	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL TF-23

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	75.2	52.4	99.6	52
Lead, filtered in lab	25	1.7	1.5	0.9	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

**TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK**

1995 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL TRCB-1

CONSTITUENT	All concentrations are in micrograms/liter (ppb)				
	GPC*	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
Trihalomethanes (Total)	100	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	#	ND	ND	ND	ND
Bromoform	#	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7	ND	ND	ND	ND
1,1-Dichloroethane	0.4	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	ND
CIS-1,3-Dichloropropene	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylene Chloride	4.7	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	0.6	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	1	2.9	3.2	1.1
Lead, filtered in lab	25	2	1.4	0.8	0.56

*Groundwater Protection Concentration

#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.

ND = None Detected

Concentrations in bold type exceed the Groundwater Protection Concentration.

NOTE: The fourth quarter results for TRCB-1 were taken from UC-1A due to mislabeling of samples.

TEXACO RESEARCH & DEVELOPMENT
BEACON, NEW YORK

HAZARDOUS WASTE MANAGEMENT PERMIT
6NYCRR PART 373
NYSDEC ID#3-1330-48/3-0
EPA ID#091894899

ATTACHMENT IV

POST-CLOSURE COST ESTIMATE

TEXACO RESEARCH AND DEVELOPMENT - BEACON, NEW YORK

POST-CLOSURE COST ESTIMATE

February 22, 1996

GROUNDWATER MONITORING

Sampling

One two-person team for 4 sampling events
(includes travel time, mileage, expenses, equipment
cost and a brief sampling event report)
\$30,271 (1995 cost estimate) X 1.025 (inflation factor) \$31,028

Analytical services

See attached Table \$19,280

EROSION CONTROL MAINTENANCE

Miscellaneous expenses for materials and labor
\$1,081 (1995 cost estimate) X 1.025 (inflation factor) \$1,108

Subtotal \$51,389

Administration @ 10% \$5,139

Contingencies @ 20% \$10,278

TOTAL ANNUAL POST-CLOSURE COST \$66,806

POST-CLOSURE COST ESTIMATE FOR 18 YEARS \$1,202,508

ONE-TIME COSTS

Installation costs of 3 wells and 9 piezometers \$33,535

TOTAL POST-CLOSURE COST ESTIMATE \$1,236,043

Note: All costs are based on the assumption that a third party conducts all of the post closure care activities.

**TEXACO FUELS AND LUBRICANT RESEARCH DEPARTMENT
BEACON, NEW YORK**

February 22, 1996
Post-Closure Care Cost Estimate
Cost of Annual Analytical Services

	Analytical Method	Groundwater Samples	Trip Blanks	Total Samples	Unit Cost (\$)	Total Cost (\$)	Cost per Quarter
1st Qtr	8010	20	4	24	75	1800	
	8020	20	4	24	75	1800	
	7421	20	0	20	25	500	
	QA/QC	NA	NA	24	30	720	\$4,820
2nd Qtr	8010	20	4	24	75	1800	
	8020	20	4	24	75	1800	
	7421	20	0	20	25	500	
	QA/QC	NA	NA	24	30	720	\$4,820
3rd Qtr	8010	20	4	24	75	1800	
	8020	20	4	24	75	1800	
	7421	20	0	20	25	500	
	QA/QC	NA	NA	24	30	720	\$4,820
4th Qtr	8010	20	4	24	75	1800	
	8020	20	4	24	75	1800	
	7421	20	0	20	25	500	
	QA/QC	NA	NA	24	30	720	\$4,820
TOTAL =						\$19,280	

Unit costs are based on actual 1996 costs for analytical services.

Number of groundwater samples include the 19 wells listed in the permit and 1 blind well sample.