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

POST-CLOSURE PERMIT
1994 ANNUAL REPORT

February 28, 1995

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TABLE OF CONTENTS

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 1994 completed the fourth 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 May 18, 1994, July 15, 1994, October 24, 1994 and February 24, 1995, 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.

NYS DEC OPERATION AND MAINTENANCE INSPECTION

A representative of the NYS DEC conducted an Operation and Maintenance inspection of the monitoring network and sampling procedures on August 9 and 10, 1994. The inspection included observations of the sampling procedures, inspections of the wells in the monitoring network and documentation of the inspection in the form of photographs and field notes.

Except for the one procedure described below, all sampling procedures were in accordance with the Groundwater Monitoring Plan (GMP). The inspection revealed a diversion from the well depth measurement procedure as outlined in the GMP. After the probe had been lowered through the water column of one well, the tape was not properly decontaminated prior to use on the next well. This deficiency was observed during the sampling of the first set of wells and was corrected in the field during the remainder of the sampling event.

The condition of the protective casing, concrete apron, well identification and lock, well casing and top of casing reference point marking were all satisfactory for each on-site wells except TF-5. The hinge to the cover of the protective casing on TF-5 was broken allowing the cover to be opened without removing the lock. Repairs to the hinge have been completed.

Inspection of the offsite wells revealed the need for additional well maintenance and protection. The concrete aprons of OR-2 and OS-2 were cracked. The well casing and road boxes have limited locking capabilities due to their construction. The top of the well casing on OR-3 was cracked. The appropriate maintenance measures to correct the above deficiencies will be implemented in 1995.

During the inspection it was noted that the road box gaskets of the offsite wells needed to be cleaned to allow a tight seal between the cover and the road box. The suggestion that the gasket

be cleaned during each sampling event has been added to the regular monitoring procedures.

GROUNDWATER MONITORING

Groundwater monitoring was conducted on the following dates: March 2, 1994 through March 9, 1994 for the first quarter; May 9, 1994 through May 11, 1994 for the second quarter; August 9, 1994 through August 16, 1994 for the third quarter; and November 14, 1994 through November 17, 1994 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 1994 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 first, second and third quarters so UL-2 was used as a substitute. UL-1 was sampled in the fourth quarter.

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 eleven (11) times and TF-22 was sampled twelve (12) times in 1994.

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. The first quarter samples were also analyzed using EPA Method 8040 for phenols. No phenols were detected in any well. 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 58.2 micrograms/liter (ppb) in the first quarter to 75.3 ppb in the third quarter. The total volatile organics concentration never exceeded 30 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 sixteen (16) 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: DB-6A, DC-2, TF-9A and TRCB1. No constituents were detected in wells UL-1/UL2, OS-2, TF-5, and TF-23 during any of the sampling events. The results of the quarterly sampling for each well are presented in ATTACHMENT III.

The compound 1-4 dioxane was detected above the detection limit in well DB-8A by the Appendix 33 analysis during the third quarter, 1993 monitoring event. During the fourth quarter, 1993 monitoring event, 1-4 dioxane was detected at a level below the detection limit. The first quarter, 1994 sample from DB-8A inadvertently was not analyzed for the 1-4 dioxane. During the second and third quarters of 1994, the DB-8A sample was analyzed and no 1-4 dioxane was detected. Thus, as outlined in the Permit, the testing for this constituent was discontinued since it was not present in two (2) consecutive quarters.

During the past four (4) 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 the second, third and fourth quarters. 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 six (6), seven (7) and nine (9) wells in the 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 7 ppb and thirty-two (32) of the forty-six (46) filtered samples were reported at the detection limit. Thus, it appears that the dissolved lead in the groundwater is below the GPC for all wells. The unfiltered and filter analysis of the well samples will be repeated in 1995 to verify this conclusion.

POST-CLOSURE CARE INSPECTIONS

The quarterly post-closure care inspections of the former sludge lagoon area were conducted on March 31, 1994, May 27, 1994, August 11, 1994 and December 20, 1994. No major deficiencies were observed.

POST-CLOSURE COST ESTIMATE

The post-closure cost estimate has been updated from the 1994 estimate. The costs of the analytical services are based on the cost estimate for the first quarter sampling event for 1995.

Thus, the inflation factor was not applied to the analytical costs since they are in 1995 dollars. An inflation factor of 1.027 was applied to the other 1994 costs figures. The annual cost was multiplied by nineteen (19) to reflect the remaining nineteen (19) years of monitoring required by the permit. The cost of the installation of the additional wells and piezometers at the Recreation Area and the Phase II of the Building 83 RCRA Facility Investigation were added as one-time costs to the nineteen (19) year monitoring and maintenance costs. The total post-closure cost estimate is $1,305,539. The details of post-closure care cost estimate are presented in ATTACHMENT IV.

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

1994 GROUNDWATER ELEVATIONS
AND WELL DEPTHS
RECREATION AREA AND TANK FARM

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1994 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	DRY	-------	DRY	-------	DRY	-------	30.22	282.05
DL-1	277.18	2.98	274.20	5.58	271.60	11.00	266.18	9.50	267.68
DL-2	277.24	2.90	274.34	5.32	271.92	11.20	266.04	6.42	270.82
DL-3	278.02	3.82	274.20	8.12	269.90	12.40	265.62	11.66	266.36
DL-4	280.12	3.72	276.40	8.76	271.36	13.44	266.68	12.52	267.60
DL-6	265.52	10.08	255.44	13.80	251.72	14.62	250.90	14.36	251.16
DL-7A	246.32	2.92	243.40	7.18	239.14	10.40	235.92	9.11	237.21
DL-7B	245.53	3.88	241.65	6.78	238.75	11.76	233.77	9.98	235.55
DL-8	239.59	2.68	236.91	4.28	235.31	9.46	230.13	7.80	231.79
OR-1	262.20	2.02	260.18	4.28	257.92	7.42	254.78	6.30	255.90
OS-1	262.82	4.50	258.32	5.88	256.94	8.10	254.72	7.44	255.38
OR-2	222.25	7.36	214.89	6.20	216.05	9.56	212.69	7.04	215.21
OS-2	222.00	5.54	216.46	5.52	216.48	6.52	215.48	5.66	216.34
OR-3	233.15	21.90	211.25	19.52	213.63	27.06	206.09	21.50	211.65
OS-3	233.32	1.76	231.56	1.56	231.76	6.40	226.92	3.70	229.62
OR-4	271.93	26.20	245.73	29.56	242.37	35.60	236.33	32.72	239.21
OS-4	273.79	0.00	273.79	0.00	273.79	1.10	272.69	0.78	273.01
DB-6A	235.92	10.50	225.42	11.00	224.92	13.60	222.32	11.96	223.96
DB-7A	236.90	2.78	234.12	3.02	233.88	8.00	228.90	7.27	229.63
DB-8A	232.68	6.58	226.10	6.74	225.94	8.35	224.33	7.34	225.34
DB-10A	237.42	6.56	230.86	5.78	231.64	5.90	231.52	5.80	231.62
DB-12	230.73	4.50	226.23	4.84	225.89	7.54	223.19	5.50	225.23
DB-13A	237.30	10.48	226.82	12.20	225.10	13.22	224.08	13.04	224.26
DB-14	243.05	9.00	234.05	10.10	232.95	14.20	228.85	12.26	230.79
DB-16	240.53	14.80	225.73	DRY	-------	DRY	-------	DRY	-------
DB-18	231.51	2.40	229.11	2.64	228.87	6.52	224.99	3.40	228.11
DB-32	235.38	8.22	227.16	8.44	226.94	11.38	224.00	9.36	226.02
UC-1A	237.62	2.20	235.42	2.83	234.79	7.20	230.42	5.86	231.76
DC-1	229.30	3.96	225.34	3.68	225.62	4.67	224.63	4.06	225.24
DC-2	229.00	1.98	227.02	2.00	227.00	3.80	225.20	3.04	225.96
TF-5	207.63	6.08	201.55	6.10	201.53	7.48	200.15	7.30	200.33
TF-9A	204.51	6.46	198.05	6.72	197.79	7.72	196.79	7.75	196.76
TF-23	207.21	6.80	200.41	6.88	200.33	8.00	199.21	7.80	199.41

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1994 WELL DEPTHS AT THE RECREATION AREA AND THE TANK FARM

Well I.D.	Original Depth (ft)	FIRST QUARTER Field Data	FIRST QUARTER Calculated Depth (ft)	SECOND QUARTER Field Data	SECOND QUARTER Calculated Depth (ft)	THIRD QUARTER Field Data	THIRD QUARTER Calculated Depth (ft)	FOURTH QUARTER Field Data	FOURTH QUARTER Calculated Depth (ft)
UL-1	30	31.16	29.09	31.40	29.33	31.16	29.09	30.16	28.09
DL-1	18	17.20	15.02	17.16	14.98	17.20	15.02	17.20	15.02
DL-2	25	NM	-------	25.86	23.52	25.84	23.50	25.84	23.50
DL-3	25	25.92	23.70	25.94	23.72	25.94	23.72	25.92	23.70
DL-4	25	26.12	23.80	26.12	23.80	26.10	23.78	26.10	23.78
DL-6	16.8	17.30	14.68	17.30	14.68	17.34	14.72	17.30	14.68
DL-7A	25.5	26.02	23.50	17.08	14.56	26.02	23.50	26.00	23.48
DL-7B	17	17.08	15.05	26.02	23.99	17.08	15.05	17.08	15.05
DL-8	16	18.72	17.03	18.14	16.45	18.16	16.47	18.14	16.45
OR-1	77	75.22	75.57	75.20	75.55	75.04	75.39	75.26	75.61
OS-1	35	33.36	33.62	33.40	33.66	33.32	33.58	33.62	33.88
OR-2	48	44.38	44.71	44.40	44.73	45.70	46.03	44.38	44.71
OS-2	16	15.36	15.81	15.30	15.75	15.28	15.73	15.26	15.71
OR-3	76	74.80	75.29	72.92	73.41	76.60	77.09	73.00	73.49
OS-3	16	13.86	14.18	13.52	13.84	13.58	13.90	13.48	13.80
OR-4	83	79.12	79.98	78.44	79.30	80.40	81.26	78.72	79.58
OS-4	16	14.10	14.43	13.90	14.23	13.66	13.99	13.92	14.25
DB-6A	15.5	16.60	15.28	15.34	14.02	15.38	14.06	15.43	14.11
DB-7A	13	15.22	13.22	15.20	13.20	15.16	13.16	15.18	13.18
DB-8A	15.3	16.40	15.52	16.40	15.52	16.40	15.52	16.40	15.52
DB-10A	30	28.00	25.38	28.00	25.38	28.00	25.38	27.88	25.26
DB-12	35	35.80	34.17	35.78	34.15	35.79	34.16	35.80	34.17
DB-13A	12.6	11.56	9.66	13.66	11.76	13.54	11.64	13.56	11.66
DB-14	32	25.18	23.33	25.14	23.29	25.60	23.75	25.16	23.31
DB-16	12.8	15.02	11.29	15.06	11.33	15.06	11.33	15.02	11.29
DB-18	12	11.50	10.09	11.54	10.13	11.53	10.12	11.50	10.09
DB-32	10.5	13.12	10.64	13.10	10.62	13.12	10.64	13.11	10.63
UC-1A	18	15.84	14.12	15.84	14.12	15.96	14.24	15.84	14.12
DC-1	15	14.80	12.40	14.78	12.38	14.74	12.34	14.70	12.30
DC-2	17.5	13.76	11.76	13.76	11.76	13.74	11.74	13.70	11.70
TF-5	9	9.50	8.77	9.48	8.75	9.48	8.75	9.48	8.75
TF-9A	9	11.30	8.99	11.24	8.93	11.28	8.97	11.26	8.95
TF-23	12	12.92	11.01	12.94	11.03	12.92	11.01	12.94	11.03

NM = No measurement taken.

* 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.

In the first quarter, ice was encountered at a depth of 2.90 feet in well DL-2. The ice could not be broken so the well depth was not measured

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ATTACHMENT II

1994 SUMMARY TABLES
OF THE ANALYTICAL RESULTS FOR THE GROUNDWATER SAMPLES
FROM THE RECREATION AREA AND TANK FARM

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1994 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	ND	ND	0	0	1.5	0	1	0
DL-3	1.4	0	1	0	2.7	0.8	2	1
DL-6	16	14.6	3	2	10	4.3	4	1
DL-8	ND	ND	0	0	16.9	16.1	3	2
OR-2	3.5	3.5	2	2	5	4.2	3	2
OS-2	ND	ND	0	0	ND	ND	0	0
DB-6A	ND	ND	0	0	ND	ND	0	0
DB-8A	17	14	3	1	26.6	24	4	1
UC-1A	11.8	6.2	5	2	11.5	0.5	5	1
DC-1	58.2	51	4	2	63.8	62.2	6	3
DC-2	ND	ND	0	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	ND	ND	0	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	ND	ND	0	0
DL-1	7.7	2.3	4	1	7.6	2.3	4	1
DL-3	13.3	10.3	4	2	13.7	10.8	4	2
DL-6	19.2	15.7	4	2	16.3	7.1	4	1
DL-8	24.8	22.7	5	2	19.7	16.9	6	2
OR-2	3.4	2.8	3	2	3	2.4	3	2
OS-2	ND	ND	0	0	ND	ND	0	0
DB-6A	ND	ND	0	0	1.5	0	1	0
DB-8A	17.1	14	4	1	15.1	6.6	6	1
UC-1A	9.1	0.7	5	1	6.6	0.6	5	1
DC-1	75.3	73.7	5	3	69.3	67.9	6	4
DC-2	0.5	0	1	0	0.6	0	1	0
TF-5	ND	ND	0	0	ND	ND	0	0
TF-9A	ND	ND	0	0	0.9	0	1	0
TF-23	ND	ND	0	0	ND	ND	0	0
TRCB1	ND	ND	0	0	1.5	0	1	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-2 was sampled in the first, second and third quarters; UL-1 was sampled in the fourth quarter.

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1994 LEAD RESULTS FROM THE WELLS AT THE RECREATION AREA AND TANK FARM

WELL I.D.	FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
UL-2	NS	NS	17.2	1.4	NS	NS	NS	NS
DL-1	7.3	NS	10.2	1.4	5.9	1.4	2.5	3.1
DL-3	6.3	NS	3.2	1.4	4.7	1.4	2.5	3.4
DL-6	**27.3**	NS	**42.6**	1.4	3.7	1.4	8.2	2.5
DL-8	**33**	NS	**45.4**	1.4	1.4	1.4	**45.8**	3.2
OR-2	5	NS	2.4	1.4	2.5	1.4	2.5	2.5
OS-2	17.4	NS	18.6	1.4	**38**	1.4	**27.6**	2.5
DB-6A	15.1	NS	23.3	1.4	**42.7**	1.4	7.3	2.5
DB-8A	12.8	NS	15.8	1.4	**35.8**	1.5	**25.5**	2.5
UC-1A	**44.7**	NS	6.8	1.4	8.7	1.4	**29.8**	2.5
DC-1	**36.3**	NS	22.6	1.4	**102**	1.4	**56.2**	2.5
DC-2	**133**	NS	**52.6**	1.4	**85.3**	1.5	**55.8**	3.6
TF-5	17	NS	**74**	7	**43.4**	3.8	**44.4**	2.5
TF-9A	**40.4**	NS	**47.2**	4.8	9.8	3.8	**26.4**	3.8
TF-23	**65.2**	NS	**114**	1.7	**39.9**	1.4	**54**	2.5
TRCB1	4.1	NS	4	1.7	3.7	1.4	2.5	2.5

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.

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ATTACHMENT III

1994
QUARTERLY ANALYTICAL RESULTS
FOR EACH WELL
AT THE RECREATION AREA AND TANK FARM

TEXACO RESEARCH AND DEVELOPMENT
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1994 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	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	NS	17.2	NS	NS
Lead, filtered in lab	25	NS	1.4	NS	NS

*Groundwater Protection Concentration

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

ND = None Detected

NS = Not Sampled

Concentrations in bold type exceed the Groundwater Protection Concentration.

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

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	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	**2.3**	**2.3**
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	1.6	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	ND	ND	0.8	0.7
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	1.5	3	3.6
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	7.3	10.2	5.9	2.5
Lead, filtered in lab	25	NS	1.4	1.4	3.1

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	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	**0.8**	**4.3**	**4.9**
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	ND	1.1	0.8
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	1.9	2.1
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	1.4	1.9	**6**	**5.9**
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	6.4	3.2	4.7	2.5
Lead, filtered in lab	25	NS	1.4	1.4	3.4

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	**7.8**	**4.3**	**9**	**7.1**
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	ND	0.5	0.9	0.9
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	**6.8**	3.2	**6.7**	4.6
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	1.4	2	2.6	3.7
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	**27.3**	**42.6**	3.7	8.2
Lead, filtered in lab	25	NS	1.4	1.4	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	0.5
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	**10**	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	0.5
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	**6.1**	**8.7**	**6.9**
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	0.6	ND
1,2-Dichloroethene (total)	5	ND	ND	0.5	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	0.7
1,1,2,2-Tetrachloroethane	1.8	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	0.7
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	**14**	**10**
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	ND	0.8	1	0.9
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	**33**	**45.4**	1.4	**45.8**
Lead, filtered in lab	25	NS	1.4	1.4	3.2

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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**	**1.8**	**1.1**	**0.8**
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	**2.2**	**2.4**	**1.7**	**1.6**
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	0.8	0.6	0.6
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	5	2.4	2.5	2.5
Lead, filtered in lab	25	NS	1.4	1.4	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	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	17.4	18.6	**38**	**27.6**
Lead, filtered in lab	25	NS	1.4	1.4	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	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	1.5
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	15.1	23.3	**42.7**	7.3
Lead, filtered in lab	25	NS	1.4	1.4	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	1.3	1.5	1.4	1.7
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	3.3
Chloroform	#	1.3	1.5	1.4	1.7
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	1.7	0.6	ND	ND
1,2-Dichloropropane	0.5	ND	ND	ND	0.5
CIS-1,3-Dichloropropene	5	ND	ND	0.8	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	0.5	0.9	0.8
1,1,2-Trichloroethane	5	ND	ND	ND	2.2
Trichloroethene	5	**14**	**24**	**14**	**6.6**
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	12.8	15.8	35.8	**25.5**
Lead, filtered in lab	25	NS	1.4	1.5	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	**1**	**0.5**	**0.7**	**0.6**
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	1.9	0.7	1	0.8
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	1.1	1.5	4.9	1.9
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	**5.2**	3	1.3	2
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	2.6	2.9	1.2	1.3
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	**44.7**	6.8	8.7	**29.8**
Lead, filtered in lab	25	NS	1.4	1.4	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	0.5	0.9	0.8
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	2.9	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
2-Chloroethylvinyl Ether	5	ND	ND	ND	ND
Chloroform	#	ND	0.5	0.9	0.8
Chloromethane	5	ND	ND	ND	ND
Dibromochloromethane	#	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	4.3	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	**1.2**	**0.7**	**0.7**
1,2-Dichloroethane	5	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND
1,2-Dichloroethene (total)	5	**16**	**18**	**29**	**22**
1,2-Dichloropropane	0.5	ND	ND	ND	**1.2**
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	0.5	ND	ND
Toluene	5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	0.6	0.7	0.6
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Trichloroethene	5	**35**	**43**	**44**	**44**
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	**36.3**	22.6	**102**	**56.2**
Lead, filtered in lab	25	NS	1.4	1.4	2.5

*Groundwater Protection Concentration

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

ND = None Detected

NS = Not Sampled

Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	0.6
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	0.5	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	**133**	**52.6**	**85.3**	**55.8**
Lead, filtered in lab	25	NS	1.4	1.5	3.6

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	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	17	**52.6**	**43.4**	**44.4**
Lead, filtered in lab	25	NS	1.4	3.8	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	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	0.9
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	**40.4**	**47.2**	9.8	**26.4**
Lead, filtered in lab	25	NS	4.8	3.8	3.8

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 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	**65.2**	**114**	**39.9**	**54**
Lead, filtered in lab	25	NS	1.7	1.4	2.5

*Groundwater Protection Concentration

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

ND = None Detected

NS = Not Sampled

Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

1994 ANALYTICAL RESULTS
OF THE GROUNDWATER SAMPLES
AT THE RECREATION AREA AND TANK FARM

WELL TRCB1

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	1.5
Trichlorofluoromethane	5	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND
Xylene (Total)	5	ND	ND	ND	ND
Lead, unfiltered	25	4.1	4	3.7	2.5
Lead, filtered in lab	25	NS	1.7	1.4	2.5

*Groundwater Protection Concentration
#Total of all Trihalomethanes not to exceed 100.00 micrograms/liter.
ND = None Detected
NS = Not Sampled
Concentrations in bold type exceed the Groundwater Protection Concentration.

TEXACO RESEARCH CENTER
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 21, 1995

GROUNDWATER MONITORING

Sampling
One two-person team for 4 sampling events
(includes travel time, mileage, expenses, equipment
cost and a brief sampling event report)
$29,475 (1994 cost estimate) X 1.027 (inflation factor) $30,271

Analytical services
See attached Table $19,280

EROSION CONTROL MAINTENANCE

Miscellaneous expenses for materials and labor
$1,053 (1994 cost estimate) X 1.027 (inflation factor) $1,081

Subtotal $50,632

Administration @ 10% $5,063

Contingencies @ 20% $10,126

TOTAL ANNUAL POST-CLOSURE COST $65,821

POST-CLOSURE COST ESTIMATE FOR 19 YEARS $1,250,599

ONE-TIME COSTS

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

Phase II of the Building 83 RCRA Facility Investigation $21,405

TOTAL POST-CLOSURE COST ESTIMATE $1,305,539

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

TEXACO RESEARCH AND DEVELOPMENT
BEACON, NEW YORK

February 21, 1995
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 1995 costs for analytical services.
Number of groundwater samples include the 19 wells listed in the permit and 1 blind well sample.