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ADDENDUM TO THE REMEDIAL INVESTIGATION  
VOLUME II - SITE CHARACTERIZATION REPORT  
PHASE IIC SOIL AND SEDIMENT SAMPLING  
TENNESSEE GAS PIPELINE COMPANY  
COMPRESSOR STATION 229  
EDEN, NEW YORK

February 1992

Prepared for:

TENNESSEE GAS PIPELINE COMPANY  
1010 Milam, Tenneco Building  
Houston, Texas 77252



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**BUFFALO CORPORATE CENTER**  
368 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060  
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## 1. INTRODUCTION

This report is an addendum to the draft Remedial Investigation - Volume II, Site Characterization Report (RI) for Tennessee Gas Pipeline Company Compressor Station 229 in Eden, New York (Ecology and Environment, Inc. [E & E] 1991) submitted to the New York State Department of Environmental Conservation (NYSDEC) on August 2, 1991. It details a supplemental sampling activity (Phase IIC) conducted in order to determine or better define the presence of polychlorinated biphenyls (PCBs) and other substances in soils and sediments at specified locations on and near the site.

This addendum includes site characterization activities that are consistent with the Work Plan for the Remedial Investigation/Feasibility Study at Compressor Station 229, Eden, New York (Environ 1990) and the Site Characterization (SCP) Plan for Compressor Stations in New York (E & E 1990).

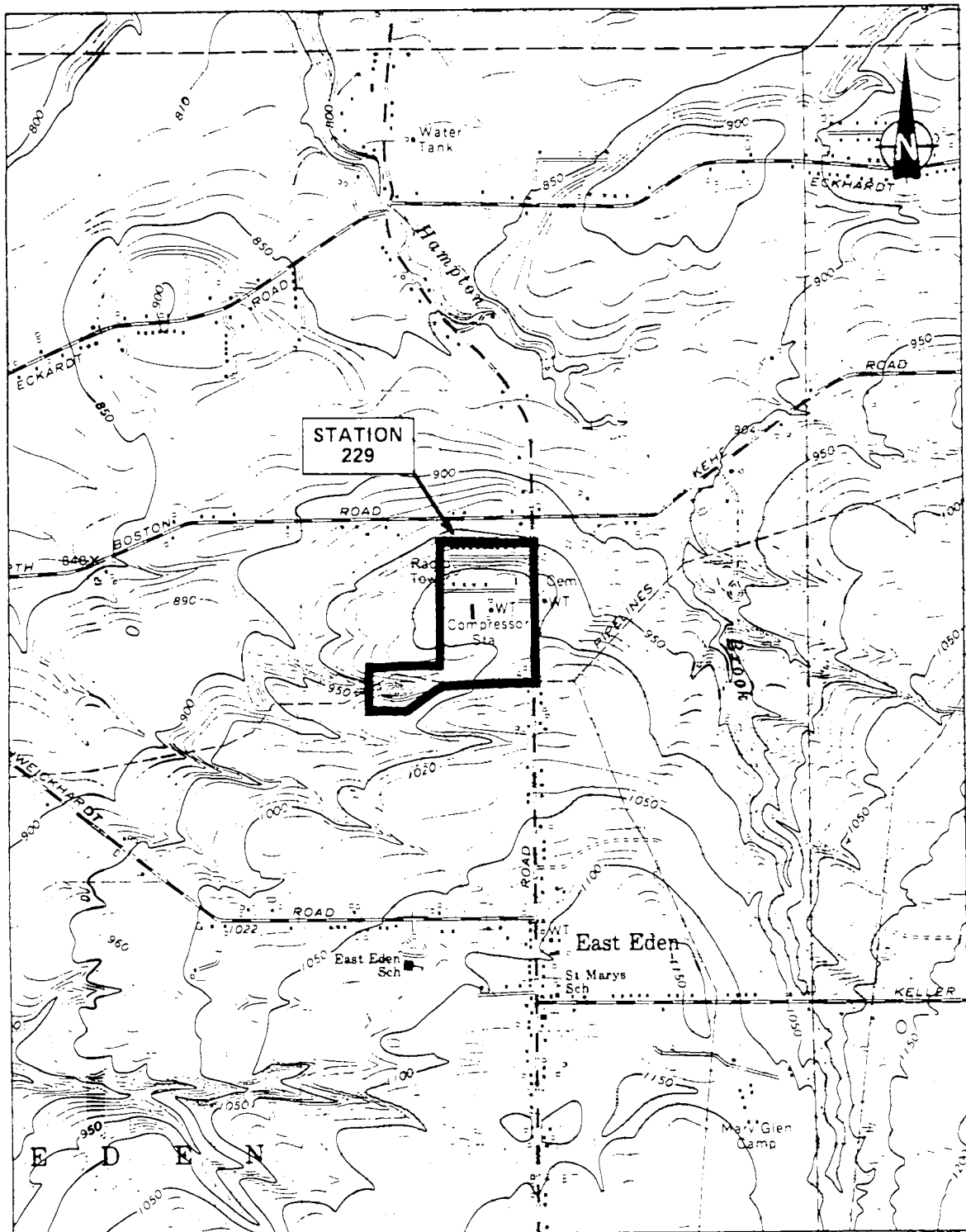
Phase IIC sampling consisted of the collection of 32 surface soils, 13 subsurface soils, and eight sediment samples for PCB-only analysis. Twenty-eight soil samples were collected from boreholes and analyzed for base/neutral and acid extractable (BNA) compounds, total petroleum hydrocarbons (TPHs), and benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds. All samples were analyzed in accordance with the protocols contained in the Quality Assurance Project Plan (QAPP) (E & E 1990). In accordance with the QAPP, analytical procedures for PCB-only analysis of soil samples were modified to be consistent with the data quality objectives.

Selected information presented in the RI report is repeated in this addendum as an aid to assess the sampling effort. For a more complete discussion, the RI report should be reviewed.

To avoid confusion, oversized drawings (provided separately) are numbered consistent with those of the RI report.

## 2. STATION LOCATION AND LAYOUT

Tennessee's Station 229 is located in Erie County south of the village of Hamburg, New York (see Figure 2-1). The station occupies approximately 50.5 acres along East Eden Road in the town of Eden. The primary operations portion of the station consists of one compressor building that houses six natural gas compressor engines, one auxiliary building that houses the air compressors, and one area that contains air receiver tanks (ARTs) and associated piping (see Figure 2-2). In addition to these operational facilities, the compressor station includes several other buildings used to support the gas compression operation including a pipeline warehouse, shop, equipment garage, office, and three meter station facilities.



SOURCE: U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle: Hamburg, N. Y. 1965.

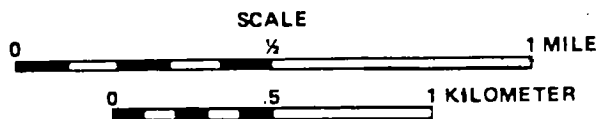
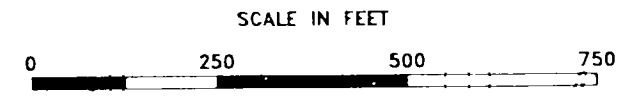
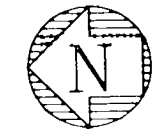
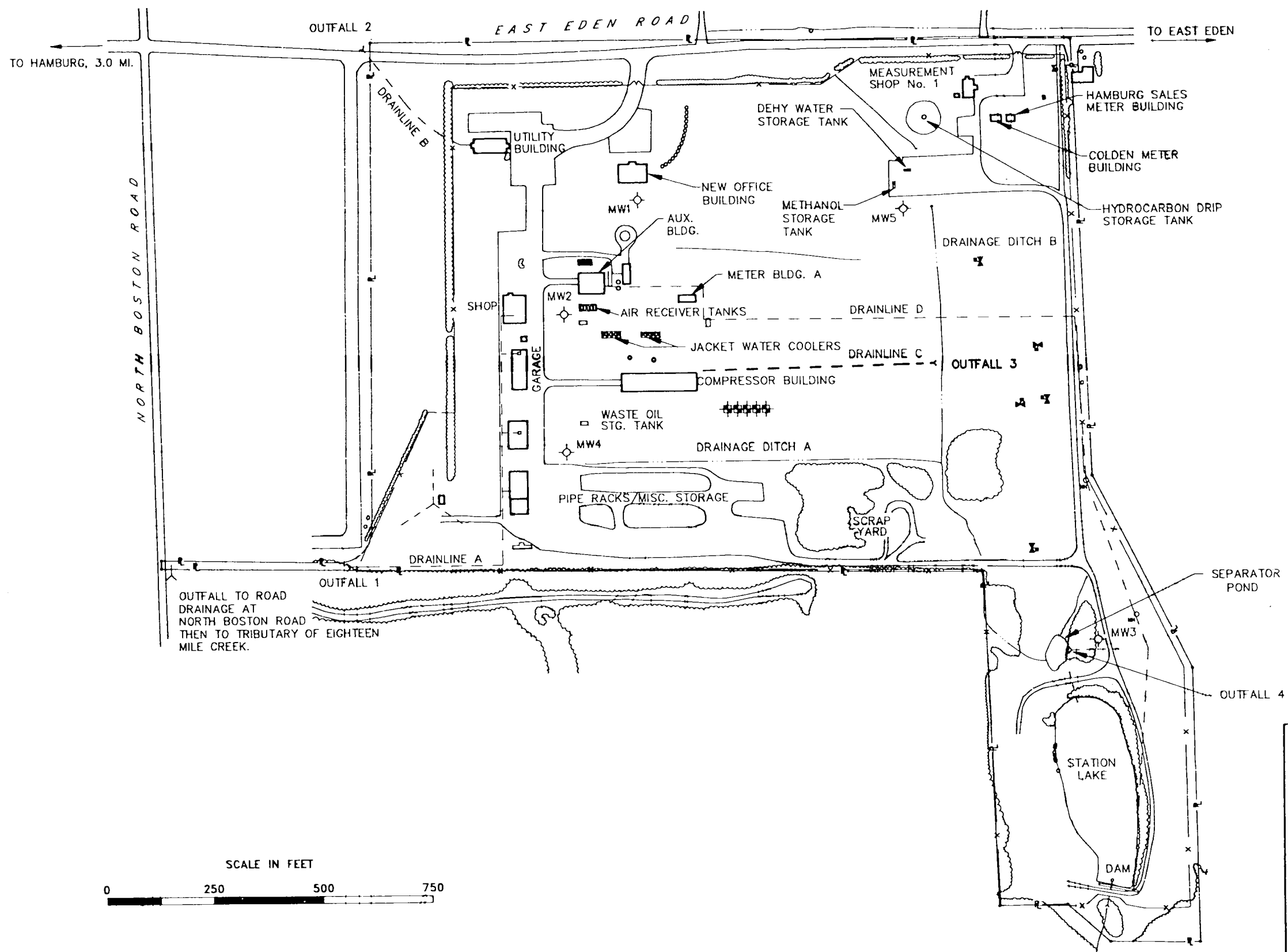


Figure 2-1  
**LOCATION OF TENNESSEE GAS PIPELINE COMPRESSOR STATION 229,  
 EAST EDEN, NY**



KEY	
	GROUNDWATER MONITORING WELL
	VALVE
	HIGH-PRESSURE GAS FILTER
	SURFACE DRAINAGE
	PROPERTY LINE
	SUBSURFACE DRAINAGE
	FENCE

Figure 2-2 PLOT PLAN - STATION 229

### 3. FIELD INVESTIGATION

#### 3.1 WORK PLAN SUMMARY

E & E developed two field manuals in October 1991 for the activities required at Compressor Station 229. The scope of work identified in the manuals included the collection of soil-boring samples near Drainage Ditch B, and the sampling of areas recommended by NYSDEC following submittal of the draft RI report.

Due to shallow bedrock formations, split-spoon refusal was encountered at five of the eight borehole locations. The scope of work was subsequently modified for the soil borings collected near Drainage Ditch B. As a result, less samples were taken than were originally planned.

#### 3.2 FIELD WORK SUMMARY

Phase IIC field work activities involved sampling near the fenceline, in the pipe racks area, along and near Drainage Ditch B, the off-site pond, Tributary Area, and areas previously characterized during the grid sampling effort. Borehole samples from Drainage Ditch B were collected on October 16, 1991. Soil and sediment sampling was conducted on November 8, 14, and 15, 1991.

All sampling was performed in accordance to the SCP and shipped to E & E's Analytical Services Center. Duplicate samples were collected and submitted for PCB analysis for the purpose of QA/QC review of the data set.

##### 3.2.1 Fenceline

Sampling of the fenceline consisted of the collection of 10 soil samples which were submitted for PCB analysis. All samples were

collected from ten nodes located in an area along the western fenceline. Samples from nodes E13 through E22 were collected from the 0- to 6-inch depth interval. In addition to the 10 samples, one duplicate sample was collected and submitted for PCB analysis for the purpose of QA/QC review of the data set.

Fenceline nodes and their corresponding sample numbers and depths are identified in Section 4.

### 3.2.2 Pipe Racks Area

Sampling of the Pipe Racks Area consisted of the collection of six soil samples which were submitted for PCB analysis. All samples were collected from six nodes located in grassy portions of the Pipe Racks Area. Samples from nodes O1 through O6 were collected from the 0- to 6-inch depth interval. Pipe Racks Area nodes and their corresponding sample numbers and depths are identified in Section 4.

### 3.2.3 Drainage Ditch B

Sampling of Drainage Ditch B consisted of the collection of five soil samples which were submitted for PCB analysis. All samples were collected from five nodes located along Drainage Ditch B near the separator pond. Samples from nodes G13 through G16 were collected from the 0- to 6-inch depth interval; the sample from node G10 was collected from the 6- to 12-inch depth interval. In addition to the five samples, one duplicate sample was collected and submitted for PCB analysis for the purpose of QA/QC review of the data set.

Drainage Ditch B nodes and their corresponding sample numbers and depths are identified in Section 4.

### 3.2.4 Off-Site Pond

Sampling of the off-site pond consisted of the collection of five sediment samples which were submitted for PCB analysis. All samples were collected from five nodes located along the centerline of the pond. Samples from nodes 19 through 23 were collected from the 0- to 6-inch depth interval.

Off-site pond nodes and their corresponding sample numbers and depths are identified in Section 4.



### 3.2.5 Tributary Area

Sampling of the Tributary Area consisted of the collection of 22 soil and three sediment samples which were submitted for PCB analysis. All samples were collected from 18 nodes located along the Tributary of Eighteen Mile Creek. Samples from nodes 121 through 133 were collected from the 0- to 6-inch depth interval; samples from nodes 108, 109, 113, 114, and 121 through 126 from the 6- to 12-inch depth interval; and samples from nodes 108, 110, and 113 from the 12- to 24-inch depth interval. In addition to the 25 samples, three duplicate samples were collected and submitted for PCB analysis for the purpose of QA/QC review of the data set.

Tributary Area nodes and their corresponding sample numbers and depths are identified in Section 4.

### 3.2.6 Grid Sampling

Grid sampling consisted of the collection of two soil samples which were submitted for PCB analysis. Both samples were collected from nodes located west of the station lake. The samples from nodes Q22 and R22 were collected from the 0- to 6-inch depth interval. In addition to the two samples, one duplicate sample was collected and submitted for PCB analysis for the purpose of QA/QC review of the data set.

Grid sampling nodes and their corresponding sample numbers and depths are identified in Section 4.

### 3.2.7 Drainage Ditch B Boreholes

Additional borehole sampling was conducted as part of the soil investigation and included the drilling of eight boreholes in the area along Drainage Ditch B. A total of 28 samples was collected from the boreholes at 2-foot intervals where possible. These borehole samples were analyzed for BNAs, TPHs, and BTEX compounds.

In addition to the 28 samples, three duplicate samples were collected and submitted for BNA, TPH, and TPH analyses for the purpose of QA/QC review of the data set.

Drainage Ditch B borehole locations and their corresponding sample numbers and depths are identified in Section 4.

#### 4. RESULTS OF THE SAMPLING PROGRAM

This section presents the analytical results for the Phase IIC soil samples, borehole samples, and sediment samples collected from the tributary and off-site pond. For the purposes of this report, detection limits for PCBs using the procedures listed in 40 CFR 136, Appendix B are set at 1 mg/kg for soil and 0.1 mg/kg for sediments. PCBs not present above detection limits in the samples are shown in the data summary tables as ND. All results are presented in the data summary tables at the end of this section.

All results in the data summary tables are reported and qualified with a "B" if the compound was also present in the laboratory method blank. The results are further qualified and discussed in Section 5.

##### 4.1 FENCELINE

Ten soil samples were analyzed for PCBs. PCBs were present in eight of the 10 samples at concentrations ranging from 1.3 mg/kg to 450 mg/kg of Aroclor 1254.

Table 4-1 summarizes the PCB analytical results for samples taken from the fenceline. Figure 3-2 (separate, oversized) shows the locations of the Phase IIC fenceline samples.

##### 4.2 PIPE RACKS AREA

Six soil samples were analyzed for PCBs. PCBs were present in four of the six samples at concentrations ranging from 1.8 mg/kg to 13 mg/kg of Aroclor 1254.

Table 4-2 summarizes the PCB analytical results for samples taken from the Pipe Racks Area. Figure 3-2 (separate, oversized) shows the locations of the Phase IIC Pipe Racks Area samples.

#### 4.3 DRAINAGE DITCH B

Five soil samples were analyzed for PCBs. PCBs were present in two of the five samples at concentrations of 3.4 mg/kg and 16 mg/kg of Aroclor 1254.

Table 4-3 summarizes the PCB analytical results for samples taken from Drainage Ditch B. Figure 3-2 (separate, oversized) shows the locations of the Phase IIC Drainage Ditch B samples.

#### 4.4 OFF-SITE POND

Five sediment samples were analyzed for PCBs. PCBs were present in all five samples at concentrations ranging from 0.44 mg/kg to 0.71 mg/kg of Aroclor 1254.

Table 4-4 summarizes the PCB analytical results for samples taken from the off-site pond. Figure 3-4 (separate, oversized) shows the locations of the Phase IIC off-site pond samples.

#### 4.5 TRIBUTARY AREA

Twenty-two soil samples and three sediment samples were analyzed for PCBs. PCBs were present in 13 soil samples at concentrations ranging from 3.4 mg/kg to 290 mg/kg of Aroclor 1254. The sample from node 110 contained 180 mg/kg of Aroclor 1248. PCBs were also present in one sediment sample at a concentration of 0.22 mg/kg of Aroclor 1254.

Table 4-5 summarizes the PCB analytical results for samples taken from the Tributary Area. Figure 3-4 (separate, oversized) shows the locations of the Phase IIC Tributary Area samples.

#### 4.6 GRID SAMPLING

Two soil samples were analyzed for PCBs. PCBs were not present above detection limits in either sample.

Table 4-6 summarizes the PCB analytical results for Phase IIC grid samples. Figure 3-1A (separate, oversized) shows the locations of the Phase IIC grid samples.

#### 4.7 DRAINAGE DITCH B BOREHOLES

Drainage Ditch B borehole sampling consisted of the collection of 28 samples which were submitted for BNA, volatiles, and TPH analysis. All samples were collected from eight boreholes located along Drainage Ditch B. BNA analysis indicated the presence of polynuclear aromatic hydrocarbons (PAHs) above detection limits in two samples from BH06 and BH07. Both samples were collected from the 0- to 24-inch depth interval. Sample C006 contained a total PAH concentration of 79,740 µg/kg; sample C009 contained a total PAH concentration of 18,970 µg/kg.

Eleven of the 28 samples were found to contain total petroleum hydrocarbons (TPHs) at levels above detection limits. Concentrations ranged from 6,200 µg/kg to 110,000 µg/kg.

Volatile analysis included testing for the presence of BTEX compounds. Benzene was present above detection limits in three of the 28 samples. Concentrations ranged from 0.28 µg/kg to 5.3 µg/kg in samples from BH06 and BH07.

Toluene was present above detection limits in four of the 28 samples. Concentrations ranged from 0.15 µg/kg to 6.3 µg/kg in samples from BH06, BH07, and BH08.

Ethylbenzene was present above detection limits in three of the 28 samples. Concentrations ranged from 0.69 µg/kg to 9.3 µg/kg in samples from BH06 and BH07.

Total xylenes were present above detection limits in three of the 28 samples. Concentrations ranged from 1.5 µg/kg to 41 µg/kg in samples from BH06 and BH07.

Tables 4-7 through 4-9 summarize the analytical results for samples taken from the Drainage Ditch B boreholes. Figure 3-2 (separate, oversized) shows the locations of the borehole samples.

Table 4-1  
**PCB RESULTS FOR PHASE IIC SOIL SAMPLES**  
**FENCELINE**  
**COMPRESSOR STATION 229**

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
E13	C039	0 - 6	1.3
E14	C040	0 - 6	ND
E15	C041	0 - 6	26
E16	C042	0 - 6	2.9
E17	C043	0 - 6	5.0
E18	C044	0 - 6	1.6
E19	C045	0 - 6	96
E20	C046	0 - 6	8.4
E21	C047	0 - 6	450
E22	C048	0 - 6	ND

02[TG5901]D3730/225/34

Notes: All concentrations are in mg/kg.  
 All concentrations are Aroclor 1254 unless otherwise noted.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 4-2  
 PCB RESULTS FOR PHASE IIC SOIL SAMPLES  
 PIPE RACKS AREA  
 COMPRESSOR STATION 229

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
01	C050	0 - 6	ND
02	C051	0 - 6	ND
03	C052	0 - 6	5.9
04	C053	0 - 6	1.8
05	C054	0 - 6	4.3
06	C055	0 - 6	13

02[TG5901]D3730/226/34

Notes: All concentrations are in mg/kg.  
 All concentrations are Aroclor 1254 unless otherwise noted.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 4-3

PCB RESULTS FOR PHASE IIC SOIL SAMPLES  
DRAINAGE DITCH B  
COMPRESSOR STATION 229

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
G10	C056	6 - 12	3.4
G13	C057	0 - 6	16
G14	C058	0 - 6	ND
G15	C059	0 - 6	ND
G16	C061	0 - 6	ND

02[TG5901]D3730/227/34

Notes: All concentrations are in mg/kg.  
All concentrations are Aroclor 1254 unless otherwise noted.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 4-4  
**PCB RESULTS FOR PHASE IIC SEDIMENT SAMPLES**  
**OFF-SITE POND**  
**COMPRESSOR STATION 229**

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
19	C062	0 - 6	0.71
20	C063	0 - 6	0.71
21	C064	0 - 6	0.67
22	C065	0 - 6	0.44
23	C066	0 - 6	0.61

02[TG5901]D3730/228/34

Notes: All concentrations are in mg/kg.  
 All concentrations are Aroclor 1254 unless otherwise noted.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.



Table 4-5

**PCB RESULTS FOR PHASE IIC SOIL/SEDIMENT SAMPLES  
TRIBUTARY AREA  
COMPRESSOR STATION 229**

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
108	C067	6 - 12	290
	C068	12 - 24	39
109	C069	6 - 12	ND
110	C070	12 - 24	120 180 (1248)
	C071	6 - 12	70
113	C072	12 - 24	8.1
	C073	6 - 12	96
121	C075	0 - 6	ND
122	C077	0 - 6	ND
	C078	6 - 12	ND
123	C079	0 - 6	180
	C080	6 - 12	140
124	C081	0 - 6	30
	C082	6 - 12	ND
125	C083	0 - 6	ND
	C084	6 - 12	ND
126	C085	0 - 6	120
	C086	6 - 12	45
127	C088	0 - 6	7.4
128	C089	0 - 6	3.4
129	C090	0 - 6	ND
130	C091	Sediment	0.22
131	C092	0 - 6	ND
132	C093	Sediment	ND
133	C095	Sediment	ND

02[TG5901]D3730/229/34

Notes: All concentrations are in mg/kg.  
All concentrations are Aroclor 1254 unless otherwise noted.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 4-6

PCB RESULTS FOR PHASE IIC SOIL SAMPLES  
GRID SAMPLING  
COMPRESSOR STATION 229

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
Q22	9344	0 - 6	ND
R22	9345	0 - 6	ND

02[TG5901]D3730/230/34

Notes: All concentrations are in mg/kg.  
All concentrations are Aroclor 1254 unless otherwise noted.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 4-7

BMA RESULTS FOR BOREHOLE SAMPLES  
DRAINAGE DITCH B  
COMPRESSOR STATION 229

Parameter	Analytical Result							
	Node:	BH05	BH05	BH05	BH05	BH05	BH06	BH06
	Depth:	0 - 24"	24 - 48"	48 - 72"	72 - 96"	96 -108"	0 - 24"	24 - 48"
Sample Number:	C001	C002	C003	C004	C005	C006	C007	
Acenaphthene	ND	ND	ND	ND	ND	2,300	ND	
Anthracene	ND	ND	ND	ND	ND	4,500	ND	
Benzo(A)Anthracene	ND	ND	ND	ND	ND	6,300	ND	
Benzo(A)Pyrene	ND	ND	ND	ND	ND	4,900	ND	
Benzo(B)Fluoranthene	ND	ND	ND	ND	ND	8,400	ND	
Benzo(G,H,I)Perylene	ND	ND	ND	ND	ND	2,100	ND	
Chrysene	ND	ND	ND	ND	ND	5,700	ND	
Dibenzo(A,H)Anthracene	ND	ND	ND	ND	ND	510	ND	
Dibenzofuran	ND	ND	ND	ND	ND	1,300	ND	
Fluoranthene	ND	ND	ND	ND	ND	13,000	ND	
Fluorene	ND	ND	ND	ND	ND	2,100	ND	
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	2,400	ND	
Naphthalene	ND	ND	ND	ND	ND	530	ND	
Phenanthrene	ND	ND	ND	ND	ND	14,000	ND	
Pyrene	ND	ND	ND	ND	ND	13,000	ND	

02[TG5901]D3730/243/6

Key at end of table.

Table 4-7 (Cont.)

Parameter	Analytical Result							
	Node:	BH06	BH07	BH07	BH07	BH08	BH08	BH08
	Depth:	48 - 72"	0 - 24"	24 - 48"	48 - 66"	0 - 24"	24 - 48"	48 - 72"
Sample Number:	C008	C009	C010	C012	C014	C015	C016	
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	
Anthracene	ND	970	ND	ND	ND	ND	ND	
Benzo(A)Anthracene	ND	1,600	ND	ND	ND	ND	ND	
Benzo(A)Pyrene	ND	1,200	ND	ND	ND	ND	ND	
Benzo(B)Fluoranthene	ND	2,000	ND	ND	ND	ND	ND	
Benzo(G,H,I)Perylene	ND	ND	ND	ND	ND	ND	ND	
Chrysene	ND	1,500	ND	ND	ND	ND	ND	
Dibenzo(A,H)Anthracene	ND	ND	ND	ND	ND	ND	ND	
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	
Fluoranthene	ND	3,400	ND	ND	ND	ND	ND	
Fluorene	ND	ND	ND	ND	ND	ND	ND	
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	ND	ND	ND	ND	ND	ND	ND	
Phenanthrene	ND	3,800	ND	ND	ND	ND	ND	
Pyrene	ND	3,200	ND	ND	ND	ND	ND	

02[TG5901]D3730/243/6

Key at end of table.

Table 4-7 (Cont.)

Parameter	Analytical Result							
	Node:	BH09	BH09	BH09	BH10	BH10	BH10	BH11
	Depth:	0 - 24"	24 - 48"	48 - 60"	0 - 24"	24 - 48"	48 - 60"	0 - 24"
Sample Number:	C018	C019	C020	C023	C024	C025	C027	
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(A)Anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(A)Pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(B)Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(G,H,I)Perylene	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(A,H)Anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND

02[TG5901]D3730/243/6

Key at end of table.

Table 4-7 (Cont.)

Parameter	Analytical Result							
	Node:	BH11	BH11	BH11	BH12	BH12	BH12	BH12
	Depth:	24 - 48"	48 - 72"	72 - 96"	0 - 24"	24 - 48"	48 - 72"	72 - 96"
Sample Number:	C028	C029	C030	C031	C032	C034	C035	
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(A)Anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(A)Pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(B)Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(G,H,I)Perylene	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(A,H)Anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND

02[TG5901]D3730/243/6

## Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 4-8

**TPH RESULTS FOR BOREHOLE SAMPLES  
DRAINAGE DITCH B  
COMPRESSOR STATION 229**

Borehole Number	Sample Number	Sample Depth (inches)	Analytical Result
BH05	C001	0 - 24	ND UJ
	C002	24 - 48	32,000 J
	C003	48 - 72	12,000 J
	C004	72 - 96	120,000 J
	C005	96 - 108	44,000 J
BH06	C006	0 - 24	ND UJ
	C007	24 - 48	95,000 J
	C008	48 - 72	130,000 J
BH07	C009	0 - 24	6,800 J
	C010	24 - 48	ND UJ
	C012	48 - 66	64,000 J
BH08	C014	0 - 24	47,000 J
	C015	24 - 48	ND UJ
	C016	48 - 72	29,000 J
BH09	C018	0 - 24	ND UJ
	C019	24 - 48	ND UJ
	C020	48 - 72	ND UJ
BH10	C023	0 - 24	ND UJ
	C024	24 - 48	ND UJ
	C025	48 - 60	12,000 J
BH11	C027	0 - 24	ND UJ
	C028	24 - 48	ND UJ
	C029	48 - 72	ND UJ
	C030	72 - 96	ND UJ
BH12	C031	0 - 24	ND UJ
	C032	24 - 48	ND UJ
	C034	48 - 72	ND UJ
	C035	72 - 96	ND UJ

02[RG5901]D3730/255/38

Notes: Concentrations are in  $\mu\text{g}/\text{kg}$ .  
Results are in dry weight.

## Key:

J = Estimated value.  
ND = Not detected.  
UJ = Estimated detection limit.

Source: Ecology and Environment, Inc., 1992.

Table 4-9

**BTEX RESULTS FOR BOREHOLE SAMPLES  
DRAINAGE DITCH B  
COMPRESSOR STATION 229**

Borehole Number	Sample Number	Sample Depth (inches)	Analytical Results			
			Benzene	Toulene	Ethylbenzene	Total Xylenes
BH05	C001	0 - 24	ND	ND	ND	ND
	C002	24 - 48	ND	ND	ND	ND
	C003	48 - 72	ND	ND	ND	ND
	C004	72 - 96	ND	ND	ND	ND
	C005	96 - 108	ND	ND	ND	ND
BH06	C006	0 - 24	ND	ND	ND	ND
	C007	24 - 48	5.3	6.3	9.3	41
	C008	48 - 72	0.28	0.15	0.69	1.5
BH07	C009	0 - 24	ND	ND	ND	ND
	C010	24 - 48	2.5	ND	ND	ND
	C012	48 - 66	ND	1.6 J	1.8 J	9.2 J
BH08	C014	0 - 24	ND	ND	ND	ND
	C015	24 - 48	ND	3.7	ND	ND
	C016	48 - 72	ND	ND	ND	ND
BH09	C018	0 - 24	ND	ND	ND	ND
	C019	24 - 48	ND	ND	ND	ND
	C020	48 - 72	ND	ND	ND	ND
BH10	C023	0 - 24	ND	ND	ND	ND
	C024	24 - 48	ND	ND	ND	ND
	C025	48 - 60	ND	ND	ND	ND
BH11	C027	0 - 24	ND	ND	ND	ND
	C028	24 - 48	ND	ND	ND	ND
	C029	48 - 72	ND	ND	ND	ND
	C030	72 - 96	ND	ND	ND	ND
BH12	C031	0 - 24	ND	ND	ND	ND
	C032	24 - 48	ND	ND	ND	ND
	C034	48 - 72	ND	ND	ND	ND
	C035	72 - 96	ND	ND	ND	ND

02[TG5901]D3730/256/20

Notes: Concentrations are in µg/kg.

Key:

J = Estimated value.  
ND = Not detected.

Source: Ecology and Environment, Inc., 1992.



## 5. QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

### 5.1 INTRODUCTION

This section summarizes the results of the review process used to evaluate laboratory and field data quality, reliability, and validity for Station 229 Phase IIC samples. Data review was performed by E & E quality assurance chemists utilizing Functional Guidelines for Evaluating Organic/Inorganic Analyses (EPA 1988). Compliance to the QA/QC criteria specified in the QAPP was also evaluated.

### 5.2 LABORATORY QUALITY CONTROL

#### 5.2.1 PCB-Only Analysis

All samples upon which this report is based were analyzed within the appropriate holding times. No laboratory contamination was detected in any of the method blanks associated with these samples. All surrogate spike recoveries were within acceptable limits. All matrix spike and matrix spike duplicates were within acceptable limits.

#### 5.2.2 BTEX, BNA, and TPH Analysis

All samples upon which this report is based were analyzed within the appropriate holding times. No laboratory contamination was detected in any of the method blanks associated with these samples. All surrogate spike recoveries were within acceptable limits. All matrix spike and matrix spike duplicates were within acceptable limits.

Laboratory precision was evaluated based on the replicate TPH analysis of sample C023. The first analysis of C023 yielded a result of ND, whereas the second yielded a result of 19,000 µg/kg. Due to this inconsistency, the TPH results for the borehole samples are qualified as

estimated and flagged with a J. A result of ND is flagged with UJ indicating that the detection limit is an estimated quantity.

During the analysis of sample C012, a matrix interference obscured the raw data preventing an accurate calculation of the toluene, ethylbenzene, and total xylene concentrations. The results for these analytes in sample C012 have been qualified as estimated and flagged with a J.

### 5.3 FIELD QUALITY CONTROL

#### 5.3.1 PCB-Only Samples

Three soil sample rinsate blanks were prepared and analyzed for PCBs. The results are presented in Table 5-1. No PCBs were detected in any of the rinsate blanks.

Six soil sample duplicate pairs were collected and analyzed for PCBs. The results for these field duplicates are presented in Table 5-3. Aroclor 1254 was detected in sample C086 and its duplicate C087. Aroclor 1254 was detected in duplicate sample C076; however, it was not detected in the original sample C075. The RPD value of 120% is greater than the 35% maximum stated in the QAPP. In this particular case, Aroclor 1254 was present in both the original sample and its duplicate. The presence of Aroclor 1254 is, therefore, certain. However, the numerical value of 45 mg/kg for sample C086 is quantitatively questionable and should be used as an approximate value.

Based on an assessment of field quality control parameters, decontamination procedures were effective, and proper sampling techniques were consistently employed.

#### 5.3.2 BTEX, BNA, and TPH Samples

Two soil sample rinsate blanks were prepared and analyzed for BNA compounds. The results are presented in Table 5-2. No organic compounds were present above detection limits in either of the blanks, indicating that no cross-contamination occurred between sampling events.

One trip blank (C038) was prepared and analyzed for BTEX and BNA compounds. The results for this sample are presented in Tables 5-4 and 5-5. None of these analytes were detected in trip blank C038, indicating that no contamination of the samples occurred during transport.

Four soil sample duplicate pairs were collected and analyzed for TPHs, BTEX compounds, and BNAs. These results are presented in Tables 5-6 through 5-8. TPHs were detected in the duplicate samples (C011 and C021), but were not detected in the original samples (C010 and C020). As discussed in Section 5.2.2, all of the TPH results have been qualified as estimated due to the replicate analysis results. This may be one explanation for the difference between the TPH results for the field duplicate pairs. Investigation of the borings collected indicate another possible explanation. Since the soils collected consisted of fragmented shale and clay, it was difficult to homogenize the samples (see Appendix A). In light of this, it should be assumed that TPHs are present and that concentrations can only be estimated.

Based on an assessment of field quality control parameters, decontamination procedures were effective, and proper sampling techniques were consistently employed.

Table 5-1

QA/QC SUMMARY OF PCB RESULTS FOR  
SOIL SAMPLE RINSATE BLANKS  
COMPRESSOR STATION 229

Sample Number	Analytical Result
C096	ND
C097	ND
C098	ND

02[TG5901]D3730/232/40

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 5-2

QA/QC SUMMARY OF BNA RESULTS FOR SOIL SAMPLE  
RINSATE BLANKS  
COMPRESSOR STATION 229

Parameter	Sample Number:	Analytical Results	
		C036	C037
1,2,4-Trichlorobenzene		ND	ND
1,2-Dichlorobenzene		ND	ND
1,3-Dichlorobenzene		ND	ND
1,4-Dichlorobenzene		ND	ND
2,4-Dinitrotoluene		ND	ND
2,6-Dinitrotoluene		ND	ND
2-Chloronaphthalene		ND	ND
2-Methylnaphthalene		ND	ND
2-Nitroaniline		ND	ND
3,3'-Dichlorobenzidine		ND	ND
3-Nitroaniline		ND	ND
4-Bromophenyl Phenyl Ether		ND	ND
4-Chloroaniline		ND	ND
4-Chlorophenyl Phenyl Ether		ND	ND
4-Nitroaniline		ND	ND
Acenaphthene		ND	ND
Acenaphthylene		ND	ND
Anthracene		ND	ND
Benzidine		ND	ND
Benzo(A)Anthracene		ND	ND
Benzo(A)Pyrene		ND	ND
Benzo(B)Fluoranthene		ND	ND
Benzo(K)Fluoranthene		ND	ND
Benzyl Alcohol		ND	ND
Bis(2-Chloroethyl)Ether		ND	ND
Bis(2-Ethylhexyl)Phthalate		ND	ND

02[TG5901]D3730/233/30

Key at end of table.

Table 5-2 (Cont.)

Parameter	Sample Number:	Analytical Results	
		C036	C037
Butyl-Benzyl-Phthalate		ND	ND
Chrysene		ND	ND
Di-N-Butyl-Phthalate		ND	ND
Di-N-Octyl-Phthalate		ND	ND
Dibenzo(A,H)Anthracene		ND	ND
Dibenzofuran		ND	ND
Fluoranthene		ND	ND
Fluorene		ND	ND
Hexachlorobenzene		ND	ND
Hexachlorobutadiene		ND	ND
Hexachlorocyclopentadiene		ND	ND
Hexachloroethane		ND	ND
Indeno(1,2,3-cd)Pyrene		ND	ND
Isophorone		ND	ND
N-Nitrosodiphenylamine		ND	ND
N-Nitrosodipropylamine		ND	ND
Naphthalene		ND	ND
Phenanthrene		ND	ND
Pyrene		ND	ND
Phenol		ND	ND
2-Chlorophenol		ND	ND
2-Nitrophenol		ND	ND

02[TG5901]D3730/233/30

Key at end of table.

Table 5-2 (Cont.)

Parameter	Sample Number:	Analytical Results	
		C036	C037
2,4-Dimethylphenol		ND	ND
2,4-Dichlorophenol		ND	ND
4-Chloro-3-Methylphenol		ND	ND
2,4,6-Trichlorophenol		ND	ND
2,4-Dinitrophenol		ND	ND
4-Nitrophenol		ND	ND
4,6-Dinitro-2-Methylphenol		ND	ND
Pentachlorophenol		ND	ND
2-Methylphenol		ND	ND
4-Methylphenol		ND	ND
Benzoic Acid		ND	ND
2,4,5-Trichlorophenol		ND	ND

02[TG5901]D3730/233/30

Note: All concentrations are in  $\mu\text{g}/\text{kg}$ .

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 5-3

QA/QC SUMMARY OF PCB RESULTS FOR  
SOIL/SEDIMENT SAMPLE DUPLICATES  
COMPRESSOR STATION 229

Sample Number	Sample Result	Duplicate Number	Duplicate Result	Relative Percent Difference (RPD)
<b>Fenceline</b>				
C048	ND	C049	ND	*
<b>Drainage Ditch B</b>				
C059	ND	C060	ND	*
<b>Tributary Area</b>				
C075	ND	C076	2.0	*
C086	45	C087	12	120
C093	ND	C094	ND	*
<b>Grid Sampling</b>				
9345	ND	9346	ND	*

02(TG5901)D3730/236/24

Note: All concentrations are in mg/kg.  
All concentrations are Aroclor 1254 unless otherwise noted.

\*RPD not calculated when one or both values are ND.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.



Table 5-4  
 QA/QC SUMMARY OF BTEX RESULTS FOR  
 WATER TRIP BLANK  
 COMPRESSOR STATION 229

Parameter	Sample Number:	Analytical Results
	C038	
Benzene		ND
Ethylbenzene		ND
Toluene		ND
Total Xylenes		ND

02[TG5901]D3730/234/38

Note: All concentrations are in  $\mu\text{g/L}$ .

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 5-5

QA/QC SUMMARY OF BNA RESULTS FOR  
WATER TRIP BLANK  
COMPRESSOR STATION 229

Parameter	Sample Number:	Analytical
		Results
	C038	
Acenaphthene		ND
Anthracene		ND
Benzo(a)Anthracene		ND
Benzo(a)Pyrene		ND
Benzo(b)Fluoranthene		ND
Benzo(g,h,i)Perylene		ND
Chrysene		ND
Dibenzo(a,h)anthracene		ND
Dibenzofuran		ND
Fluoranthene		ND
Fluorene		ND
Indeno(1,2,3-cd)Pyrene		ND
Naphthalene		ND
Phenanthrene		ND
Pyrene		ND

02(TG5901)D3730/235/38

Note: All concentrations are in  $\mu\text{g/L}$ .

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 5-6

QA/QC SUMMARY OF TPH RESULTS FOR SOIL SAMPLE DUPLICATES  
COMPRESSOR STATION 229

Area	Sample Number	Sample Result	Duplicate Number	Duplicate Result	Relative Percent Difference (RPD)
Drainage Ditch B	C010	ND	C011	66,000	*
	C020	ND	C021	20,000	*
	C032	ND	C033	ND	*

02[TG5901]D3730/238/21

Notes: All concentrations are in  $\mu\text{g}/\text{kg}$ .  
Concentrations are in dry weight.

\*RPD not calculated when one value is ND or values are qualified.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

Table 5-7

**QA/QC SUMMARY OF BTEX RESULTS FOR SOIL SAMPLE DUPLICATES  
COMPRESSOR STATION 229**

Parameter	Original Sample Number C010	Duplicate Sample Number C011	RPD	Original Sample Number C020	Duplicate Sample Number C021	RPD	Original Sample Number C032	Duplicate Sample Number C033	RPD
Benzene	2.5	3.4	30	ND	ND	*	ND	ND	*
Ethylbenzene	ND	ND	*	ND	ND	*	ND	ND	*
Toluene	ND	ND	*	ND	ND	*	ND	ND	*
Total xylenes	ND	ND	*	ND	ND	*	ND	ND	*

02{TG5901}D3730/237/9

Note: All concentrations are in  $\mu\text{g}/\text{kg}$ .

\*RPD not calculated when one value is ND or values are qualified.

Source: Ecology and Environment, Inc. 1992.

Table 5-8

QA/QC SUMMARY OF BNA RESULTS FOR SOIL SAMPLE DUPLICATES  
COMPRESSOR STATION 229

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C010	C011	
1,2,4-Trichlorobenzene	ND	ND	*
1,2-Dichlorobenzene	ND	ND	*
1,3-Dichlorobenzene	ND	ND	*
1,4-Dichlorobenzene	ND	ND	*
2,4-Dinitrotoluene	ND	ND	*
2,6-Dinitrotoluene	ND	ND	*
2-Chloronaphthalene	ND	ND	*
2-Methylnaphthalene	ND	ND	*
2-Nitroaniline	ND	ND	*
3,3'-Dichlorobenzidine	ND	ND	*
3-Nitroaniline	ND	ND	*
4-Bromophenyl Phenyl Ether	ND	ND	*
4-Chloroaniline	ND	ND	*
4-Chlorophenyl Phenyl Ether	ND	ND	*
4-Nitroaniline	ND	ND	*
Acenaphthene	ND	ND	*
Acenaphthylene	ND	ND	*
Anthracene	ND	ND	*
Benzidine	ND	ND	*
Benzo(A)Anthracene	ND	ND	*
Benzo(A)Pyrene	ND	ND	*
Benzo(B)Fluoranthene	ND	ND	*
Benzo(G,H,I)Perylene	ND	ND	*
Benzo(K)Fluoranthene	ND	ND	*
Benzyl Alcohol	ND	ND	*

02(TG5901)D3730/239/23

Key at end of table.

Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	CO10	CO11	
Bis(2-Chloroethoxy)Methane	ND	ND	*
Bis(2-Chloroethyl)Ether	ND	ND	*
Bis(2-Chloroisopropyl)Ether	ND	ND	*
Bis(2-Ethylhexyl)Phthalate	ND	ND	*
Butyl Benzyl Phthalate	ND	ND	*
Chrysene	ND	ND	*
Di-N-Butyl-Phthalate	ND	ND	*
Di-N-Octyl Phthalate	ND	ND	*
Dibenzo(A,H)Anthracene	ND	ND	*
Dibenzofuran	ND	ND	*
Fluoranthene	ND	ND	*
Fluorene	ND	ND	*
Hexachlorobenzene	ND	ND	*
Hexachlorobutadiene	ND	ND	*
Hexachlorocyclopentadiene	ND	ND	*
Hexachloroethane	ND	ND	*
Indeno(1,2,3-cd)Pyrene	ND	ND	*
Isophorone	ND	ND	*
N-Nitrosodiphenylamine	ND	ND	*
N-Nitrosodipropylamine	ND	ND	*
Naphthalene	ND	ND	*

02[TG5901]D3730/239/23

Key at end of table.

Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C010	C011	
Phenanthrene	ND	ND	*
Pyrene	ND	ND	*
Phenol	ND	ND	*
2-Chlorophenol	ND	ND	*
2-Nitrophenol	ND	ND	*
2,4-Dimethylphenol	ND	ND	*
2,4-Dichlorophenol	ND	ND	*
4-Chloro-3-Methylphenol	ND	ND	*
2,4,6-Trichlorophenol	ND	ND	*
2,4-Dinitrophenol	ND	ND	*
4-Nitrophenol	ND	ND	*
4,6-Dinitro-2-Methylphenol	ND	ND	*
Pentachlorophenol	ND	ND	*
2-Methylphenol	ND	ND	*
4-Methylphenol	ND	ND	*
Benzoic Acid	ND	ND	*
2,4,5-Trichlorophenol	ND	ND	*

02[TG5901]D3730/239/23

Key at end of table.

Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C020	C021	
1,2,4-Trichlorobenzene	ND	ND	*
1,2-Dichlorobenzene	ND	ND	*
1,3-Dichlorobenzene	ND	ND	*
1,4-Dichlorobenzene	ND	ND	*
2,4-Dinitrotoluene	ND	ND	*
2,6-Dinitrotoluene	ND	ND	*
2-Chloronaphthalene	ND	ND	*
2-Methylnaphthalene	ND	ND	*
2-Nitroaniline	ND	ND	*
3,3'-Dichlorobenzidine	ND	ND	*
3-Nitroaniline	ND	ND	*
4-Bromophenyl Phenyl Ether	ND	ND	*
4-Chloroaniline	ND	ND	*
4-Chlorophenyl Phenyl Ether	ND	ND	*
4-Nitroaniline	ND	ND	*
Acenaphthene	ND	ND	*
Acenaphthylene	ND	ND	*
Anthracene	ND	ND	*
Benzidine	ND	ND	*
Benzo(A)Anthracene	ND	ND	*
Benzo(A)Pyrene	ND	ND	*
Benzo(B)Fluoranthene	ND	ND	*
Benzo(G,H,I)Perlyene	ND	ND	*
Benzo(K)Fluoranthene	ND	ND	*
Benzyl Alcohol	ND	ND	*

02|TG5901|D3730/239/23

Key at end of table.



Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C020	C021	
Bis(2-Chloroethoxy)Methane	ND	ND	*
Bis(2-Chloroethyl)Ether	ND	ND	*
Bis(2-Chloroisopropyl)Ether	ND	ND	*
Bis(2-Ethylhexyl)Phthalate	ND	ND	*
Butyl Benzyl Phthalate	ND	ND	*
Chrysene	ND	ND	*
Di-N-Butyl-Phthalate	ND	ND	*
Di-N-Octyl Phthalate	ND	ND	*
Dibenzo(A,H)Anthracene	ND	ND	*
Dibenzofuran	ND	ND	*
Fluoranthene	ND	ND	*
Fluorene	ND	ND	*
Hexachlorobenzene	ND	ND	*
Hexachlorobutadiene	ND	ND	*
Hexachlorocyclopentadiene	ND	ND	*
Hexachloroethane	ND	ND	*
Indeno(1,2,3-cd)Pyrene	ND	ND	*
Isophorone	ND	ND	*
N-Nitrosodiphenylamine	ND	ND	*
N-Nitrosodipropylamine	ND	ND	*
Naphthalene	ND	ND	*

02[TG5901]D3730/239/23

Key at end of table.

Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C020	C021	
Phenanthrene	ND	ND	*
Pyrene	ND	ND	*
Phenol	ND	ND	*
2-Chlorophenol	ND	ND	*
2-Nitrophenol	ND	ND	*
2,4-Dimethylphenol	ND	ND	*
2,4-Dichlorophenol	ND	ND	*
4-Chloro-3-Methylphenol	ND	ND	*
2,4,6-Trichlorophenol	ND	ND	*
2,4-Dinitrophenol	ND	ND	*
4-Nitrophenol	ND	ND	*
4,6-Dinitro-2-Methylphenol	ND	ND	*
Pentachlorophenol	ND	ND	*
2-Methylphenol	ND	ND	*
4-Methylphenol	ND	ND	*
Benzoic Acid	ND	ND	*
2,4,5-Trichlorophenol	ND	ND	*

02[TG5901]D3730/239/23

Key at end of table.

Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C032	C033	
1,2,4-Trichlorobenzene	ND	ND	*
1,2-Dichlorobenzene	ND	ND	*
1,3-Dichlorobenzene	ND	ND	*
1,4-Dichlorobenzene	ND	ND	*
2,4-Dinitrotoluene	ND	ND	*
2,6-Dinitrotoluene	ND	ND	*
2-Chloronaphthalene	ND	ND	*
2-Methylnaphthalene	ND	ND	*
2-Nitroaniline	ND	ND	*
3,3'-Dichlorobenzidine	ND	ND	*
3-Nitroaniline	ND	ND	*
4-Bromophenyl Phenyl Ether	ND	ND	*
4-Chloroaniline	ND	ND	*
4-Chlorophenyl Phenyl Ether	ND	ND	*
4-Nitroaniline	ND	ND	*
Acenaphthene	ND	ND	*
Acenaphthylene	ND	ND	*
Anthracene	ND	ND	*
Benzidine	ND	ND	*
Benzo(A)Anthracene	ND	ND	*
Benzo(A)Pyrene	ND	ND	*
Benzo(B)Fluoranthene	ND	ND	*
Benzo(G,H,I)Perlyene	ND	ND	*
Benzo(K)Fluoranthene	ND	ND	*
Benzyl Alcohol	ND	ND	*

02[TG5901]D3730/239/23

Key at end of table.

Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C032	C033	
Bis(2-Chloroethoxy)Methane	ND	ND	*
Bis(2-Chloroethyl)Ether	ND	ND	*
Bis(2-Chloroisopropyl)Ether	ND	ND	*
Bis(2-Ethylhexyl)Phthalate	ND	ND	*
Butyl Benzyl Phthalate	ND	ND	*
Chrysene	ND	ND	*
Di-N-Butyl-Phthalate	ND	ND	*
Di-N-Octyl Phthalate	ND	ND	*
Dibenzo(A,H)Anthracene	ND	ND	*
Dibenzofuran	ND	ND	*
Fluoranthene	ND	ND	*
Fluorene	ND	ND	*
Hexachlorobenzene	ND	ND	*
Hexachlorobutadiene	ND	ND	*
Hexachlorocyclopentadiene	ND	ND	*
Hexachloroethane	ND	ND	*
Indeno(1,2,3-cd)Pyrene	ND	ND	*
Isophorone	ND	ND	*
N-Nitrosodiphenylamine	ND	ND	*
N-Nitrosodipropylamine	ND	ND	*
Naphthalene	ND	ND	*

02[TG5901]D3730/239/23

Key at end of table.

Table 5-8 (Cont.)

Parameter	Drainage Ditch B Analytical Results		
	Sample Number	Duplicate Number	Relative Percent Difference (RPD)
	C032	C033	
Phenanthrene	ND	ND	*
Pyrene	ND	ND	*
Phenol	ND	ND	*
2-Chlorophenol	ND	ND	*
2-Nitrophenol	ND	ND	*
2,4-Dimethylphenol	ND	ND	*
2,4-Dichlorophenol	ND	ND	*
4-Chloro-3-Methylphenol	ND	ND	*
2,4,6-Trichlorophenol	ND	ND	*
2,4-Dinitrophenol	ND	ND	*
4-Nitrophenol	ND	ND	*
4,6-Dinitro-2-Methylphenol	ND	ND	*
Pentachlorophenol	ND	ND	*
2-Methylphenol	ND	ND	*
4-Methylphenol	ND	ND	*
Benzoic Acid	ND	ND	*
2,4,5-Trichlorophenol	ND	ND	*

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Note: All concentrations are in  $\mu\text{g}/\text{kg}$ .

\*RPD not calculated when one value is ND or for qualified values.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

APPENDIX A

BORING LOGS


# DRILLING LOG of BORING No. BH05

Page 1 of 1

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & E DRILLING Ground Elevation 1001.54  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 9.0'  
 Driller PAUL BARTH  
 Geologist JOHN DOEBB

Elev.	Depth	Description	Lithology	Sample No. and Symbol	Blow Count	Remarks
1001.54		Ground Surface				
	0.0'-0.4'	SILTY LOAM (OL): dark brown, moist, organic debris (roots, grass), minor pebbles		C001		Auger Run 1: 0.0'-5.0' 4.5' recovery. DVA: 7.0 ppm.
1000	0.4'-1.0'	SILTY CLAY (CL): light gray, moist, minor rock fragments, horizontal shearing		C002		Sample from 0.0'-2.0': TG-C001-0229-0080
	1.0'-1.1'	FILL: moist, bedded gravel-shale				Sample from 2.0'-4.0': TG-C002-0229-0080
	1.1'-5.0'	SILTY CLAY (CL): red-brown, moist, minor pebbles, vertical fracturing		C003		Auger Run 2: 5.0'-9.0' 3.3' recovery. Refusal at 9.0'.
	5.0'-5.1'	SILTY CLAY (CL): as above, wet				Sample from 4.0'-6.0': TG-C003-0229-0080
995	5.1'-7.0'	FILL: brown, wet, finely shattered shale, sand, clay		C004		Sample from 6.0'-8.0': TG-C004-0229-0080
	7.0'-9.0'	SILTY CLAY (CL): brown grading down to gray, wet, plastic		C005		Sample from 8.0'-9.0': TG-C005-0229-0080
						All samples analyzed for BTEX/BNA/TPH.

TENNESSEE GAS COMPRESSOR STATION 229

 Ecology and Environment, Inc.

Buffalo, New York

DRILLING LOG of BORING No. BH06

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & F DRILLING Ground Elevation 1002.78  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 5.0'  
 Driller PAUL BARTH  
 Geologist JOHN DOERR

Elev.	Depth	Description	Lithology	Sample No. and Symbol	Blow Count	Remarks
1002.78		Ground Surface				
	1	0.0'-2.5': SILTY LOAM (ML): dark brown, dry, mixed, moderate rock fragments		CO06		Auger Run 1: 0.0'-5.0' 3.5' recovery. Refusal at 5.0'. OVA up to 350 ppm in cuttings. Sample from 0.0'-2.0': TG-C006-0229-0080 Sample from 2.0'-4.0': TG-C007-0229-0080 Sample from 4.0'-5.0': TG-C008-0229-0080 All samples analyzed for BTEX/BNA/TPH.
	2			CO07		
1000	3	2.5'-3.5': CLAY AND SHALE (CL): black to dark gray, wet, plastic		CO08		

TENNESSEE GAS COMPRESSOR STATION 229

Ecology and Environment, Inc. Buffalo, New York



DRILLING LOG of BORING No. BH07

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & E DRILLING Ground Elevation 1002.93  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 5.5'  
 Driller PAUL BARTH  
 Geologist JOHN DOERR

Elev.	Depth	Description	Lithology	Sample No. and	Symbol	Blow Count	Remarks
1002.93		Ground Surface					
	0.0'-0.4'	SILTY LOAM (OL): dry, minor roots, organics		C000			Auger Run 1: 0.0'-5.5' 4.1' recovery. Refusal at 5.5'. OVA: 0.5-500 ppm.
	0.4'-2.0'	SILTY CLAY (CL): yellow-brown with dark brown, mottled, dry, minor to moderate rock fragments, soft, loose		C010			Sample from 0.0'-2.0': TG-C000-0228-0080
1000				011			Sample from 2.0'-4.0': TG-C010-0229-0080
	2.0'-5.0'	CLAY (CL): gray to brown, moist, plastic		C012			Sample from 4.0'-5.5': TG-C011-0228-0080 (DUP) TG-C012-0229-0080
	5.0'-5.5'	SHALE AND CLAY (CL): shale is black and clay is brown with gray partings, moist, plastic, finely laminated					All samples analyzed for BTEX/BNA/TPH.

TENNESSEE GAS COMPRESSOR STATION 229  
 Ecology and Environment, Inc. Buffalo, New York

DRILLING LOG of BORING No. BH08

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & E DRILLING Ground Elevation 998.08  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 5.0'  
 Driller PAUL BARTH  
 Geologist JOHN DOEBB

Elev.	Depth	Description	Lithology	Sample No. and Symbol	Blow Count	Remarks
998.08		Ground Surface				
	1	0.0'-0.3': SILTY LOAM (OL): dark brown, moist, grass, roots, organics		C014		Auger Run 1: 0.0'-5.0' 4.0' recovery. Refusal at 5.0'.
	2	0.3'-1.5': SILTY CLAY (CL): yellow-brown, dry, minor shale fragments		C015		Sample from 0.0'-2.0': TG-C014-0229-0080
995	3	1.5'-4.0': CLAY (CL): gray, wet, very plastic, trace silt and rock fragments				Sample from 2.0'-4.0': TG-C015-0229-0080
	4	4.0'-5.0': SHALE: wet, sandy, degraded		C016		Sample from 4.0'-5.0': TG-C016-0229-0080
	5					All samples analyzed for BTEX/BNA/TPH.

TENNESSEE GAS COMPRESSOR STATION 229  
 Ecology and Environment, Inc. Buffalo, New York

DRILLING LOG of BORING No. BH09

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & E DRILLING Ground Elevation 997.77  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 6.5'  
 Driller PAUL BARTH  
 Geologist JOHN DOERR

Elev.	Depth	Description	Lithology	Sample No. and Symbol	Blow Count	Remarks
997.77		Ground Surface				
	1	0.0'-0.3': SILTY LOAM (OL): dark brown, dry, minor organics		C018		Auger Run 1: 0.0'-6.5' 5.2' recovery. Refusal at 6.5'.
	2	0.3'-1.5': SILTY CLAY (CL): brown-gray, moist, soft, friable, minor shale fragments		C019		Sample from 0.0'-2.0': TG-C018-0229-0080
995	3	1.5'-6.5': CLAY (CL): gray, moist to wet, finely laminated, plastic, increasingly interbedded (laminated) with degraded shale fragments below 4.0'		C020		Sample from 2.0'-4.0': TG-C019-0229-0080
	4			021		Sample from 4.0'-6.0': TG-C020-0229-0080
	5					TG-C021-0229-0080 (DUP)
	6					All samples analyzed for BTEX/BNA/TPH.

TENNESSEE GAS COMPRESSOR STATION 229

Ecology and Environment, Inc.

Buffalo, New York

DRILLING LOG of BORING No. BH10

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & E DRILLING Ground Elevation 1001.54  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 5.0'  
 Driller PAUL BARTH  
 Geologist JOHN DOEBB

Elev.	Depth	Description	Lithology	Sample No. and Symbol	Blow Count	Remarks
1001.54		Ground Surface				
	1	0.0'-0.3': SILTY LOAM (OL): dark brown, moist, minor organics		C023		Auger Run 1: 0.0'-5.0' 3.3' recovery. Refusal at 5.0'.
	2	0.3'-1.2': CLAY (CL): brown, dry, tight, stiff, moderate shale fragments		C024		Sample from 0.0'-2.0': TG-C023-0229-0080
	3	1.2'-3.0': CLAY (CL): brown, dry, tight, stiff, moderate shale				Sample from 2.0'-4.0': TG-C024-0229-0080
		3.0'-3.3': CLAY (CL): gray, moist, finely laminated		C025		Sample from 4.0'-5.0': TG-C025-0229-0080 All samples analyzed for BTEX/BNA/TPH.

TENNESSEE GAS COMPRESSOR STATION 229  
 Ecology and Environment, Inc. Buffalo, New York

DRILLING LOG of BORING No. BH11

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & E DRILLING Ground Elevation 993.83  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 7.0'  
 Driller PAUL BARTH  
 Geologist JOHN DOERR

Elev.	Depth	Description	Lithology	Sample No. and Symbol	Blow Count	Remarks
993.83		Ground Surface				
	1	0.0'-0.2': SILTY LOAM (OL): dark brown, moist, organics		C027		Auger Run 1: 0.0'-5.0' 5.0' recovery. Sample from 0.0'-2.0': TG-C027-0229-0080
	2	0.2'-5.0': SILT (ML): yellow-brown, dry, trace rock fragments, clay/sand - uniform structure, finely laminated, mottled with gray from leaching along fractures to 7.0'		C028		Sample from 2.0'-4.0': TG-C028-0229-0080
990	4			C029		Auger Run 2: 5.0'-7.0' 2.0' recovery. Refusal at 7.0'. Sample from 4.0'-6.0': TG-C029-0229-0080
	5			C030		Sample from 6.0'-7.0': TG-C030-0229-0080 All samples analyzed for BTEX/BNA/TPH.

TENNESSEE GAS COMPRESSOR STATION 229  
 Ecology and Environment, Inc. Buffalo, New York

DRILLING LOG of BORING No. BH12

State NEW YORK Start Date 10/16/91  
 Location EDEN Completion Date 10/16/91  
 Drilling Firm E & E DRILLING Ground Elevation 994.59  
 Type of Drill DIEDRICH D-50 Total Depth of Boring 8.0'  
 Driller PAUL BARTH  
 Geologist JOHN DOERR

Elev.	Depth	Description	Lithology	Sample No. and Symbol	Blow Count	Remarks
994.59		Ground Surface				
	0.0'	0.0'-6.0': SILTY CLAY (CL): yellow-brown, dry, well laminated, decreasing silt with depth; below 4.0' is interlaminated rusty shale and clay; shale increasing downward		C031		Auger Run 1: 0.0'-6.0' 6.0' recovery. Sample from 0.0'-2.0': TG-C031-0229-0080 Sample from 2.0'-4.0': TG-C032-0229-0080 TG-C033-0229-0080 (DUP) Sample from 4.0'-6.0': TG-C034-0229-0080
	1					
	2					
	3					
	4					
990	5			C034		
	6	6.0'-8.0': SHALE: dry, increasingly degraded shale downward into competent shale		C035		Auger Run 2: 6.0'-8.0' 2.0' recovery. Refusal at 8.0'. Sample from 6.0'-8.0': TG-C035-0229-0080 All samples analyzed for BTEX/BNA/TPH.
	7					
	8					

TENNESSEE GAS COMPRESSOR STATION 229

Ecology and Environment, Inc. Buffalo, New York

APPENDIX B

SAMPLE DESCRIPTIONS AND DATA CROSS REFERENCE

## APPENDIX B

SAMPLE DESCRIPTIONS AND DATA CROSS REFERENCE  
COMPRESSOR STATION 229

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
TG-C036-0229-BKFS			Soil	D F E PCB	C036	24026	9102.506	10/16/91
TG-C037-0229-BKFS			Soil	D F E PCB	C037	24027	9102.506	10/16/91
TG-C096-0229-BKFS			Soil	D F E PCB	C096	25676	9102.708	11/08/91
TG-C097-0229-BKFS			Soil	D F E PCB	C097	26170	9102.752	11/14/91
TG-C098-0229-BKFS			Soil	D F E PCB	C098	26565	9102.765	11/15/91
TG-C038-0229-BKTW			Water	D T E TCL	C038	24028	9102.506	10/16/91
TG-C001-0229-DDBO	BH05	0 - 24	Soil	D N E TCL, TPH	C001	23995	9102.506	10/16/91
TG-C002-0229-DDBO	BH05	24 - 48	Soil	D N E TCL, TPH	C002	23996	9102.506	10/16/91
TG-C003-0229-DDBO	BH05	48 - 72	Soil	D N E TCL, TPH	C003	23997	9102.506	10/16/91
TG-C004-0229-DDBO	BH05	72 - 96	Soil	D N E TCL, TPH	C004	23998	9102.506	10/16/91
TG-C005-0229-DDBO	BH05	96 - 108	Soil	D N E TCL, TPH	C005	23999	9102.506	10/16/91
TG-C006-0229-DDBO	BH06	0 - 24	Soil	D N E TCL, TPH	C006	24000	9102.506	10/16/91
TG-C007-0229-DDBO	BH06	24 - 48	Soil	D N E TCL, TPH	C007	24001	9102.506	10/16/91
TG-C008-0229-DDBO	BH06	48 - 72	Soil	D N E TCL, TPH	C008	24002	9102.506	10/16/91
TG-C009-0229-DDBO	BH07	0 - 24	Soil	D N E TCL, TPH	C009	24003	9102.506	10/16/91

02[TG5901]D3730/242/23

Key at end of table.



Appendix B (Cont.)

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
TG-C010-0229-DDBO	BH07	24 - 48	Soil	D N E TCL, TPH	C010	24004	9102.506	10/16/91
TG-C011-0229-DDBO	BH07	24 - 48	Soil	D D E TCL, TPH	C011	24005	9102.506	10/16/91
TG-C012-0229-DDBO	BH07	48 - 66	Soil	D N E TCL, TPH	C012	24006	9102.506	10/16/91
TG-C014-0229-DDBO	BH08	0 - 24	Soil	D N E TCL, TPH	C014	24007	9102.506	10/16/91
TG-C015-0229-DDBO	BH08	24 - 48	Soil	D N E TCL, TPH	C015	24008	9102.506	10/16/91
TG-C016-0229-DDBO	BH08	48 - 72	Soil	D N E TCL, TPH	C016	24009	9102.506	10/16/91
TG-C018-0229-DDBO	BH09	0 - 24	Soil	D N E TCL, TPH	C018	24010	9102.506	10/16/91
TG-C019-0229-DDBO	BH09	24 - 48	Soil	D N E TCL, TPH	C019	24011	9102.506	10/16/91
TG-C020-0229-DDBO	BH09	48 - 72	Soil	D N E TCL, TPH	C020	24012	9102.506	10/16/91
TG-C021-0229-DDBO	BH09	48 - 72	Soil	D D E TCL, TPH	C021	24013	9102.506	10/16/91
TG-C023-0229-DDBO	BH10	0 - 24	Soil	D N E TCL, TPH	C023	24014	9102.506	10/16/91
TG-C024-0229-DDBO	BH10	24 - 48	Soil	D N E TCL, TPH	C024	24015	9102.506	10/16/91
TG-C025-0229-DDBO	BH10	48 - 60	Soil	D N E TCL, TPH	C025	24016	9102.506	10/16/91
TG-C027-0229-DDBO	BH11	0 - 24	Soil	D N E TCL, TPH	C027	24017	9102.506	10/16/91
TG-C028-0229-DDBO	BH11	24 - 48	Soil	D N E TCL, TPH	C028	24018	9102.506	10/16/91
TG-C029-0229-DDBO	BH11	48 - 72	Soil	D N E TCL, TPH	C029	24019	9102.506	10/16/91
TG-C030-0229-DDBO	BH11	72 - 96	Soil	D N E TCL, TPH	C030	24020	9102.506	10/16/91
TG-C031-0229-DDBO	BH12	0 - 24	Soil	D N E TCL, TPH	C031	24021	9102.506	10/16/91

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Key at end of table.

## Appendix B (Cont.)

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
TG-C032-0229-DDBO	BH12	24 - 48	Soil	D N E TCL, TPH	C032	24022	9102.506	10/16/91
TG-C033-0229-DDBO	BH12	24 - 48	Soil	D D E TCL, TPH	C033	24023	9102.506	10/16/91
TG-C034-0229-DDBO	BH12	48 - 72	Soil	D N E TCL, TPH	C034	24024	9102.506	10/16/91
TG-C035-0229-DDBO	BH12	72 - 96	Soil	D N E TCL, TPH	C035	24025	9102.506	10/16/91
TG-C056-0229-DDBO	G10	0 - 6	Soil	D N E PCB	C056	25667	9102.708	11/08/91
TG-C057-0229-DDBO	G13	0 - 6	Soil	D N E PCB	C057	25668	9102.708	11/08/91
TG-C058-0229-DDBO	G14	0 - 6	Soil	D N E PCB	C058	25669	9102.708	11/08/91
TG-C059-0229-DDBO	G15	0 - 6	Soil	D N E PCB	C059	25670	9102.708	11/08/91
TG-C060-0229-DDBO	G15	0 - 6	Soil	D D E PCB	C060	25671	9102.708	11/08/91
TG-C061-0229-DDBO	G16	0 - 6	Soil	D N E PCB	C061	25672	9102.708	11/08/91
TG-C039-0229-FL	E13	0 - 6	Soil	D N E PCB	C039	25655	9102.708	11/08/91
TG-C040-0229-FL	E14	0 - 6	Soil	D N E PCB	C040	25656	9102.708	11/08/91
TG-C041-0229-FL	E15	0 - 6	Soil	D N E PCB	C041	25657	9102.708	11/08/91
TG-C042-0229-FL	E16	0 - 6	Soil	D N E PCB	C042	25658	9102.708	11/08/91
TG-C043-0229-FL	E17	0 - 6	Soil	D N E PCB	C043	25659	9102.708	11/08/91
TG-C044-0229-FL	E18	0 - 6	Soil	D N E PCB	C044	25660	9102.708	11/08/91
TG-C045-0229-FL	E19	0 - 6	Soil	D N E PCB	C045	26166	9102.752	11/14/91
TG-C046-0229-FL	E20	0 - 6	Soil	D N E PCB	C046	26167	9102.752	11/14/91

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Key at end of table.

## Appendix B (Cont.)

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
TG-C047-0229-FL	E21	0 - 6	Soil	D N E PCB	C047	26168	9102.752	11/14/91
TG-C048-0229-FL	E22	0 - 6	Soil	D D E PCB	C048	26169	9102.752	11/14/91
TG-C049-0229-FL	E22	0 - 6	Soil	D N E PCB	C049	26550	9102.752	11/14/91
TG-9344-0229-GSC	Q22	0 - 6	Soil	D N E PCB	9344	25673	9102.708	11/08/91
TG-9345-0229-GSC	R22	0 - 6	Soil	D N E PCB	9345	25674	9102.708	11/08/91
TG-9346-0229-GSC	R22	0 - 6	Soil	D D E PCB	9346	25675	9102.708	11/08/91
TG-C062-0229-POAF	19	0 - 6	Sediment	D N E PCB	C062	26560	9102.765	11/15/91
TG-C063-0229-POAF	20	0 - 6	Sediment	D N E PCB	C063	26561	9102.765	11/15/91
TG-C064-0229-POAF	21	0 - 6	Sediment	D N E PCB	C064	26562	9102.765	11/15/91
TG-C065-0229-POAF	22	0 - 6	Sediment	D N E PCB	C065	26563	9102.765	11/15/91
TG-C066-0229-POAF	23	0 - 6	Sediment	D N E PCB	C066	26564	9102.765	11/15/91
TG-C050-0229-PRA	01	0 - 6	Soil	D N E PCB	C050	25661	9102.708	11/08/91
TG-C051-0229-PRA	02	0 - 6	Soil	D D E PCB	C051	25662	9102.708	11/08/91
TG-C052-0229-PRA	03	0 - 6	Soil	D N E PCB	C052	25663	9102.708	11/08/91
TG-C053-0229-PRA	04	0 - 6	Soil	D N E PCB	C053	25664	9102.708	11/08/91
TG-C054-0229-PRA	05	0 - 6	Soil	D N E PCB	C054	25665	9102.708	11/08/91
TG-C055-0229-PRA	06	0 - 6	Soil	D N E PCB	C055	25666	9102.708	11/08/91
TG-C067-0229-TRAF	108	6 - 12	Soil	D N E PCB	C067	26138	9102.752	11/14/91
TG-C068-0229-TRAF	108	12 - 24	Soil	D N E PCB	C068	26139	9102.752	11/14/91

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Key at end of table.

Appendix B (Cont.)

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
TG-C069-0229-TRAF	109	6 - 12	Soil	D N E PCB	C069	26140	9102.752	11/14/91
TG-C070-0229-TRAF	110	12 - 24	Soil	D N E PCB	C070	26141	9102.752	11/14/91
TG-C071-0229-TRAF	113	6 - 12	Soil	D N E PCB	C071	26142	9102.752	11/14/91
TG-C072-0229-TRAF	113	12 - 24	Soil	D N E PCB	C072	26143	9102.752	11/14/91
TG-C073-0229-TRAF	114	6 - 12	Soil	D N E PCB	C073	26144	9102.752	11/14/91
TG-C075-0229-TRAF	121	0 - 6	Soil	D N E PCB	C075	26145	9102.752	11/14/91
TG-C076-0229-TRAF	121	0 - 6	Soil	D D E PCB	C076	26146	9102.752	11/14/91
TG-C077-0229-TRAF	122	0 - 6	Soil	D N E PCB	C077	26147	9102.752	11/14/91
TG-C078-0229-TRAF	122	6 - 12	Soil	D N E PCB	C078	26148	9102.752	11/14/91
TG-C079-0229-TRAF	123	0 - 6	Soil	D N E PCB	C079	26149	9102.752	11/14/91
TG-C080-0229-TRAF	123	6 - 12	Soil	D N E PCB	C080	26150	9102.752	11/14/91
TG-C081-0229-TRAF	124	0 - 6	Soil	D N E PCB	C081	26151	9102.752	11/14/91
TG-C082-0229-TRAF	124	6 - 12	Soil	D N E PCB	C082	26152	9102.752	11/14/91
TG-C083-0229-TRAF	125	0 - 6	Soil	D N E PCB	C083	26153	9102.752	11/14/91
TG-C084-0229-TRAF	125	6 - 12	Soil	D N E PCB	C084	26154	9102.752	11/14/91
TG-C085-0229-TRAF	126	0 - 6	Soil	D N E PCB	C085	26155	9102.752	11/14/91
TG-C086-0229-TRAF	126	6 - 12	Soil	D N E PCB	C086	26156	9102.752	11/14/91
TG-C087-0229-TRAF	126	6 - 12	Soil	D D E PCB	C087	26157	9102.752	11/14/91

02[TG5901]D3730/242/23

Key at end of table.

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Appendix B (Cont.)

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
TG-C088-0229-TRAF	127	0 - 6	Soil	D N E PCB	C088	26158	9102.752	11/14/91
TG-C089-0229-TRAF	128	0 - 6	Soil	D N E PCB	C089	26159	9102.752	11/14/91
TG-C090-0229-TRAF	129	0 - 6	Soil	D N E PCB	C090	26160	9102.752	11/14/91
TG-C091-0229-TRAF	130	0 - 6	Sediment	D N E PCB	C091	26161	9102.752	11/14/91
TG-C092-0229-TRAF	131	0 - 6	Soil	D N E PCB	C092	26162	9102.752	11/14/91
TG-C093-0229-TRAF	132	0 - 6	Sediment	D N E PCB	C093	26163	9102.752	11/14/91
TG-C094-0229-TRAF	132	0 - 6	Sediment	D D E PCB	C094	26164	9102.752	11/14/91
TG-C095-0229-TRAF	133	0 - 6	Sediment	D N E PCB	C095	26165	9102.752	11/14/91

02[TG5901]D3730/242/23

Key:

\*Sample description is divided into four columns:

Column 1: Type

C = Composite  
D = Discrete

Column 2: QA/QC

D = Duplicate  
F = Field Blank  
N = Not a QA/QC Sample

Column 3: Lab

E = E & E ASC  
S = Subcontractor Lab

Column 4: Analysis

PCB = Polychlorinated biphenyls  
TCL = Target Compound List.  
TPH = Total petroleum hydrocarbons.

Source: Ecology and Environment, Inc. 1992.

APPENDIX C

LABORATORY REPORTS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Laboratory Job Number: 9102.506

Customer Sample Code	Laboratory Sample Code	Analytical Requirements*					
		*VOA GC/MS	*BNA GC/MS	<sup>BTEX</sup> *VOA GC	*PEST PCB	*METALS	**OTHER
TG-C001-0229-DDBO	23995		X	X			X
TG-C002-0229-DDBO	23996		X	X*			X
TG-C003-0229-DDBO	23997		X	X			X
TG-C004-0229-DDBO	23998		X	X			X
-C005-	23999		X	X*			X
-C006-	24000		X	X			X
-C007-	24001		X	X			X
-C008-	24002		X	X*			X
-C009-	24003		X	X			X
-C010-	24004		X	X			X
C011-	24005		X	X*			X
C012-	24006		X	X			X
C014	24007		X	X			X
C015	24008		X	X			X
C016	24009		X	X			X
C018	24010		X	X			X
C019	24011		X	X			X
C020	24012		X	X			X
C021	24013		X	X			X
C022							
C023	24014		X	X			X
C024	24015		X	X			X
C025	24016		X	X			X
C027	24017		X	X			X
-C028-	24018		X	X*			X
-C029-	24019		X	X			X
-C030-	24020		X	X			X

\*Check Appropriate Boxes

\*CLP, Non-CLP (Please indicate year of protocol)

\*HSL, Priority Pollutant

\*\* Total recoverable petroleum hydrocarbons.

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\* Sample container found broken on receipt.  
 Sample custody "repacked". C-2

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

VOA (BTEX)  
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd At Lab	Low Level Med. Level	Date Analyzed
23995	Soil	10-16-91	10-16-91	Low	10-19-91
6					
7					
8					
9					
24000					10-22-91
24001					
24002					
3					
4					
5					
6					
7					
8					
9					
24010					
11					
12					
13					
14	↓	↓	↓	↓	↓ 10-19-91

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

VOA  
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd At Lab	Low Level Med. Level	Date Analyzed
24015	Soil	10-16-91	10-16-91	low	10-19-91
16					10-21-91
17					
18					
19					
20					
1					
2					
3					
4					10-22-91
5					
6					
7					
8	water	↓	↓	↓	↓

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

B/N-A  
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd At Lab	Date Extracted	Date Analyzed
23995	Soil	10-16-91	10-16-91	10-17-91	10-24-91
6					
7					
8					
9					
24000					
1					
2					
3					10-25-91
4					
5					
6					
7					
8					
9					
10					
11					10-28-91
12					
13					
14				✓	



Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
23995.01	TG-C001-0229-DDBO	SBTX 1	10/16/91		10/19/91
23995.02	TG-C001-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
23995.03	TG-C001-0229-DDBO	SPETHY1	10/16/91		10/31/91
23996.01	TG-C002-0229-DDBO	SBTX 1	10/16/91		10/19/91
23996.02	TG-C002-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
23996.03	TG-C002-0229-DDBO	SPETHY1	10/16/91		10/31/91
23997.01	TG-C003-0229-DDBO	SBTX 1	10/16/91		10/19/91
23997.02	TG-C003-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
23997.03	TG-C003-0229-DDBO	SPETHY1	10/16/91		10/31/91
23998.01	TG-C004-0229-DDBO	SBTX 1	10/16/91		10/19/91
23998.02	TG-C004-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
23998.03	TG-C004-0229-DDBO	SPETHY1	10/16/91		10/31/91
23999.01	TG-C005-0229-DDBO	SBTX 1	10/16/91		10/19/91
23999.02	TG-C005-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
23999.03	TG-C005-0229-DDBO	SPETHY1	10/16/91		10/31/91
24000.01	TG-C006-0229-DDBO	SBTX 1	10/16/91		10/22/91
24000.02	TG-C006-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
24000.03	TG-C006-0229-DDBO	SPETHY1	10/16/91		10/31/91
24001.01	TG-C007-0229-DDBO	SBTX 1	10/16/91		10/23/91
24001.02	TG-C007-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
24001.03	TG-C007-0229-DDBO	SPETHY1	10/16/91		10/31/91
24002.01	TG-C008-0229-DDBO	SBTX 1	10/16/91		10/22/91
24002.02	TG-C008-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/24/91
		SBNBNA1	10/16/91	10/17/91	10/24/91
		STSCLP1	10/16/91		10/17/91
24002.03	TG-C008-0229-DDBO	SPETHY1	10/16/91		10/31/91
24003.01	TG-C009-0229-DDBO	SBTX 1	10/16/91		10/19/91
24003.02	TG-C009-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91
		SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24003.03	TG-C009-0229-DDBO	SPETHY1	10/16/91		10/31/91
24004.01	TG-C010-0229-DDBO	SBTX 1	10/16/91		10/22/91
24004.02	TG-C010-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
24004.02	TG-C010-0229-DDBO	SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24004.03	TG-C010-0229-DDBO	SPETHY1	10/16/91		10/31/91
24005.01	TG-C011-0229-DDBO	SBTX 1	10/16/91		10/19/91
24005.02	TG-C011-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91
		SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24005.03	TG-C011-0229-DDBO	SPETHY1	10/16/91		10/31/91
24006.01	TG-C012-0229-DDBO	SBTX 1	10/16/91		10/22/91
24006.02	TG-C012-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91
		SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24006.03	TG-C012-0229-DDBO	SPETHY1	10/16/91		10/31/91
24007.01	TG-C014-0229-DDBO	SBTX 1	10/16/91		10/22/91
24007.02	TG-C014-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91
		SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24007.03	TG-C014-0229-DDBO	SPETHY1	10/16/91		10/31/91
24008.01	TG-C015-0229-DDBO	SBTX 1	10/16/91		10/22/91
24008.02	TG-C015-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91
		SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24008.03	TG-C015-0229-DDBO	SPETHY1	10/16/91		10/31/91
24009.01	TG-C016-0229-DDBO	SBTX 1	10/16/91		10/22/91
24009.02	TG-C016-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91
		SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24009.03	TG-C016-0229-DDBO	SPETHY1	10/16/91		10/31/91
24010.01	TG-C018-0229-DDBO	SBTX 1	10/16/91		10/22/91
24010.02	TG-C018-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/25/91
		SBNBNA1	10/16/91	10/17/91	10/25/91
		STSCLP1	10/16/91		10/17/91
24010.03	TG-C018-0229-DDBO	SPETHY1	10/16/91		10/31/91
24011.01	TG-C019-0229-DDBO	SBTX 1	10/16/91		10/22/91
24011.02	TG-C019-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/28/91
		SBNBNA1	10/16/91	10/17/91	10/28/91
		STSCLP1	10/16/91		10/17/91
24011.03	TG-C019-0229-DDBO	SPETHY1	10/16/91		10/31/91
24012.01	TG-C020-0229-DDBO	SBTX 1	10/16/91		10/22/91
24012.02	TG-C020-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/28/91
		SBNBNA1	10/16/91	10/17/91	10/28/91
		STSCLP1	10/16/91		10/17/91
24012.03	TG-C020-0229-DDBO	SPETHY1	10/16/91		10/31/91
24013.01	TG-C021-0229-DDBO	SBTX 1	10/16/91		10/22/91
24013.02	TG-C021-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/28/91
		SBNBNA1	10/16/91	10/17/91	10/28/91
		STSCLP1	10/16/91		10/17/91

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
24013.03	TG-C021-0229-DDBO	SPETHY1	10/16/91		10/31/91
24014.01	TG-C023-0229-DDBO	SBTX 1	10/16/91		10/19/91
24014.02	TG-C023-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/28/91
		SBNBNA1	10/16/91	10/17/91	10/28/91
		STSCLP1	10/16/91		10/17/91
24014.03	TG-C023-0229-DDBO	SPETHY1	10/16/91		10/31/91
24015.01	TG-C024-0229-DDBO	SBTX 1	10/16/91		10/19/91
24015.02	TG-C024-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/28/91
		SBNBNA1	10/16/91	10/17/91	10/28/91
		STSCLP1	10/16/91		10/17/91
24015.03	TG-C024-0229-DDBO	SPETHY1	10/16/91		11/01/91
24016.01	TG-C025-0229-DDBO	SBTX 1	10/16/91		10/21/91
24016.02	TG-C025-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24016.03	TG-C025-0229-DDBO	SPETHY1	10/16/91		11/01/91
24017.01	TG-C027-0229-DDBO	SBTX 1	10/16/91		10/21/91
24017.02	TG-C027-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24017.03	TG-C027-0229-DDBO	SPETHY1	10/16/91		11/01/91
24018.01	TG-C028-0229-DDBO	SBTX 1	10/16/91		10/21/91
24018.02	TG-C028-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24018.03	TG-C028-0229-DDBO	SPETHY1	10/16/91		11/01/91
24019.01	TG-C029-0229-DDBO	SBTX 1	10/16/91		10/21/91
24019.02	TG-C029-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24019.03	TG-C029-0229-DDBO	SPETHY1	10/16/91		11/01/91
24020.01	TG-C030-0229-DDBO	SBTX 1	10/16/91		10/22/91
24020.02	TG-C030-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24020.03	TG-C030-0229-DDBO	SPETHY1	10/16/91		11/01/91
24021.01	TG-C031-0229-DDBO	SBTX 1	10/16/91		10/21/91
24021.02	TG-C031-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24021.03	TG-C031-0229-DDBO	SPETHY1	10/16/91		11/01/91
24022.01	TG-C032-0229-DDBO	SBTX 1	10/16/91		10/21/91
24022.02	TG-C032-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24022.03	TG-C032-0229-DDBO	SPETHY1	10/16/91		11/01/91
24023.01	TG-C033-0229-DDBO	SBTX 1	10/16/91		10/21/91

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
24023.02	TG-C033-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24023.03	TG-C033-0229-DDBO	SPETHY1	10/16/91		11/01/91
24024.01	TG-C034-0229-DDBO	SBTX 1	10/16/91		10/22/91
24024.02	TG-C034-0229-DDBO	SAPBNA1	10/16/91	10/17/91	10/29/91
		SBNBNA1	10/16/91	10/17/91	10/29/91
		STSCLP1	10/16/91		10/17/91
24024.03	TG-C034-0229-DDBO	SPETHY1	10/16/91		11/01/91
24025.01	TG-C035-0229-DDBO	SBTX 1	10/16/91		10/22/91
24025.02	TG-C035-0229-DDBO	SAPBNA1	10/16/91	10/21/91	10/31/91
		SBNBNA1	10/16/91	10/21/91	10/31/91
		STSCLP1	10/16/91		10/17/91
24025.03	TG-C035-0229-DDBO	SPETHY1	10/16/91		11/01/91
24026.01	TG-C036-0229-BKFS	SBTX 1	10/16/91		10/22/91
24026.02	TG-C036-0229-BKFS	SAPBNA1	10/16/91	10/21/91	10/31/91
		SBNBNA1	10/16/91	10/21/91	10/31/91
		STSCLP1	10/16/91		10/17/91
24026.03	TG-C036-0229-BKFS	SPETHY1	10/16/91		11/01/91
24027.01	TG-C037-0229-BKFS	SBTX 1	10/16/91		10/22/91
24027.02	TG-C037-0229-BKFS	SAPBNA1	10/16/91	10/21/91	10/31/91
		SBNBNA1	10/16/91	10/21/91	10/31/91
		STSCLP1	10/16/91		10/17/91
24027.03	TG-C037-0229-BKFS	SPETHY1	10/16/91		11/01/91
24028.01	TG-C038-0229-BKTW	WBTX 1	10/16/91		10/22/91



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 TEST NAME : SOLIDS - TOTAL UNITS : %  
 PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-23995 TG-C001-0229-DDBO	85	-
EE-91-23996 TG-C002-0229-DDBO	78	-
EE-91-23997 TG-C003-0229-DDBO	86	-
EE-91-23998 TG-C004-0229-DDBO	77	-
EE-91-23999 TG-C005-0229-DDBO	84	-
EE-91-24000 TG-C006-0229-DDBO	86	-
EE-91-24001 TG-C007-0229-DDBO	86	-
EE-91-24002 TG-C008-0229-DDBO	85	-
EE-91-24003 TG-C009-0229-DDBO	91	-
EE-91-24004 TG-C010-0229-DDBO	88	-
EE-91-24005 TG-C011-0229-DDBO	88	-
EE-91-24006 TG-C012-0229-DDBO	81	-
EE-91-24007 TG-C014-0229-DDBO	89	-

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-24008 TG-C015-0229-DDBO	86	-
EE-91-24009 TG-C016-0229-DDBO	87	-
EE-91-24010 TG-C018-0229-DDBO	89	-
EE-91-24011 TG-C019-0229-DDBO	79	-
EE-91-24012 TG-C020-0229-DDBO	88	-
EE-91-24013 TG-C021-0229-DDBO	87	-
EE-91-24014 TG-C023-0229-DDBO	82	-
EE-91-24015 TG-C024-0229-DDBO	82	-
EE-91-24016 TG-C025-0229-DDBO	80	-
EE-91-24017 TG-C027-0229-DDBO	87	-
EE-91-24018 TG-C028-0229-DDBO	87	-
EE-91-24019 TG-C029-0229-DDBO	88	-
EE-91-24020 TG-C030-0229-DDBO	88	-

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-24021 TG-C031-0229-DDBO	89	-
EE-91-24022 TG-C032-0229-DDBO	90	-
EE-91-24023 TG-C033-0229-DDBO	91	-
EE-91-24024 TG-C034-0229-DDBO	89	-
EE-91-24025 TG-C035-0229-DDBO	89	-
EE-91-24026 TG-C036-0229-BKFS	100	-
EE-91-24027 TG-C037-0229-BKFS	100	-

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : SPETHY1

JOB NUMBER : 9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : TRPH UNITS : MG/KG  
PARAMETER : Petroleum Hydrocarbons  
RESULTS IN DRY WEIGHT

SAMPLE ID	RESULTS	Q	QNT. LIMIT
EE-91-23995 TG-C001-0229-DDBO	ND		5.9
EE-91-23996 TG-C002-0229-DDBO	32		6.4
EE-91-23997 TG-C003-0229-DDBO	12		5.8
EE-91-23998 TG-C004-0229-DDBO	120		6.5
EE-91-23999 TG-C005-0229-DDBO	44		6.0
EE-91-24000 TG-C006-0229-DDBO	ND		5.8
EE-91-24001 TG-C007-0229-DDBO	95		5.8
EE-91-24002 TG-C008-0229-DDBO	130		5.9
EE-91-24003 TG-C009-0229-DDBO	6.8		5.5
EE-91-24004 TG-C010-0229-DDBO	ND		5.7
EE-91-24005 TG-C011-0229-DDBO	66		5.7
EE-91-24006 TG-C012-0229-DDBO	64		6.2
EE-91-24007 TG-C014-0229-DDBO	47		5.6

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED QNT. LIMIT  
NA = NOT APPLICABLE

TEST CODE : SPETHY1

JOB NUMBER : 9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : TRPH UNITS : MG/KG  
PARAMETER : Petroleum Hydrocarbons  
RESULTS IN DRY WEIGHT

SAMPLE ID	RESULTS	Q	QNT. LIMIT
EE-91-24008 TG-C015-0229-DDBO	ND		5.8
EE-91-24009 TG-C016-0229-DDBO	29		5.7
EE-91-24010 TG-C018-0229-DDBO	ND		5.6
EE-91-24011 TG-C019-0229-DDBO	ND		6.3
EE-91-24012 TG-C020-0229-DDBO	ND		5.7
EE-91-24013 TG-C021-0229-DDBO	20		5.7
EE-91-24014 TG-C023-0229-DDBO	ND		6.1
EE-91-24015 TG-C024-0229-DDBO	ND		6.1
EE-91-24016 TG-C025-0229-DDBO	12		6.2
EE-91-24017 TG-C027-0229-DDBO	ND		5.7
EE-91-24018 TG-C028-0229-DDBO	ND		5.7
EE-91-24019 TG-C029-0229-DDBO	ND		5.7

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED QNT. LIMIT  
NA = NOT APPLICABLE

TEST CODE : SPETHY1

JOB NUMBER : 9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : TRPH UNITS : MG/KG  
PARAMETER : Petroleum Hydrocarbons  
RESULTS IN DRY WEIGHT

SAMPLE ID	RESULTS	Q	QNT. LIMIT
EE-91-24020			
TG-C030-0229-DDBO	ND		5.7
EE-91-24021			
TG-C031-0229-DDBO	ND		5.6
EE-91-24022			
TG-C032-0229-DDBO	ND		5.6
EE-91-24023			
TG-C033-0229-DDBO	ND		5.5
EE-91-24024			
TG-C034-0229-DDBO	ND		5.6
EE-91-24025			
TG-C035-0229-DDBO	ND		5.6
EE-91-24026			
TG-C036-0229-BKFS	ND		5.0
EE-91-24027			
TG-C037-0229-BKFS	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED QNT. LIMIT  
NA = NOT APPLICABLE

QUALITY CONTROL FOR PRECISION  
RESULTS OF ANALYSIS OF REPLICATE  
ANALYSES OF SOLID SAMPLES

9102.506

(mg/kg)

Parameter	E & E Laboratory No. 91-	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
T. Petroleum Hydrocarbons	24014	ND	19	NC
	24024	ND	ND	NC

ND = NOT DETECTED

NC = NOT CALCULABLE

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOLID SAMPLES

9102.506

(mg/kg)

Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
T. Petroleum					
Hydrocarbons	24004	ND	110	120	107
	24014	ND	230	230	102
	24027	ND	100	59	59

ND = NOT DETECTED

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, PERCENT RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 85.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23995 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C001-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		390
1,3-Dichlorobenzene	ND		390
1,4-Dichlorobenzene	ND		390
1,2-Dichlorobenzene	ND		390
Bis(2-Chloroisopropyl) Ether	ND		390
N-Nitrosodipropylamine	ND		390
Hexachloroethane	ND		390
Nitrobenzene	ND		390
Isophorone	ND		390
Bis (2-Chloroethoxy) Methane	ND		390
1,2,4-Trichlorobenzene	ND		390
Naphthalene	ND		390
Hexachlorobutadiene	ND		390
Hexachlorocyclopentadiene	ND		390
2-Chloronaphthalene	ND		390
Dimethyl Phthalate	ND		390
Acenaphthylene	ND		390
Fluorene	ND		390
Acenaphthene	ND		390
2,4-Dinitrotoluene	ND		390
2,6-Dinitrotoluene	ND		390
Diethylphthalate	ND		390
4-Chlorophenyl Phenyl Ether	ND		390
N-Nitrosodiphenylamine	ND		390
4-Bromophenyl Phenyl Ether	ND		390
Hexachlorobenzene	ND		390
Phenanthrene	ND		390
Anthracene	ND		390
Di-N-Butyl-Phthalate	PRESENT	L	390
Fluoranthene	ND		390
Benzidine	ND		1900
Pyrene	ND		390
Butyl Benzyl Phthalate	ND		390
3,3'-Dichlorobenzidine	ND		780
Benzo(A)Anthracene	ND		390
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	390

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 85.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23995 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C001-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		390
Di-N-Octyl Phthalate	ND		390
Benzo(B)Fluoranthene	ND		390
Benzo(K)Fluoranthene	ND		390
Benzo(A)Pyrene	ND		390
Indeno(1,2,3-cd)Pyrene	ND		390
Dibenzo(A,H)Anthracene	ND		390
Benzo(G,H,I)Perylene	ND		390
Benzyl Alcohol	ND		390
4-Chloroaniline	ND		390
2-Methylnaphthalene	ND		390
2-Nitroaniline	ND		1900
3-Nitroaniline	ND		1900
Dibenzofuran	ND		390
4-Nitroaniline	ND		1900

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 85.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23995 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO01-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		390
2-Chlorophenol	ND		390
2-Nitrophenol	ND		390
2,4-Dimethylphenol	ND		390
2,4-Dichlorophenol	ND		390
4-Chloro-3-Methylphenol	ND		390
2,4,6-Trichlorophenol	ND		390
2,4-Dinitrophenol	ND		1900
4-Nitrophenol	ND		1900
4,6-Dinitro-2-Methylphenol	ND		1900
Pentachlorophenol	ND		1900
2-Methylphenol	ND		390
4-Methylphenol	ND		390
Benzoic Acid	ND		1900
2,4,5-Trichlorophenol	ND		1900

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 78.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23996 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C002-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		420
1,3-Dichlorobenzene	ND		420
1,4-Dichlorobenzene	ND		420
1,2-Dichlorobenzene	ND		420
Bis(2-Chloroisopropyl) Ether	ND		420
N-Nitrosodipropylamine	ND		420
Hexachloroethane	ND		420
Nitrobenzene	ND		420
Isophorone	ND		420
Bis (2-Chloroethoxy) Methane	ND		420
1,2,4-Trichlorobenzene	ND		420
Naphthalene	ND		420
Hexachlorobutadiene	ND		420
Hexachlorocyclopentadiene	ND		420
2-Chloronaphthalene	ND		420
Dimethyl Phthalate	ND		420
Acenaphthylene	ND		420
Fluorene	ND		420
Acenaphthene	ND		420
2,4-Dinitrotoluene	ND		420
2,6-Dinitrotoluene	ND		420
Diethylphthalate	ND		420
4-Chlorophenyl Phenyl Ether	ND		420
N-Nitrosodiphenylamine	ND		420
4-Bromophenyl Phenyl Ether	ND		420
Hexachlorobenzene	ND		420
Phenanthrene	ND		420
Anthracene	ND		420
Di-N-Butyl-Phthalate	PRESENT	L	420
Fluoranthene	ND		420
Benzidine	ND		2000
Pyrene	ND		420
Butyl Benzyl Phthalate	ND		420
3,3'-Dichlorobenzidine	ND		850
Benzo(A)Anthracene	ND		420
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	420

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SBNBNA1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 78.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23996 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO02-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		420
Di-N-Octyl Phthalate	ND		420
Benzo(B)Fluoranthene	ND		420
Benzo(K)Fluoranthene	ND		420
Benzo(A)Pyrene	ND		420
Indeno(1,2,3-cd)Pyrene	ND		420
Dibenzo(A,H)Anthracene	ND		420
Benzo(G,H,I)Perylene	ND		420
Benzyl Alcohol	ND		420
4-Chloroaniline	ND		420
2-Methylnaphthalene	ND		420
2-Nitroaniline	ND		2000
3-Nitroaniline	ND		2000
Dibenzofuran	ND		420
4-Nitroaniline	ND		2000

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 78.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23996 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C002-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		420
2-Chlorophenol	ND		420
2-Nitrophenol	ND		420
2,4-Dimethylphenol	ND		420
2,4-Dichlorophenol	ND		420
4-Chloro-3-Methylphenol	ND		420
2,4,6-Trichlorophenol	ND		420
2,4-Dinitrophenol	ND		2000
4-Nitrophenol	ND		2000
4,6-Dinitro-2-Methylphenol	ND		2000
Pentachlorophenol	ND		2000
2-Methylphenol	ND		420
4-Methylphenol	ND		420
Benzoic Acid	ND		2000
2,4,5-Trichlorophenol	ND		2000

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23997 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO03-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	PRESENT	L	380
Fluoranthene	ND		380
Benzidine	ND		1900
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		770
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23997 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C003-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1900
3-Nitroaniline	ND		1900
Dibenzofuran	ND		380
4-Nitroaniline	ND		1900

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23997 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C003-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1900
4-Nitrophenol	ND		1900
4,6-Dinitro-2-Methylphenol	ND		1900
Pentachlorophenol	ND		1900
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1900
2,4,5-Trichlorophenol	ND		1900

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 77.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23998 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C004-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		430
1,3-Dichlorobenzene	ND		430
1,4-Dichlorobenzene	ND		430
1,2-Dichlorobenzene	ND		430
Bis(2-Chloroisopropyl) Ether	ND		430
N-Nitrosodipropylamine	ND		430
Hexachloroethane	ND		430
Nitrobenzene	ND		430
Isophorone	ND		430
Bis (2-Chloroethoxy) Methane	ND		430
1,2,4-Trichlorobenzene	ND		430
Naphthalene	ND		430
Hexachlorobutadiene	ND		430
Hexachlorocyclopentadiene	ND		430
2-Chloronaphthalene	ND		430
Dimethyl Phthalate	ND		430
Acenaphthylene	ND		430
Fluorene	ND		430
Acenaphthene	ND		430
2,4-Dinitrotoluene	ND		430
2,6-Dinitrotoluene	ND		430
Diethylphthalate	ND		430
4-Chlorophenyl Phenyl Ether	ND		430
N-Nitrosodiphenylamine	ND		430
4-Bromophenyl Phenyl Ether	ND		430
Hexachlorobenzene	ND		430
Phenanthrene	ND		430
Anthracene	ND		430
Di-N-Butyl-Phthalate	ND		430
Fluoranthene	ND		430
Benzidine	ND		2100
Pyrene	ND		430
Butyl Benzyl Phthalate	ND		430
3,3'-Dichlorobenzidine	ND		860
Benzo(A)Anthracene	ND		430
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	430

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 77.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23998 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C004-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		430
Di-N-Octyl Phthalate	ND		430
Benzo(B)Fluoranthene	ND		430
Benzo(K)Fluoranthene	ND		430
Benzo(A)Pyrene	ND		430
Indeno(1,2,3-cd)Pyrene	ND		430
Dibenzo(A,H)Anthracene	ND		430
Benzo(G,H,I)Perylene	ND		430
Benzyl Alcohol	ND		430
4-Chloroaniline	ND		430
2-Methylnaphthalene	ND		430
2-Nitroaniline	ND		2100
3-Nitroaniline	ND		2100
Dibenzofuran	ND		430
4-Nitroaniline	ND		2100

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 77.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23998 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C004-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		430
2-Chlorophenol	ND		430
2-Nitrophenol	ND		430
2,4-Dimethylphenol	ND		430
2,4-Dichlorophenol	ND		430
4-Chloro-3-Methylphenol	ND		430
2,4,6-Trichlorophenol	ND		430
2,4-Dinitrophenol	ND		2100
4-Nitrophenol	ND		2100
4,6-Dinitro-2-Methylphenol	ND		2100
Pentachlorophenol	ND		2100
2-Methylphenol	ND		430
4-Methylphenol	ND		430
Benzoic Acid	ND		2100
2,4,5-Trichlorophenol	ND		2100

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 84.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23999 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C005-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		390
1,3-Dichlorobenzene	ND		390
1,4-Dichlorobenzene	ND		390
1,2-Dichlorobenzene	ND		390
Bis(2-Chloroisopropyl) Ether	ND		390
N-Nitrosodipropylamine	ND		390
Hexachloroethane	ND		390
Nitrobenzene	ND		390
Isophorone	ND		390
Bis (2-Chloroethoxy) Methane	ND		390
1,2,4-Trichlorobenzene	ND		390
Naphthalene	ND		390
Hexachlorobutadiene	ND		390
Hexachlorocyclopentadiene	ND		390
2-Chloronaphthalene	ND		390
Dimethyl Phthalate	ND		390
Acenaphthylene	ND		390
Fluorene	ND		390
Acenaphthene	ND		390
2,4-Dinitrotoluene	ND		390
2,6-Dinitrotoluene	ND		390
Diethylphthalate	ND		390
4-Chlorophenyl Phenyl Ether	ND		390
N-Nitrosodiphenylamine	ND		390
4-Bromophenyl Phenyl Ether	ND		390
Hexachlorobenzene	ND		390
Phenanthrene	ND		390
Anthracene	ND		390
Di-N-Butyl-Phthalate	PRESENT	L	390
Fluoranthene	ND		390
Benzidine	ND		1900
Pyrene	ND		390
Butyl Benzyl Phthalate	ND		390
3,3'-Dichlorobenzidine	ND		780
Benzo(A)Anthracene	ND		390
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	390

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 84.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23999 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C005-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		390
Di-N-Octyl Phthalate	ND		390
Benzo(B)Fluoranthene	ND		390
Benzo(K)Fluoranthene	ND		390
Benzo(A)Pyrene	ND		390
Indeno(1,2,3-cd)Pyrene	ND		390
Dibenzo(A,H)Anthracene	ND		390
Benzo(G,H,I)Perylene	ND		390
Benzyl Alcohol	ND		390
4-Chloroaniline	ND		390
2-Methylnaphthalene	ND		390
2-Nitroaniline	ND		1900
3-Nitroaniline	ND		1900
Dibenzofuran	ND		390
4-Nitroaniline	ND		1900

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 84.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-23999 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C005-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		390
2-Chlorophenol	ND		390
2-Nitrophenol	ND		390
2,4-Dimethylphenol	ND		390
2,4-Dichlorophenol	ND		390
4-Chloro-3-Methylphenol	ND		390
2,4,6-Trichlorophenol	ND		390
2,4-Dinitrophenol	ND		1900
4-Nitrophenol	ND		1900
4,6-Dinitro-2-Methylphenol	ND		1900
Pentachlorophenol	ND		1900
2-Methylphenol	ND		390
4-Methylphenol	ND		390
Benzoic Acid	ND		1900
2,4,5-Trichlorophenol	ND		1900

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24000 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C006-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	530		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	2100		380
Acenaphthene	2300		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	PRESENT	L	380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	14000		380
Anthracene	4500		380
Di-N-Butyl-Phthalate	PRESENT	L	380
Fluoranthene	13000		380
Benzidine	ND		1900
Pyrene	13000		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		770
Benzo(A)Anthracene	6300		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24000 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C006-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	5700		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	8400		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	4900		380
Indeno(1,2,3-cd)Pyrene	2400		380
Dibenzo(A,H)Anthracene	510		380
Benzo(G,H,I)Perylene	2100		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	PRESENT	L	380
2-Nitroaniline	ND		1900
3-Nitroaniline	ND		1900
Dibenzofuran	1300		380
4-Nitroaniline	ND		1900

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24000 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C006-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1900
4-Nitrophenol	ND		1900
4,6-Dinitro-2-Methylphenol	ND		1900
Pentachlorophenol	ND		1900
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1900
2,4,5-Trichlorophenol	ND		1900

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24001 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C007-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	PRESENT	L	380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	PRESENT	L	380
Anthracene	ND		380
Di-N-Butyl-Phthalate	ND		380
Fluoranthene	PRESENT	L	380
Benzidine	ND		1900
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		770
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	ND		380

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
 TEST NAME : BASE NEUTRAL UNITS : UG/KG  
 SAMPLE ID LAB : EE-91-24001 MATRIX : SOLID  
 SAMPLE ID CLIENT: TG-C007-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1900
3-Nitroaniline	ND		1900
Dibenzofuran	ND		380
4-Nitroaniline	ND		1900

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24001 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C007-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1900
4-Nitrophenol	ND		1900
4,6-Dinitro-2-Methylphenol	ND		1900
Pentachlorophenol	ND		1900
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1900
2,4,5-Trichlorophenol	ND		1900

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 85.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24002 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C008-229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		390
1,3-Dichlorobenzene	ND		390
1,4-Dichlorobenzene	ND		390
1,2-Dichlorobenzene	ND		390
Bis(2-Chloroisopropyl) Ether	ND		390
N-Nitrosodipropylamine	ND		390
Hexachloroethane	ND		390
Nitrobenzene	ND		390
Isophorone	ND		390
Bis (2-Chloroethoxy) Methane	ND		390
1,2,4-Trichlorobenzene	ND		390
Naphthalene	ND		390
Hexachlorobutadiene	ND		390
Hexachlorocyclopentadiene	ND		390
2-Chloronaphthalene	ND		390
Dimethyl Phthalate	ND		390
Acenaphthylene	ND		390
Fluorene	ND		390
Acenaphthene	ND		390
2,4-Dinitrotoluene	ND		390
2,6-Dinitrotoluene	ND		390
Diethylphthalate	ND		390
4-Chlorophenyl Phenyl Ether	ND		390
N-Nitrosodiphenylamine	ND		390
4-Bromophenyl Phenyl Ether	ND		390
Hexachlorobenzene	ND		390
Phenanthrene	ND		390
Anthracene	ND		390
Di-N-Butyl-Phthalate	PRESENT	L	390
Fluoranthene	ND		390
Benzidine	ND		1900
Pyrene	ND		390
Butyl Benzyl Phthalate	ND		390
3,3'-Dichlorobenzidine	ND		780
Benzo(A)Anthracene	ND		390
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	390

-----  
 QUALIFIERS: C = COMMENT            ND = NOT DETECTED  
               J = ESTIMATED VALUE    B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 85.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24002 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO08-229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		390
Di-N-Octyl Phthalate	ND		390
Benzo(B)Fluoranthene	ND		390
Benzo(K)Fluoranthene	ND		390
Benzo(A)Pyrene	ND		390
Indeno(1,2,3-cd)Pyrene	ND		390
Dibenzo(A,H)Anthracene	ND		390
Benzo(G,H,I)Perylene	ND		390
Benzyl Alcohol	ND		390
4-Chloroaniline	ND		390
2-Methylnaphthalene	ND		390
2-Nitroaniline	ND		1900
3-Nitroaniline	ND		1900
Dibenzofuran	ND		390
4-Nitroaniline	ND		1900

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 85.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24002 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO08-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		390
2-Chlorophenol	ND		390
2-Nitrophenol	ND		390
2,4-Dimethylphenol	ND		390
2,4-Dichlorophenol	ND		390
4-Chloro-3-Methylphenol	ND		390
2,4,6-Trichlorophenol	ND		390
2,4-Dinitrophenol	ND		1900
4-Nitrophenol	ND		1900
4,6-Dinitro-2-Methylphenol	ND		1900
Pentachlorophenol	ND		1900
2-Methylphenol	ND		390
4-Methylphenol	ND		390
Benzoic Acid	ND		1900
2,4,5-Trichlorophenol	ND		1900

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 91.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24003 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C009-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		720
1,3-Dichlorobenzene	ND		720
1,4-Dichlorobenzene	ND		720
1,2-Dichlorobenzene	ND		720
Bis(2-Chloroisopropyl) Ether	ND		720
N-Nitrosodipropylamine	ND		720
Hexachloroethane	ND		720
Nitrobenzene	ND		720
Isophorone	ND		720
Bis (2-Chloroethoxy) Methane	ND		720
1,2,4-Trichlorobenzene	ND		720
Naphthalene	PRESENT	L	720
Hexachlorobutadiene	ND		720
Hexachlorocyclopentadiene	ND		720
2-Chloronaphthalene	ND		720
Dimethyl Phthalate	ND		720
Acenaphthylene	ND		720
Fluorene	PRESENT	L	720
Acenaphthene	PRESENT	L	720
2,4-Dinitrotoluene	ND		720
2,6-Dinitrotoluene	ND		720
Diethylphthalate	ND		720
4-Chlorophenyl Phenyl Ether	ND		720
N-Nitrosodiphenylamine	ND		720
4-Bromophenyl Phenyl Ether	ND		720
Hexachlorobenzene	ND		720
Phenanthrene	3800		720
Anthracene	970		720
Di-N-Butyl-Phthalate	ND		720
Fluoranthene	3400		720
Benzidine	ND		3500
Pyrene	3200		720
Butyl Benzyl Phthalate	ND		720
3,3'-Dichlorobenzidine	ND		1400
Benzo(A)Anthracene	1600		720
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	720

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 91.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24003 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-COO9-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	1500		720
Di-N-Octyl Phthalate	ND		720
Benzo(B)Fluoranthene	2000		720
Benzo(K)Fluoranthene	ND		720
Benzo(A)Pyrene	1200		720
Indeno(1,2,3-cd)Pyrene	PRESENT	L	720
Dibenzo(A,H)Anthracene	PRESENT	L	720
Benzo(G,H,I)Perylene	PRESENT	L	720
Benzyl Alcohol	ND		720
4-Chloroaniline	ND		720
2-Methylnaphthalene	PRESENT	L	720
2-Nitroaniline	ND		3500
3-Nitroaniline	ND		3500
Dibenzofuran	PRESENT	L	720
4-Nitroaniline	ND		3500

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SAPBNA1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 91.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24003 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C009-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		720
2-Chlorophenol	ND		720
2-Nitrophenol	ND		720
2,4-Dimethylphenol	ND		720
2,4-Dichlorophenol	ND		720
4-Chloro-3-Methylphenol	ND		720
2,4,6-Trichlorophenol	ND		720
2,4-Dinitrophenol	ND		3500
4-Nitrophenol	ND		3500
4,6-Dinitro-2-Methylphenol	ND		3500
Pentachlorophenol	ND		3500
2-Methylphenol	ND		720
4-Methylphenol	ND		720
Benzoic Acid	ND		3500
2,4,5-Trichlorophenol	ND		3500

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24004 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C010-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	PRESENT	L	380
Acenaphthene	PRESENT	L	380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	PRESENT	L	380
Anthracene	PRESENT	L	380
Di-N-Butyl-Phthalate	ND		380
Fluoranthene	PRESENT	L	380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	PRESENT	L	380
3,3'-Dichlorobenzidine	ND		750
Benzo(A)Anthracene	PRESENT	L	380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24004 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C010-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	PRESENT	L	380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	PRESENT	L	380
Benzo(K)Fluoranthene	PRESENT	L	380
Benzo(A)Pyrene	PRESENT	L	380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	PRESENT	L	380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24004 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C010-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24005 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO11-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	ND		380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		750
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24005 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C011-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24005 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C011-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 81.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24006 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C012-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		410
1,3-Dichlorobenzene	ND		410
1,4-Dichlorobenzene	ND		410
1,2-Dichlorobenzene	ND		410
Bis(2-Chloroisopropyl) Ether	ND		410
N-Nitrosodipropylamine	ND		410
Hexachloroethane	ND		410
Nitrobenzene	ND		410
Isophorone	ND		410
Bis (2-Chloroethoxy) Methane	ND		410
1,2,4-Trichlorobenzene	ND		410
Naphthalene	ND		410
Hexachlorobutadiene	ND		410
Hexachlorocyclopentadiene	ND		410
2-Chloronaphthalene	ND		410
Dimethyl Phthalate	ND		410
Acenaphthylene	ND		410
Fluorene	ND		410
Acenaphthene	ND		410
2,4-Dinitrotoluene	ND		410
2,6-Dinitrotoluene	ND		410
Diethylphthalate	ND		410
4-Chlorophenyl Phenyl Ether	ND		410
N-Nitrosodiphenylamine	ND		410
4-Bromophenyl Phenyl Ether	ND		410
Hexachlorobenzene	ND		410
Phenanthrene	ND		410
Anthracene	ND		410
Di-N-Butyl-Phthalate	PRESENT	L	410
Fluoranthene	ND		410
Benzidine	ND		2000
Pyrene	ND		410
Butyl Benzyl Phthalate	ND		410
3,3'-Dichlorobenzidine	ND		810
Benzo(A)Anthracene	ND		410
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	410

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 81.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24006 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO12-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		410
Di-N-Octyl Phthalate	ND		410
Benzo(B)Fluoranthene	ND		410
Benzo(K)Fluoranthene	ND		410
Benzo(A)Pyrene	ND		410
Indeno(1,2,3-cd)Pyrene	ND		410
Dibenzo(A,H)Anthracene	ND		410
Benzo(G,H,I)Perylene	ND		410
Benzyl Alcohol	ND		410
4-Chloroaniline	ND		410
2-Methylnaphthalene	ND		410
2-Nitroaniline	ND		2000
3-Nitroaniline	ND		2000
Dibenzofuran	ND		410
4-Nitroaniline	ND		2000

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SAPBNA1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 81.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24006 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C012-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		410
2-Chlorophenol	ND		410
2-Nitrophenol	ND		410
2,4-Dimethylphenol	ND		410
2,4-Dichlorophenol	ND		410
4-Chloro-3-Methylphenol	ND		410
2,4,6-Trichlorophenol	ND		410
2,4-Dinitrophenol	ND		2000
4-Nitrophenol	ND		2000
4,6-Dinitro-2-Methylphenol	ND		2000
Pentachlorophenol	ND		2000
2-Methylphenol	ND		410
4-Methylphenol	ND		410
Benzoic Acid	ND		2000
2,4,5-Trichlorophenol	ND		2000

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24007 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C014-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		370
1,3-Dichlorobenzene	ND		370
1,4-Dichlorobenzene	ND		370
1,2-Dichlorobenzene	ND		370
Bis(2-Chloroisopropyl) Ether	ND		370
N-Nitrosodipropylamine	ND		370
Hexachloroethane	ND		370
Nitrobenzene	ND		370
Isophorone	ND		370
Bis (2-Chloroethoxy) Methane	ND		370
1,2,4-Trichlorobenzene	ND		370
Naphthalene	ND		370
Hexachlorobutadiene	ND		370
Hexachlorocyclopentadiene	ND		370
2-Chloronaphthalene	ND		370
Dimethyl Phthalate	ND		370
Acenaphthylene	ND		370
Fluorene	ND		370
Acenaphthene	ND		370
2,4-Dinitrotoluene	ND		370
2,6-Dinitrotoluene	ND		370
Diethylphthalate	ND		370
4-Chlorophenyl Phenyl Ether	ND		370
N-Nitrosodiphenylamine	ND		370
4-Bromophenyl Phenyl Ether	ND		370
Hexachlorobenzene	ND		370
Phenanthrene	PRESENT	L	370
Anthracene	ND		370
Di-N-Butyl-Phthalate	ND		370
Fluoranthene	PRESENT	L	370
Benzidine	ND		1800
Pyrene	PRESENT	L	370
Butyl Benzyl Phthalate	ND		370
3,3'-Dichlorobenzidine	ND		740
Benzo(A)Anthracene	ND		370
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	370

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24007 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C014-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	PRESENT	L	370
Di-N-Octyl Phthalate	ND		370
Benzo(B)Fluoranthene	PRESENT	L	370
Benzo(K)Fluoranthene	ND		370
Benzo(A)Pyrene	ND		370
Indeno(1,2,3-cd)Pyrene	ND		370
Dibenzo(A,H)Anthracene	ND		370
Benzo(G,H,I)Perylene	ND		370
Benzyl Alcohol	ND		370
4-Chloroaniline	ND		370
2-Methylnaphthalene	ND		370
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		370
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24007 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C014-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		370
2-Chlorophenol	ND		370
2-Nitrophenol	ND		370
2,4-Dimethylphenol	ND		370
2,4-Dichlorophenol	ND		370
4-Chloro-3-Methylphenol	ND		370
2,4,6-Trichlorophenol	ND		370
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		370
4-Methylphenol	ND		370
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24008 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C015-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	ND		380
Fluoranthene	ND		380
Benzidine	ND		1900
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		770
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24008 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C015-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND	-	380
Di-N-Octyl Phthalate	ND	-	380
Benzo(B)Fluoranthene	ND	-	380
Benzo(K)Fluoranthene	ND	-	380
Benzo(A)Pyrene	ND	-	380
Indeno(1,2,3-cd)Pyrene	ND	-	380
Dibenzo(A,H)Anthracene	ND	-	380
Benzo(G,H,I)Perylene	ND	-	380
Benzyl Alcohol	ND	-	380
4-Chloroaniline	ND	-	380
2-Methylnaphthalene	ND	-	380
2-Nitroaniline	ND	-	1900
3-Nitroaniline	ND	-	1900
Dibenzofuran	ND	-	380
4-Nitroaniline	ND	-	1900

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 86.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24008 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C015-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1900
4-Nitrophenol	ND		1900
4,6-Dinitro-2-Methylphenol	ND		1900
Pentachlorophenol	ND		1900
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1900
2,4,5-Trichlorophenol	ND		1900

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24009 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO16-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	ND		380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		760
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
 TEST NAME : BASE NEUTRAL UNITS : UG/KG  
 SAMPLE ID LAB : EE-91-24009 MATRIX : SOLID  
 SAMPLE ID CLIENT: TG-CO16-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

-----  
 QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SAPBNA1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24009 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C016-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24010 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C018-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		370
1,3-Dichlorobenzene	ND		370
1,4-Dichlorobenzene	ND		370
1,2-Dichlorobenzene	ND		370
Bis(2-Chloroisopropyl) Ether	ND		370
N-Nitrosodipropylamine	ND		370
Hexachloroethane	ND		370
Nitrobenzene	ND		370
Isophorone	ND		370
Bis (2-Chloroethoxy) Methane	ND		370
1,2,4-Trichlorobenzene	ND		370
Naphthalene	ND		370
Hexachlorobutadiene	ND		370
Hexachlorocyclopentadiene	ND		370
2-Chloronaphthalene	ND		370
Dimethyl Phthalate	ND		370
Acenaphthylene	ND		370
Fluorene	ND		370
Acenaphthene	ND		370
2,4-Dinitrotoluene	ND		370
2,6-Dinitrotoluene	ND		370
Diethylphthalate	ND		370
4-Chlorophenyl Phenyl Ether	ND		370
N-Nitrosodiphenylamine	ND		370
4-Bromophenyl Phenyl Ether	ND		370
Hexachlorobenzene	ND		370
Phenanthrene	PRESENT	L	370
Anthracene	ND		370
Di-N-Butyl-Phthalate	ND		370
Fluoranthene	PRESENT	L	370
Benzidine	ND		1800
Pyrene	PRESENT	L	370
Butyl Benzyl Phthalate	ND		370
3,3'-Dichlorobenzidine	ND		740
Benzo(A)Anthracene	PRESENT	L	370
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	370

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT . %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24010 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C018-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	PRESENT	L	370
Di-N-Octyl Phthalate	ND		370
Benzo(B)Fluoranthene	ND		370
Benzo(K)Fluoranthene	ND		370
Benzo(A)Pyrene	ND		370
Indeno(1,2,3-cd)Pyrene	ND		370
Dibenzo(A,H)Anthracene	ND		370
Benzo(G,H,I)Perylene	ND		370
Benzyl Alcohol	ND		370
4-Chloroaniline	ND		370
2-Methylnaphthalene	ND		370
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		370
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24010 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C018-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		370
2-Chlorophenol	ND		370
2-Nitrophenol	ND		370
2,4-Dimethylphenol	ND		370
2,4-Dichlorophenol	ND		370
4-Chloro-3-Methylphenol	ND		370
2,4,6-Trichlorophenol	ND		370
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		370
4-Methylphenol	ND		370
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 79.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24011 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C019-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		420
1,3-Dichlorobenzene	ND		420
1,4-Dichlorobenzene	ND		420
1,2-Dichlorobenzene	ND		420
Bis(2-Chloroisopropyl) Ether	ND		420
N-Nitrosodipropylamine	ND		420
Hexachloroethane	ND		420
Nitrobenzene	ND		420
Isophorone	ND		420
Bis (2-Chloroethoxy) Methane	ND		420
1,2,4-Trichlorobenzene	ND		420
Naphthalene	ND		420
Hexachlorobutadiene	ND		420
Hexachlorocyclopentadiene	ND		420
2-Chloronaphthalene	ND		420
Dimethyl Phthalate	ND		420
Acenaphthylene	ND		420
Fluorene	ND		420
Acenaphthene	ND		420
2,4-Dinitrotoluene	ND		420
2,6-Dinitrotoluene	ND		420
Diethylphthalate	ND		420
4-Chlorophenyl Phenyl Ether	ND		420
N-Nitrosodiphenylamine	ND		420
4-Bromophenyl Phenyl Ether	ND		420
Hexachlorobenzene	ND		420
Phenanthrene	ND		420
Anthracene	ND		420
Di-N-Butyl-Phthalate	ND		420
Fluoranthene	ND		420
Benzidine	ND		2000
Pyrene	ND		420
Butyl Benzyl Phthalate	ND		420
3,3'-Dichlorobenzidine	ND		840
Benzo(A)Anthracene	ND		420
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	420

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 79.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24011 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C019-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		420
Di-N-Octyl Phthalate	ND		420
Benzo(B)Fluoranthene	ND		420
Benzo(K)Fluoranthene	ND		420
Benzo(A)Pyrene	ND		420
Indeno(1,2,3-cd)Pyrene	ND		420
Dibenzo(A,H)Anthracene	ND		420
Benzo(G,H,I)Perylene	ND		420
Benzyl Alcohol	ND		420
4-Chloroaniline	ND		420
2-Methylnaphthalene	ND		420
2-Nitroaniline	ND		2000
3-Nitroaniline	ND		2000
Dibenzofuran	ND		420
4-Nitroaniline	ND		2000

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 79.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24011 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C019-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		420
2-Chlorophenol	ND		420
2-Nitrophenol	ND		420
2,4-Dimethylphenol	ND		420
2,4-Dichlorophenol	ND		420
4-Chloro-3-Methylphenol	ND		420
2,4,6-Trichlorophenol	ND		420
2,4-Dinitrophenol	ND		2000
4-Nitrophenol	ND		2000
4,6-Dinitro-2-Methylphenol	ND		2000
Pentachlorophenol	ND		2000
2-Methylphenol	ND		420
4-Methylphenol	ND		420
Benzoic Acid	ND		2000
2,4,5-Trichlorophenol	ND		2000

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24012 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO20-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	ND		380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		750
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24012 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO20-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
 TEST NAME : ACID PHENOL UNITS : UG/KG  
 SAMPLE ID LAB : EE-91-24012 MATRIX : SOLID  
 SAMPLE ID CLIENT: TG-C020-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24013 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO21-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	PRESENT	L	380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		760
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24013 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO21-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24013 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO21-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 82.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24014 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO23-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		400
1,3-Dichlorobenzene	ND		400
1,4-Dichlorobenzene	ND		400
1,2-Dichlorobenzene	ND		400
Bis(2-Chloroisopropyl) Ether	ND		400
N-Nitrosodipropylamine	ND		400
Hexachloroethane	ND		400
Nitrobenzene	ND		400
Isophorone	ND		400
Bis (2-Chloroethoxy) Methane	ND		400
1,2,4-Trichlorobenzene	ND		400
Naphthalene	ND		400
Hexachlorobutadiene	ND		400
Hexachlorocyclopentadiene	ND		400
2-Chloronaphthalene	ND		400
Dimethyl Phthalate	ND		400
Acenaphthylene	ND		400
Fluorene	ND		400
Acenaphthene	ND		400
2,4-Dinitrotoluene	ND		400
2,6-Dinitrotoluene	ND		400
Diethylphthalate	ND		400
4-Chlorophenyl Phenyl Ether	ND		400
N-Nitrosodiphenylamine	ND		400
4-Bromophenyl Phenyl Ether	ND		400
Hexachlorobenzene	ND		400
Phenanthrene	PRESENT	L	400
Anthracene	ND		400
Di-N-Butyl-Phthalate	PRESENT	L	400
Fluoranthene	PRESENT	L	400
Benzidine	ND		2000
Pyrene	PRESENT	L	400
Butyl Benzyl Phthalate	ND		400
3,3'-Dichlorobenzidine	ND		800
Benzo(A)Anthracene	PRESENT	L	400
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	400

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 82.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24014 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO23-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	PRESENT	L	400
Di-N-Octyl Phthalate	ND		400
Benzo(B)Fluoranthene	PRESENT	L	400
Benzo(K)Fluoranthene	PRESENT	L	400
Benzo(A)Pyrene	ND		400
Indeno(1,2,3-cd)Pyrene	ND		400
Dibenzo(A,H)Anthracene	ND		400
Benzo(G,H,I)Perylene	ND		400
Benzyl Alcohol	ND		400
4-Chloroaniline	ND		400
2-Methylnaphthalene	ND		400
2-Nitroaniline	ND		2000
3-Nitroaniline	ND		2000
Dibenzofuran	ND		400
4-Nitroaniline	ND		2000

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 82.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24014 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO23-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		400
2-Chlorophenol	ND		400
2-Nitrophenol	ND		400
2,4-Dimethylphenol	ND		400
2,4-Dichlorophenol	ND		400
4-Chloro-3-Methylphenol	ND		400
2,4,6-Trichlorophenol	ND		400
2,4-Dinitrophenol	ND		2000
4-Nitrophenol	ND		2000
4,6-Dinitro-2-Methylphenol	ND		2000
Pentachlorophenol	ND		2000
2-Methylphenol	ND		400
4-Methylphenol	ND		400
Benzoic Acid	ND		2000
2,4,5-Trichlorophenol	ND		2000

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 82.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24015 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C024-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		400
1,3-Dichlorobenzene	ND		400
1,4-Dichlorobenzene	ND		400
1,2-Dichlorobenzene	ND		400
Bis(2-Chloroisopropyl) Ether	ND		400
N-Nitrosodipropylamine	ND		400
Hexachloroethane	ND		400
Nitrobenzene	ND		400
Isophorone	ND		400
Bis (2-Chloroethoxy) Methane	ND		400
1,2,4-Trichlorobenzene	ND		400
Naphthalene	ND		400
Hexachlorobutadiene	ND		400
Hexachlorocyclopentadiene	ND		400
2-Chloronaphthalene	ND		400
Dimethyl Phthalate	ND		400
Acenaphthylene	ND		400
Fluorene	ND		400
Acenaphthene	ND		400
2,4-Dinitrotoluene	ND		400
2,6-Dinitrotoluene	ND		400
Diethylphthalate	ND		400
4-Chlorophenyl Phenyl Ether	ND		400
N-Nitrosodiphenylamine	ND		400
4-Bromophenyl Phenyl Ether	ND		400
Hexachlorobenzene	ND		400
Phenanthrene	ND		400
Anthracene	ND		400
Di-N-Butyl-Phthalate	ND		400
Fluoranthene	ND		400
Benzidine	ND		2000
Pyrene	ND		400
Butyl Benzyl Phthalate	ND		400
3,3'-Dichlorobenzidine	ND		800
Benzo(A)Anthracene	ND		400
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	400

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 82.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24015 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO24-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		400
Di-N-Octyl Phthalate	ND		400
Benzo(B)Fluoranthene	ND		400
Benzo(K)Fluoranthene	ND		400
Benzo(A)Pyrene	ND		400
Indeno(1,2,3-cd)Pyrene	ND		400
Dibenzo(A,H)Anthracene	ND		400
Benzo(G,H,I)Perylene	ND		400
Benzyl Alcohol	ND		400
4-Chloroaniline	ND		400
2-Methylnaphthalene	ND		400
2-Nitroaniline	ND		2000
3-Nitroaniline	ND		2000
Dibenzofuran	ND		400
4-Nitroaniline	ND		2000

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 82.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24015 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C024-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		400
2-Chlorophenol	ND		400
2-Nitrophenol	ND		400
2,4-Dimethylphenol	ND		400
2,4-Dichlorophenol	ND		400
4-Chloro-3-Methylphenol	ND		400
2,4,6-Trichlorophenol	ND		400
2,4-Dinitrophenol	ND		2000
4-Nitrophenol	ND		2000
4,6-Dinitro-2-Methylphenol	ND		2000
Pentachlorophenol	ND		2000
2-Methylphenol	ND		400
4-Methylphenol	ND		400
Benzoic Acid	ND		2000
2,4,5-Trichlorophenol	ND		2000

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 80.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24016 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C025-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		410
1,3-Dichlorobenzene	ND		410
1,4-Dichlorobenzene	ND		410
1,2-Dichlorobenzene	ND		410
Bis(2-Chloroisopropyl) Ether	ND		410
N-Nitrosodipropylamine	ND		410
Hexachloroethane	ND		410
Nitrobenzene	ND		410
Isophorone	ND		410
Bis (2-Chloroethoxy) Methane	ND		410
1,2,4-Trichlorobenzene	ND		410
Naphthalene	ND		410
Hexachlorobutadiene	ND		410
Hexachlorocyclopentadiene	ND		410
2-Chloronaphthalene	ND		410
Dimethyl Phthalate	ND		410
Acenaphthylene	ND		410
Fluorene	ND		410
Acenaphthene	ND		410
2,4-Dinitrotoluene	ND		410
2,6-Dinitrotoluene	ND		410
Diethylphthalate	ND		410
4-Chlorophenyl Phenyl Ether	ND		410
N-Nitrosodiphenylamine	ND		410
4-Bromophenyl Phenyl Ether	ND		410
Hexachlorobenzene	ND		410
Phenanthrene	ND		410
Anthracene	ND		410
Di-N-Butyl-Phthalate	PRESENT	L	410
Fluoranthene	ND		410
Benzidine	ND		2000
Pyrene	ND		410
Butyl Benzyl Phthalate	ND		410
3,3'-Dichlorobenzidine	ND		820
Benzo(A)Anthracene	ND		410
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	410

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 80.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24016 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C025-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		410
Di-N-Octyl Phthalate	ND		410
Benzo(B)Fluoranthene	ND		410
Benzo(K)Fluoranthene	ND		410
Benzo(A)Pyrene	ND		410
Indeno(1,2,3-cd)Pyrene	ND		410
Dibenzo(A,H)Anthracene	ND		410
Benzo(G,H,I)Perylene	ND		410
Benzyl Alcohol	ND		410
4-Chloroaniline	ND		410
2-Methylnaphthalene	ND		410
2-Nitroaniline	ND		2000
3-Nitroaniline	ND		2000
Dibenzofuran	ND		410
4-Nitroaniline	ND		2000

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 80.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24016 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C025-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		410
2-Chlorophenol	ND		410
2-Nitrophenol	ND		410
2,4-Dimethylphenol	ND		410
2,4-Dichlorophenol	ND		410
4-Chloro-3-Methylphenol	ND		410
2,4,6-Trichlorophenol	ND		410
2,4-Dinitrophenol	ND		2000
4-Nitrophenol	ND		2000
4,6-Dinitro-2-Methylphenol	ND		2000
Pentachlorophenol	ND		2000
2-Methylphenol	ND		410
4-Methylphenol	ND		410
Benzoic Acid	ND		2000
2,4,5-Trichlorophenol	ND		2000

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24017 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO27-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	ND		380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		760
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24017 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO27-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24017 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C027-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24018 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO28-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	PRESENT	L	380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		760
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24018 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO28-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 RESULTS IN DRY WEIGHT %SOLIDS : 87.0 %  
 TEST NAME : ACID PHENOL UNITS : UG/KG  
 SAMPLE ID LAB : EE-91-24018 MATRIX : SOLID  
 SAMPLE ID CLIENT: TG-C028-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24019 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO29-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	PRESENT	L	380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		750
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24019 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO29-O229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SAPBNA1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24019 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO29-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24020 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO30-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		380
1,3-Dichlorobenzene	ND		380
1,4-Dichlorobenzene	ND		380
1,2-Dichlorobenzene	ND		380
Bis(2-Chloroisopropyl) Ether	ND		380
N-Nitrosodipropylamine	ND		380
Hexachloroethane	ND		380
Nitrobenzene	ND		380
Isophorone	ND		380
Bis (2-Chloroethoxy) Methane	ND		380
1,2,4-Trichlorobenzene	ND		380
Naphthalene	ND		380
Hexachlorobutadiene	ND		380
Hexachlorocyclopentadiene	ND		380
2-Chloronaphthalene	ND		380
Dimethyl Phthalate	ND		380
Acenaphthylene	ND		380
Fluorene	ND		380
Acenaphthene	ND		380
2,4-Dinitrotoluene	ND		380
2,6-Dinitrotoluene	ND		380
Diethylphthalate	ND		380
4-Chlorophenyl Phenyl Ether	ND		380
N-Nitrosodiphenylamine	ND		380
4-Bromophenyl Phenyl Ether	ND		380
Hexachlorobenzene	ND		380
Phenanthrene	ND		380
Anthracene	ND		380
Di-N-Butyl-Phthalate	PRESENT	L	380
Fluoranthene	ND		380
Benzidine	ND		1800
Pyrene	ND		380
Butyl Benzyl Phthalate	ND		380
3,3'-Dichlorobenzidine	ND		750
Benzo(A)Anthracene	ND		380
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	380

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24020 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO30-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		380
Di-N-Octyl Phthalate	ND		380
Benzo(B)Fluoranthene	ND		380
Benzo(K)Fluoranthene	ND		380
Benzo(A)Pyrene	ND		380
Indeno(1,2,3-cd)Pyrene	ND		380
Dibenzo(A,H)Anthracene	ND		380
Benzo(G,H,I)Perylene	ND		380
Benzyl Alcohol	ND		380
4-Chloroaniline	ND		380
2-Methylnaphthalene	ND		380
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		380
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT.

TEST CODE :SAPBNA1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY

RESULTS IN DRY WEIGHT %SOLIDS : 88.0 %

TEST NAME : ACID PHENOL UNITS : UG/KG

SAMPLE ID LAB : EE-91-24020 MATRIX : SOLID

SAMPLE ID CLIENT: TG-C030-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		380
2-Chlorophenol	ND		380
2-Nitrophenol	ND		380
2,4-Dimethylphenol	ND		380
2,4-Dichlorophenol	ND		380
4-Chloro-3-Methylphenol	ND		380
2,4,6-Trichlorophenol	ND		380
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		380
4-Methylphenol	ND		380
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24021 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO31-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		370
1,3-Dichlorobenzene	ND		370
1,4-Dichlorobenzene	ND		370
1,2-Dichlorobenzene	ND		370
Bis(2-Chloroisopropyl) Ether	ND		370
N-Nitrosodipropylamine	ND		370
Hexachloroethane	ND		370
Nitrobenzene	ND		370
Isophorone	ND		370
Bis (2-Chloroethoxy) Methane	ND		370
1,2,4-Trichlorobenzene	ND		370
Naphthalene	ND		370
Hexachlorobutadiene	ND		370
Hexachlorocyclopentadiene	ND		370
2-Chloronaphthalene	ND		370
Dimethyl Phthalate	ND		370
Acenaphthylene	ND		370
Fluorene	ND		370
Acenaphthene	ND		370
2,4-Dinitrotoluene	ND		370
2,6-Dinitrotoluene	ND		370
Diethylphthalate	ND		370
4-Chlorophenyl Phenyl Ether	ND		370
N-Nitrosodiphenylamine	ND		370
4-Bromophenyl Phenyl Ether	ND		370
Hexachlorobenzene	ND		370
Phenanthrene	ND		370
Anthracene	ND		370
Di-N-Butyl-Phthalate	PRESENT	L	370
Fluoranthene	ND		370
Benzydine	ND		1800
Pyrene	ND		370
Butyl Benzyl Phthalate	ND		370
3,3'-Dichlorobenzidine	ND		740
Benzo(A)Anthracene	ND		370
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	370

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
 TEST NAME : BASE NEUTRAL UNITS : UG/KG  
 SAMPLE ID LAB : EE-91-24021 MATRIX : SOLID  
 SAMPLE ID CLIENT: TG-CO31-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		370
Di-N-Octyl Phthalate	ND		370
Benzo(B)Fluoranthene	ND		370
Benzo(K)Fluoranthene	ND		370
Benzo(A)Pyrene	ND		370
Indeno(1,2,3-cd)Pyrene	ND		370
Dibenzo(A,H)Anthracene	ND		370
Benzo(G,H,I)Perylene	ND		370
Benzyl Alcohol	ND		370
4-Chloroaniline	ND		370
2-Methylnaphthalene	ND		370
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		370
4-Nitroaniline	ND		1800

-----  
 QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
               J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
               L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24021 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C031-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		370
2-Chlorophenol	ND		370
2-Nitrophenol	ND		370
2,4-Dimethylphenol	ND		370
2,4-Dichlorophenol	ND		370
4-Chloro-3-Methylphenol	ND		370
2,4,6-Trichlorophenol	ND		370
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		370
4-Methylphenol	ND		370
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 RESULTS IN DRY WEIGHT %SOLIDS : 90.0 %  
 TEST NAME : BASE NEUTRAL UNITS : UG/KG  
 SAMPLE ID LAB : EE-91-24022 MATRIX : SOLID  
 SAMPLE ID CLIENT: TG-CO32-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		370
1,3-Dichlorobenzene	ND		370
1,4-Dichlorobenzene	ND		370
1,2-Dichlorobenzene	ND		370
Bis(2-Chloroisopropyl) Ether	ND		370
N-Nitrosodipropylamine	ND		370
Hexachloroethane	ND		370
Nitrobenzene	ND		370
Isophorone	ND		370
Bis (2-Chloroethoxy) Methane	ND		370
1,2,4-Trichlorobenzene	ND		370
Naphthalene	ND		370
Hexachlorobutadiene	ND		370
Hexachlorocyclopentadiene	ND		370
2-Chloronaphthalene	ND		370
Dimethyl Phthalate	ND		370
Acenaphthylene	ND		370
Fluorene	ND		370
Acenaphthene	ND		370
2,4-Dinitrotoluene	ND		370
2,6-Dinitrotoluene	ND		370
Diethylphthalate	ND		370
4-Chlorophenyl Phenyl Ether	ND		370
N-Nitrosodiphenylamine	ND		370
4-Bromophenyl Phenyl Ether	ND		370
Hexachlorobenzene	ND		370
Phenanthrene	ND		370
Anthracene	ND		370
Di-N-Butyl-Phthalate	PRESENT	L	370
Fluoranthene	ND		370
Benzidine	ND		1800
Pyrene	ND		370
Butyl Benzyl Phthalate	ND		370
3,3'-Dichlorobenzidine	ND		730
Benzo(A)Anthracene	ND		370
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	370

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 90.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24022 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO32-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		370
Di-N-Octyl Phthalate	ND		370
Benzo(B)Fluoranthene	ND		370
Benzo(K)Fluoranthene	ND		370
Benzo(A)Pyrene	ND		370
Indeno(1,2,3-cd)Pyrene	ND		370
Dibenzo(A,H)Anthracene	ND		370
Benzo(G,H,I)Perylene	ND		370
Benzyl Alcohol	ND		370
4-Chloroaniline	ND		370
2-Methylnaphthalene	ND		370
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		370
4-Nitroaniline	ND		1800

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 RESULTS IN DRY WEIGHT %SOLIDS : 90.0 %  
 TEST NAME : ACID PHENOL UNITS : UG/KG  
 SAMPLE ID LAB : EE-91-24022 MATRIX : SOLID  
 SAMPLE ID CLIENT: TG-CO32-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		370
2-Chlorophenol	ND		370
2-Nitrophenol	ND		370
2,4-Dimethylphenol	ND		370
2,4-Dichlorophenol	ND		370
4-Chloro-3-Methylphenol	ND		370
2,4,6-Trichlorophenol	ND		370
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		370
4-Methylphenol	ND		370
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 91.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24023 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO33-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		360
1,3-Dichlorobenzene	ND		360
1,4-Dichlorobenzene	ND		360
1,2-Dichlorobenzene	ND		360
Bis(2-Chloroisopropyl) Ether	ND		360
N-Nitrosodipropylamine	ND		360
Hexachloroethane	ND		360
Nitrobenzene	ND		360
Isophorone	ND		360
Bis (2-Chloroethoxy) Methane	ND		360
1,2,4-Trichlorobenzene	ND		360
Naphthalene	ND		360
Hexachlorobutadiene	ND		360
Hexachlorocyclopentadiene	ND		360
2-Chloronaphthalene	ND		360
Dimethyl Phthalate	ND		360
Acenaphthylene	ND		360
Fluorene	ND		360
Acenaphthene	ND		360
2,4-Dinitrotoluene	ND		360
2,6-Dinitrotoluene	ND		360
Diethylphthalate	ND		360
4-Chlorophenyl Phenyl Ether	ND		360
N-Nitrosodiphenylamine	ND		360
4-Bromophenyl Phenyl Ether	ND		360
Hexachlorobenzene	ND		360
Phenanthrene	ND		360
Anthracene	ND		360
Di-N-Butyl-Phthalate	PRESENT	L	360
Fluoranthene	ND		360
Benidine	ND		1800
Pyrene	ND		360
Butyl Benzyl Phthalate	ND		360
3,3'-Dichlorobenzidine	ND		720
Benzo(A)Anthracene	ND		360
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	360

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 91.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24023 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C033-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		360
Di-N-Octyl Phthalate	ND		360
Benzo(B)Fluoranthene	ND		360
Benzo(K)Fluoranthene	ND		360
Benzo(A)Pyrene	ND		360
Indeno(1,2,3-cd)Pyrene	ND		360
Dibenzo(A,H)Anthracene	ND		360
Benzo(G,H,I)Perylene	ND		360
Benzyl Alcohol	ND		360
4-Chloroaniline	ND		360
2-Methylnaphthalene	ND		360
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		360
4-Nitroaniline	ND		1800

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 91.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24023 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO33-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		360
2-Chlorophenol	ND		360
2-Nitrophenol	ND		360
2,4-Dimethylphenol	ND		360
2,4-Dichlorophenol	ND		360
4-Chloro-3-Methylphenol	ND		360
2,4,6-Trichlorophenol	ND		360
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		360
4-Methylphenol	ND		360
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24024 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C034-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		370
1,3-Dichlorobenzene	ND		370
1,4-Dichlorobenzene	ND		370
1,2-Dichlorobenzene	ND		370
Bis(2-Chloroisopropyl) Ether	ND		370
N-Nitrosodipropylamine	ND		370
Hexachloroethane	ND		370
Nitrobenzene	ND		370
Isophorone	ND		370
Bis (2-Chloroethoxy) Methane	ND		370
1,2,4-Trichlorobenzene	ND		370
Naphthalene	ND		370
Hexachlorobutadiene	ND		370
Hexachlorocyclopentadiene	ND		370
2-Chloronaphthalene	ND		370
Dimethyl Phthalate	ND		370
Acenaphthylene	ND		370
Fluorene	ND		370
Acenaphthene	ND		370
2,4-Dinitrotoluene	ND		370
2,6-Dinitrotoluene	ND		370
Diethylphthalate	ND		370
4-Chlorophenyl Phenyl Ether	ND		370
N-Nitrosodiphenylamine	ND		370
4-Bromophenyl Phenyl Ether	ND		370
Hexachlorobenzene	ND		370
Phenanthrene	ND		370
Anthracene	ND		370
Di-N-Butyl-Phthalate	PRESENT	L	370
Fluoranthene	ND		370
Benzidine	ND		1800
Pyrene	ND		370
Butyl Benzyl Phthalate	ND		370
3,3'-Dichlorobenzidine	ND		740
Benzo(A)Anthracene	ND		370
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	370

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24024 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO34-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		370
Di-N-Octyl Phthalate	ND		370
Benzo(B)Fluoranthene	ND		370
Benzo(K)Fluoranthene	ND		370
Benzo(A)Pyrene	ND		370
Indeno(1,2,3-cd)Pyrene	ND		370
Dibenzo(A,H)Anthracene	ND		370
Benzo(G,H,I)Perylene	ND		370
Benzyl Alcohol	ND		370
4-Chloroaniline	ND		370
2-Methylnaphthalene	ND		370
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		370
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24024 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C034-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		370
2-Chlorophenol	ND		370
2-Nitrophenol	ND		370
2,4-Dimethylphenol	ND		370
2,4-Dichlorophenol	ND		370
4-Chloro-3-Methylphenol	ND		370
2,4,6-Trichlorophenol	ND		370
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		370
4-Methylphenol	ND		370
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24025 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C035-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		370
1,3-Dichlorobenzene	ND		370
1,4-Dichlorobenzene	ND		370
1,2-Dichlorobenzene	ND		370
Bis(2-Chloroisopropyl) Ether	ND		370
N-Nitrosodipropylamine	ND		370
Hexachloroethane	ND		370
Nitrobenzene	ND		370
Isophorone	ND		370
Bis (2-Chloroethoxy) Methane	ND		370
1,2,4-Trichlorobenzene	ND		370
Naphthalene	ND		370
Hexachlorobutadiene	ND		370
Hexachlorocyclopentadiene	ND		370
2-Chloronaphthalene	ND		370
Dimethyl Phthalate	ND		370
Acenaphthylene	ND		370
Fluorene	ND		370
Acenaphthene	ND		370
2,4-Dinitrotoluene	ND		370
2,6-Dinitrotoluene	ND		370
Diethylphthalate	ND		370
4-Chlorophenyl Phenyl Ether	ND		370
N-Nitrosodiphenylamine	ND		370
4-Bromophenyl Phenyl Ether	ND		370
Hexachlorobenzene	ND		370
Phenanthrene	ND		370
Anthracene	ND		370
Di-N-Butyl-Phthalate	ND		370
Fluoranthene	ND		370
Benzidine	ND		1800
Pyrene	ND		370
Butyl Benzyl Phthalate	ND		370
3,3'-Dichlorobenzidine	ND		740
Benzo(A)Anthracene	ND		370
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	370

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24025 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C035-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		370
Di-N-Octyl Phthalate	ND		370
Benzo(B)Fluoranthene	ND		370
Benzo(K)Fluoranthene	ND		370
Benzo(A)Pyrene	ND		370
Indeno(1,2,3-cd)Pyrene	ND		370
Dibenzo(A,H)Anthracene	ND		370
Benzo(G,H,I)Perylene	ND		370
Benzyl Alcohol	ND		370
4-Chloroaniline	ND		370
2-Methylnaphthalene	ND		370
2-Nitroaniline	ND		1800
3-Nitroaniline	ND		1800
Dibenzofuran	ND		370
4-Nitroaniline	ND		1800

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS : 89.0 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24025 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C035-0229-DDBO

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		370
2-Chlorophenol	ND		370
2-Nitrophenol	ND		370
2,4-Dimethylphenol	ND		370
2,4-Dichlorophenol	ND		370
4-Chloro-3-Methylphenol	ND		370
2,4,6-Trichlorophenol	ND		370
2,4-Dinitrophenol	ND		1800
4-Nitrophenol	ND		1800
4,6-Dinitro-2-Methylphenol	ND		1800
Pentachlorophenol	ND		1800
2-Methylphenol	ND		370
4-Methylphenol	ND		370
Benzoic Acid	ND		1800
2,4,5-Trichlorophenol	ND		1800

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS :100 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24026 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C036-0229-BKFS

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		330
1,3-Dichlorobenzene	ND		330
1,4-Dichlorobenzene	ND		330
1,2-Dichlorobenzene	ND		330
Bis(2-Chloroisopropyl) Ether	ND		330
N-Nitrosodipropylamine	ND		330
Hexachloroethane	ND		330
Nitrobenzene	ND		330
Isophorone	ND		330
Bis (2-Chloroethoxy) Methane	ND		330
1,2,4-Trichlorobenzene	ND		330
Naphthalene	ND		330
Hexachlorobutadiene	ND		330
Hexachlorocyclopentadiene	ND		330
2-Chloronaphthalene	ND		330
Dimethyl Phthalate	ND		330
Acenaphthylene	ND		330
Fluorene	ND		330
Acenaphthene	ND		330
2,4-Dinitrotoluene	ND		330
2,6-Dinitrotoluene	ND		330
Diethylphthalate	ND		330
4-Chlorophenyl Phenyl Ether	ND		330
N-Nitrosodiphenylamine	ND		330
4-Bromophenyl Phenyl Ether	ND		330
Hexachlorobenzene	ND		330
Phenanthrene	ND		330
Anthracene	ND		330
Di-N-Butyl-Phthalate	PRESENT	L	330
Fluoranthene	ND		330
Benzidine	ND		1600
Pyrene	ND		330
Butyl Benzyl Phthalate	ND		330
3,3'-Dichlorobenzidine	ND		660
Benzo(A)Anthracene	ND		330
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	330

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS :100 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24026 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C036-0229-BKFS

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		330
Di-N-Octyl Phthalate	ND		330
Benzo(B)Fluoranthene	ND		330
Benzo(K)Fluoranthene	ND		330
Benzo(A)Pyrene	ND		330
Indeno(1,2,3-cd)Pyrene	ND		330
Dibenzo(A,H)Anthracene	ND		330
Benzo(G,H,I)Perylene	ND		330
Benzyl Alcohol	ND		330
4-Chloroaniline	ND		330
2-Methylnaphthalene	ND		330
2-Nitroaniline	ND		1600
3-Nitroaniline	ND		1600
Dibenzofuran	ND		330
4-Nitroaniline	ND		1600

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS :100 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24026 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C036-0229-BKFS

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		330
2-Chlorophenol	ND		330
2-Nitrophenol	ND		330
2,4-Dimethylphenol	ND		330
2,4-Dichlorophenol	ND		330
4-Chloro-3-Methylphenol	ND		330
2,4,6-Trichlorophenol	ND		330
2,4-Dinitrophenol	ND		1600
4-Nitrophenol	ND		1600
4,6-Dinitro-2-Methylphenol	ND		1600
Pentachlorophenol	ND		1600
2-Methylphenol	ND		330
4-Methylphenol	ND		330
Benzoic Acid	ND		1600
2,4,5-Trichlorophenol	ND		1600

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS :100 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24027 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-C037-0229-BKFS

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		330
1,3-Dichlorobenzene	ND		330
1,4-Dichlorobenzene	ND		330
1,2-Dichlorobenzene	ND		330
Bis(2-Chloroisopropyl) Ether	ND		330
N-Nitrosodipropylamine	ND		330
Hexachloroethane	ND		330
Nitrobenzene	ND		330
Isophorone	ND		330
Bis (2-Chloroethoxy) Methane	ND		330
1,2,4-Trichlorobenzene	ND		330
Naphthalene	ND		330
Hexachlorobutadiene	ND		330
Hexachlorocyclopentadiene	ND		330
2-Chloronaphthalene	ND		330
Dimethyl Phthalate	ND		330
Acenaphthylene	ND		330
Fluorene	ND		330
Acenaphthene	ND		330
2,4-Dinitrotoluene	ND		330
2,6-Dinitrotoluene	ND		330
Diethylphthalate	ND		330
4-Chlorophenyl Phenyl Ether	ND		330
N-Nitrosodiphenylamine	ND		330
4-Bromophenyl Phenyl Ether	ND		330
Hexachlorobenzene	ND		330
Phenanthrene	ND		330
Anthracene	ND		330
Di-N-Butyl-Phthalate	PRESENT	L	330
Fluoranthene	ND		330
Benzidine	ND		1600
Pyrene	ND		330
Butyl Benzyl Phthalate	ND		330
3,3'-Dichlorobenzidine	ND		660
Benzo(A)Anthracene	ND		330
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	330

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS :100 %  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24027 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO37-0229-BKFS

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		330
Di-N-Octyl Phthalate	ND		330
Benzo(B)Fluoranthene	ND		330
Benzo(K)Fluoranthene	ND		330
Benzo(A)Pyrene	ND		330
Indeno(1,2,3-cd)Pyrene	ND		330
Dibenzo(A,H)Anthracene	ND		330
Benzo(G,H,I)Perylene	ND		330
Benzyl Alcohol	ND		330
4-Chloroaniline	ND		330
2-Methylnaphthalene	ND		330
2-Nitroaniline	ND		1600
3-Nitroaniline	ND		1600
Dibenzofuran	ND		330
4-Nitroaniline	ND		1600

-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
RESULTS IN DRY WEIGHT %SOLIDS :100 %  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : EE-91-24027 MATRIX : SOLID  
SAMPLE ID CLIENT: TG-CO37-0229-BKFS

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Phenol	ND		330
2-Chlorophenol	ND		330
2-Nitrophenol	ND		330
2,4-Dimethylphenol	ND		330
2,4-Dichlorophenol	ND		330
4-Chloro-3-Methylphenol	ND		330
2,4,6-Trichlorophenol	ND		330
2,4-Dinitrophenol	ND		1600
4-Nitrophenol	ND		1600
4,6-Dinitro-2-Methylphenol	ND		1600
Pentachlorophenol	ND		1600
2-Methylphenol	ND		330
4-Methylphenol	ND		330
Benzoic Acid	ND		1600
2,4,5-Trichlorophenol	ND		1600

-----  
QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
 PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
 OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)  
 (Sample # 24005)

9102.506

Compound	Original Value	Amount Added (ug)	Amount Determined		Percent Recovery		RPD
			MS	MSD	MS	MSD	
1,2,4-Trichlorobenzene	ND	200	136	135	68	68	0
Acenaphthene	ND	200	122	119	61	60	2
2,4-Dinitrotoluene	ND	200	156	147	78	74	5
Pyrene	ND	200	129	133	64	66	3
N-Nitroso-di-n-propylamine	ND	200	120	122	60	61	2
1,4-Dichlorobenzene	ND	200	112	111	56	56	0
Pentachlorophenol	ND	400	277	278	69	70	1
Phenol	ND	400	237	249	59	62	5
2-Chlorophenol	ND	400	226	217	56	54	4
4-Chloro-3-methylphenol	ND	400	240	225	60	56	7
4-Nitrophenol	ND	400	240	189	60	47	24

ND = NOT DETECTED

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
(ug)				
Nitrobenzene-d5	23995	100	72	72
	23996	100	81	81
	23997	100	86	86
	23998	100	69	69
	23999	100	74	74
	24000	100	73	73
	24001	100	86	86
	24002	100	73	73
	24003	100	67	67
	24004	100	64	64
2-Fluorobiphenyl	23995	100	104	104
	23996	100	112	112
	23997	100	121	121
	23998	100	101	101
	23999	100	103	103
	24000	100	111	111
	24001	100	127	127
	24002	100	103	103
	24003	100	88	88
	24004	100	84	84
Terphenyl-d14	23995	100	84	84
	23996	100	99	99
	23997	100	124	124
	23998	100	96	96
	23999	100	101	101
	24000	100	101	101
	24001	100	116	116
	24002	100	94	94
	24003	100	79	79
	24004	100	81	81

These recoveries are acceptable to EPA QC advisory guidelines.

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
(ug)				
Nitrobenzene-d5	24005	100	61	61
	24006	100	66	66
	24007	100	57	57
	24008	100	55	55
	24009	100	62	62
	24010	100	59	59
	24011	100	62	62
	24012	100	64	64
	24013	100	62	62
	24014	100	61	61
2-Fluorobiphenyl	24005	100	82	82
	24006	100	85	85
	24007	100	76	76
	24008	100	75	75
	24009	100	80	80
	24010	100	77	77
	24011	100	76	76
	24012	100	110	110
	24013	100	77	77
	24014	100	79	79
Terphenyl-d14	24005	100	84	84
	24006	100	78	78
	24007	100	72	72
	24008	100	72	72
	24009	100	83	83
	24010	100	79	79
	24011	100	82	82
	24012	100	106	106
	24013	100	87	87
	24014	100	87	87

These recoveries are acceptable to EPA QC advisory guidelines.

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
		(ug)		
Nitrobenzene-d5	24015	100	59	59
	24016	100	62	62
	24017	100	49	49
	24018	100	76	76
	24019	100	65	65
	24020	100	58	58
	24021	100	69	69
	24022	100	72	72
	24023	100	56	56
	24024	100	73	73
2-Fluorobiphenyl	24015	100	74	74
	24016	100	69	69
	24017	100	67	67
	24018	100	87	87
	24019	100	79	79
	24020	100	76	76
	24021	100	87	87
	24022	100	82	82
	24023	100	73	73
	24024	100	86	86
Terphenyl-d14	24015	100	82	82
	24016	100	62	62
	24017	100	68	68
	24018	100	86	86
	24019	100	76	76
	24020	100	73	73
	24021	100	80	80
	24022	100	74	74
	24023	100	65	65
	24024	100	81	81

These recoveries are acceptable to EPA QC advisory guidelines.

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
(ug)				
Nitrobenzene-d5	24025	100	75	75
	24026	100	82	82
	24027	100	82	82
	Method Blank 1	100	82	82
	Method Blank 2	100	74	74
	Method Blank 3	100	81	81
2-Fluorobiphenyl	24025	100	91	91
	24026	100	103	103
	24027	100	104	104
	Method Blank 1	100	111	111
	Method Blank 2	100	105	105
	Method Blank 3	100	117	117
Terphenyl-d14	24025	100	66	66
	24026	100	80	80
	24027	100	74	74
	Method Blank 1	100	100	100
	Method Blank 2	100	90	90
	Method Blank 3	100	102	102

These recoveries are acceptable to EPA QC advisory guidelines.



QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
(ug)				
2-Fluorophenol	23995	200	145	72
	23996	200	164	82
	23997	200	178	89
	23998	200	146	73
	23999	200	155	77
	24000	200	144	72
	24001	200	165	84
	24002	200	143	72
	24003	200	136	68
	24004	200	133	66
Phenol-d5	23995	200	150	75
	23996	200	162	81
	23997	200	174	87
	23998	200	144	72
	23999	200	156	77
	24000	200	138	69
	24001	200	160	80
	24002	200	146	73
	24003	200	140	70
	24004	200	139	70
2,4,6-Tribromophenol	23995	200	157	78
	23996	200	157	78
	23997	200	157	78
	23998	200	140	70
	23999	200	140	70
	24000	200	60	30
	24001	200	90	45
	24002	200	140	70
	24003	200	132	66
	24004	200	138	69

These recoveries are acceptable to EPA QC advisory guidelines.

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
(ug)				
2-Fluorophenol	24005	200	96	48
	24006	200	134	67
	24007	200	114	57
	24008	200	108	54
	24009	200	124	62
	24010	200	124	62
	24011	200	119	60
	24012	200	123	62
	24013	200	119	60
	24014	200	117	58
Phenol-d5	24005	200	108	54
	24006	200	139	70
	24007	200	120	60
	24008	200	117	58
	24009	200	128	64
	24010	200	129	64
	24011	200	125	62
	24012	200	105	52
	24013	200	127	64
	24014	200	126	63
2,4,6-Tribromophenol	24005	200	24	12
	24006	200	129	64
	24007	200	112	56
	24008	200	109	54
	24009	200	123	62
	24010	200	79	40
	24011	200	143	72
	24012	200	191	96
	24013	200	132	66
	24014	200	128	64

These recoveries are acceptable to EPA QC advisory guidelines.

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
(ug)				
2-Fluorophenol	24015	200	108	54
	24016	200	119	60
	24017	200	97	49
	24018	200	144	72
	24019	200	133	66
	24020	200	126	63
	24021	200	125	64
	24022	200	131	66
	24023	200	118	59
	24024	200	145	72
Phenol-d5	24015	200	118	59
	24016	200	132	66
	24017	200	110	55
	24018	200	153	76
	24019	200	142	71
	24020	200	133	66
	24021	200	143	72
	24022	200	149	74
	24023	200	129	64
	24024	200	151	76
2,4,6-Tribromophenol	24015	200	114	57
	24016	200	115	58
	24017	200	108	54
	24018	200	140	70
	24019	200	125	62
	24020	200	123	62
	24021	200	131	66
	24022	200	126	63
	24023	200	101	50
	24024	200	103	52

These recoveries are acceptable to EPA QC advisory guidelines.

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

Compound	E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
(ug)				
2-Fluorophenol	24025	200	139	70
	24026	200	150	75
	24027	200	153	76
	Method Blank 1	200	167	84
	Method Blank 2	200	151	76
	Method Blank 3	200	154	77
Phenol-d5	24025	200	155	78
	24026	200	178	89
	24027	200	178	89
	Method Blank 1	200	162	81
	Method Blank 2	200	149	74
	Method Blank 3	200	154	77
2,4,6-Tribromophenol	24025	200	146	73
	24026	200	149	80
	24027	200	137	68
	Method Blank 1	200	147	74
	Method Blank 2	200	123	62
	Method Blank 3	200	122	61

These recoveries are acceptable to EPA QC advisory guidelines.

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 1 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		330
1,3-Dichlorobenzene	ND		330
1,4-Dichlorobenzene	ND		330
1,2-Dichlorobenzene	ND		330
Bis(2-Chloroisopropyl) Ether	ND		330
N-Nitrosodipropylamine	ND		330
Hexachloroethane	ND		330
Nitrobenzene	ND		330
Isophorone	ND		330
Bis (2-Chloroethoxy) Methane	ND		330
1,2,4-Trichlorobenzene	ND		330
Naphthalene	ND		330
Hexachlorobutadiene	ND		330
Hexachlorocyclopentadiene	ND		330
2-Chloronaphthalene	ND		330
Dimethyl Phthalate	ND		330
Acenaphthylene	ND		330
Fluorene	ND		330
Acenaphthene	ND		330
2,4-Dinitrotoluene	ND		330
2,6-Dinitrotoluene	ND		330
Diethylphthalate	ND		330
4-Chlorophenyl Phenyl Ether	ND		330
N-Nitrosodiphenylamine	ND		330
4-Bromophenyl Phenyl Ether	ND		330
Hexachlorobenzene	ND		330
Phenanthrene	ND		330
Anthracene	ND		330
Di-N-Butyl-Phthalate	ND		330
Fluoranthene	ND		330
Benzidine	ND		1600
Pyrene	ND		330
Butyl Benzyl Phthalate	ND		330
3,3'-Dichlorobenzidine	ND		660
Benzo(A)Anthracene	ND		330
Bis(2-Ethylhexyl)Phthalate	PRESENT	L	330

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 1 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
-----	-----	-	-----
Chrysene	ND		330
Di-N-Octyl Phthalate	ND		330
Benzo(B)Fluoranthene	ND		330
Benzo(K)Fluoranthene	ND		330
Benzo(A)Pyrene	ND		330
Indeno(1,2,3-cd)Pyrene	ND		330
Dibenzo(A,H)Anthracene	ND		330
Benzo(G,H,I)Perylene	ND		330
Benzyl Alcohol	ND		330
4-Chloroaniline	ND		330
2-Methylnaphthalene	ND		330
2-Nitroaniline	ND		1600
3-Nitroaniline	ND		1600
Dibenzofuran	ND		330
4-Nitroaniline	ND		1600

-----  
**QUALIFIERS:** C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 1 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		330
2-Chlorophenol	ND		330
2-Nitrophenol	ND		330
2,4-Dimethylphenol	ND		330
2,4-Dichlorophenol	ND		330
4-Chloro-3-Methylphenol	ND		330
2,4,6-Trichlorophenol	ND		330
2,4-Dinitrophenol	ND		1600
4-Nitrophenol	ND		1600
4,6-Dinitro-2-Methylphenol	ND		1600
Pentachlorophenol	ND		1600
2-Methylphenol	ND		330
4-Methylphenol	ND		330
Benzoic Acid	ND		1600
2,4,5-Trichlorophenol	ND		1600

-----  
 QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 2 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		330
1,3-Dichlorobenzene	ND		330
1,4-Dichlorobenzene	ND		330
1,2-Dichlorobenzene	ND		330
Bis(2-Chloroisopropyl) Ether	ND		330
N-Nitrosodipropylamine	ND		330
Hexachloroethane	ND		330
Nitrobenzene	ND		330
Isophorone	ND		330
Bis (2-Chloroethoxy) Methane	ND		330
1,2,4-Trichlorobenzene	ND		330
Naphthalene	ND		330
Hexachlorobutadiene	ND		330
Hexachlorocyclopentadiene	ND		330
2-Chloronaphthalene	ND		330
Dimethyl Phthalate	ND		330
Acenaphthylene	ND		330
Fluorene	ND		330
Acenaphthene	ND		330
2,4-Dinitrotoluene	ND		330
2,6-Dinitrotoluene	ND		330
Diethylphthalate	ND		330
4-Chlorophenyl Phenyl Ether	ND		330
N-Nitrosodiphenylamine	ND		330
4-Bromophenyl Phenyl Ether	ND		330
Hexachlorobenzene	ND		330
Phenanthrene	ND		330
Anthracene	ND		330
Di-N-Butyl-Phthalate	ND		330
Fluoranthene	ND		330
Benzidine	ND		1600
Pyrene	ND		330
Butyl Benzyl Phthalate	ND		330
3,3'-Dichlorobenzidine	ND		660
Benzo(A)Anthracene	ND		330
Bis(2-Ethylhexyl)Phthalate	PRESENT	L	330

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 2 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		330
Di-N-Octyl Phthalate	ND		330
Benzo(B)Fluoranthene	ND		330
Benzo(K)Fluoranthene	ND		330
Benzo(A)Pyrene	ND		330
Indeno(1,2,3-cd)Pyrene	ND		330
Dibenzo(A,H)Anthracene	ND		330
Benzo(G,H,I)Perylene	ND		330
Benzyl Alcohol	ND		330
4-Chloroaniline	ND		330
2-Methylnaphthalene	ND		330
2-Nitroaniline	ND		1600
3-Nitroaniline	ND		1600
Dibenzofuran	ND		330
4-Nitroaniline	ND		1600

-----  
**QUALIFIERS:** C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SAPBNA1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 2 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		330
2-Chlorophenol	ND		330
2-Nitrophenol	ND		330
2,4-Dimethylphenol	ND		330
2,4-Dichlorophenol	ND		330
4-Chloro-3-Methylphenol	ND		330
2,4,6-Trichlorophenol	ND		330
2,4-Dinitrophenol	ND		1600
4-Nitrophenol	ND		1600
4,6-Dinitro-2-Methylphenol	ND		1600
Pentachlorophenol	ND		1600
2-Methylphenol	ND		330
4-Methylphenol	ND		330
Benzoic Acid	ND		1600
2,4,5-Trichlorophenol	ND		1600

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
 TEST NAME : BASE NEUTRAL UNITS : UG/KG  
 SAMPLE ID LAB : METHOD BLANK 3 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		330
1,3-Dichlorobenzene	ND		330
1,4-Dichlorobenzene	ND		330
1,2-Dichlorobenzene	ND		330
Bis(2-Chloroisopropyl) Ether	ND		330
N-Nitrosodipropylamine	ND		330
Hexachloroethane	ND		330
Nitrobenzene	ND		330
Isophorone	ND		330
Bis (2-Chloroethoxy) Methane	ND		330
1,2,4-Trichlorobenzene	ND		330
Naphthalene	ND		330
Hexachlorobutadiene	ND		330
Hexachlorocyclopentadiene	ND		330
2-Chloronaphthalene	ND		330
Dimethyl Phthalate	ND		330
Acenaphthylene	ND		330
Fluorene	ND		330
Acenaphthene	ND		330
2,4-Dinitrotoluene	ND		330
2,6-Dinitrotoluene	ND		330
Diethylphthalate	ND		330
4-Chlorophenyl Phenyl Ether	ND		330
N-Nitrosodiphenylamine	ND		330
4-Bromophenyl Phenyl Ether	ND		330
Hexachlorobenzene	ND		330
Phenanthrene	ND		330
Anthracene	ND		330
Di-N-Butyl-Phthalate	ND		330
Fluoranthene	ND		330
Benzidine	ND		1600
Pyrene	ND		330
Butyl Benzyl Phthalate	ND		330
3,3'-Dichlorobenzidine	ND		660
Benzo(A)Anthracene	ND		330
Bis(2-Ethylhexyl)Phthalate	PRESENT	L	330

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : BASE NEUTRAL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 3 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Chrysene	ND		330
Di-N-Octyl Phthalate	ND		330
Benzo(B)Fluoranthene	ND		330
Benzo(K)Fluoranthene	ND		330
Benzo(A)Pyrene	ND		330
Indeno(1,2,3-cd)Pyrene	ND		330
Dibenzo(A,H)Anthracene	ND		330
Benzo(G,H,I)Perylene	ND		330
Benzyl Alcohol	ND		330
4-Chloroaniline	ND		330
2-Methylnaphthalene	ND		330
2-Nitroaniline	ND		1600
3-Nitroaniline	ND		1600
Dibenzofuran	ND		330
4-Nitroaniline	ND		1600

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : ACID PHENOL UNITS : UG/KG  
SAMPLE ID LAB : METHOD BLANK 3 MATRIX : SOLID

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		330
2-Chlorophenol	ND		330
2-Nitrophenol	ND		330
2,4-Dimethylphenol	ND		330
2,4-Dichlorophenol	ND		330
4-Chloro-3-Methylphenol	ND		330
2,4,6-Trichlorophenol	ND		330
2,4-Dinitrophenol	ND		1600
4-Nitrophenol	ND		1600
4,6-Dinitro-2-Methylphenol	ND		1600
Pentachlorophenol	ND		1600
2-Methylphenol	ND		330
4-Methylphenol	ND		330
Benzoic Acid	ND		1600
2,4,5-Trichlorophenol	ND		1600

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WBTX 1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME: BETX -WATER UNITS : UG/L

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LAB SAMPLE ID: EE-91-24028  
CLIENT SAMPLE ID: TG-C038-0229-BKTW

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.60
Toluene	ND		0.90
Total Xylenes	ND		2.0
Ethylbenzene	ND		0.70

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

C-137

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

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Compound	E & E Laboratory No. 91-	Percent Recovery
Trifluorotoluene	24028 Method Blank	82 100

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C-138

TEST CODE :WBTX 1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:BETX -WATER UNITS : UG/L

-----  
LAB SAMPLE ID: METHOD BLANK

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.60
Toluene	ND		0.90
Total Xylenes	ND		2.0
Ethylbenzene	ND		0.70

-----

-----  
QUALIFIERS: C = COMMENT                   ND = NOT DETECTED  
              J = ESTIMATED VALUE        B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME: BETX

-SOLID

UNITS : UG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-23995

CLIENT SAMPLE ID: TG-CO01-0229-DDBO

PARAMETER	RESULTS	Q	DET. LIMIT
Benzene	ND		0.70
Toluene	ND		1.0
Total Xylenes	ND		2.4
Ethylbenzene	ND		0.82

LAB SAMPLE ID: EE-91-23996

CLIENT SAMPLE ID: TG-CO02-0229-DDBO

PARAMETER	RESULTS	Q	DET. LIMIT
Benzene	ND		0.77
Toluene	ND		1.2
Total Xylenes	ND		2.6
Ethylbenzene	ND		0.90

LAB SAMPLE ID: EE-91-23997

CLIENT SAMPLE ID: TG-CO03-0229-DDBO

PARAMETER	RESULTS	Q	DET. LIMIT
Benzene	ND		0.70
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.81

LAB SAMPLE ID: EE-91-23998

CLIENT SAMPLE ID: TG-CO04-0229-DDBO

PARAMETER	RESULTS	Q	DET. LIMIT
Benzene	ND		0.78
Toluene	ND		1.2
Total Xylenes	ND		2.6
Ethylbenzene	ND		0.91

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME: BETX -SOLID UNITS : UG/KG  
RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-23999  
CLIENT SAMPLE ID: TG-C005-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.71
Toluene	ND		1.1
Total Xylenes	ND		2.4
Ethylbenzene	ND		0.83

LAB SAMPLE ID: EE-91-24000  
CLIENT SAMPLE ID: TG-C006-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.70
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.81

LAB SAMPLE ID: EE-91-24003  
CLIENT SAMPLE ID: TG-C009-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.66
Toluene	ND		0.99
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.77

LAB SAMPLE ID: EE-91-24004  
CLIENT SAMPLE ID: TG-C010-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	2.5		0.68
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SBTX 1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:BETX

-SOLID

UNITS : UG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-24005

CLIENT SAMPLE ID: TG-C011-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	3.4		0.68
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

LAB SAMPLE ID: EE-91-24006

CLIENT SAMPLE ID: TG-C012-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.74
Toluene	1.6	J	1.1
Total Xylenes	9.2	J	2.5
Ethylbenzene	1.8	J	0.86

LAB SAMPLE ID: EE-91-24007

CLIENT SAMPLE ID: TG-C014-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.67
Toluene	ND		1.0
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.79

LAB SAMPLE ID: EE-91-24008

CLIENT SAMPLE ID: TG-C015-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.70
Toluene	3.7		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.81

QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
 J = ESTIMATED VALUE                    B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME: BETX

-SOLID

UNITS : UG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-24009

CLIENT SAMPLE ID: TG-C016-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.69
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

LAB SAMPLE ID: EE-91-24010

CLIENT SAMPLE ID: TG-C018-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.67
Toluene	ND		1.0
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.79

LAB SAMPLE ID: EE-91-24011

CLIENT SAMPLE ID: TG-C019-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.76
Toluene	ND		1.1
Total Xylenes	ND		2.5
Ethylbenzene	ND		0.89

LAB SAMPLE ID: EE-91-24012

CLIENT SAMPLE ID: TG-C020-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.68
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME: BETX

-SOLID

UNITS : UG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-24013

CLIENT SAMPLE ID: TG-C021-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.69
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

LAB SAMPLE ID: EE-91-24014

CLIENT SAMPLE ID: TG-C023-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.73
Toluene	ND		1.1
Total Xylenes	ND		2.4
Ethylbenzene	ND		0.85

LAB SAMPLE ID: EE-91-24015

CLIENT SAMPLE ID: TG-C024-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.73
Toluene	ND		1.1
Total Xylenes	ND		2.4
Ethylbenzene	ND		0.85

LAB SAMPLE ID: EE-91-24016

CLIENT SAMPLE ID: TG-C025-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.75
Toluene	ND		1.1
Total Xylenes	ND		2.5
Ethylbenzene	ND		0.88

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:BETX

-SOLID

UNITS : UG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-24017

CLIENT SAMPLE ID: TG-CO27-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.69
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

LAB SAMPLE ID: EE-91-24018

CLIENT SAMPLE ID: TG-CO28-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.69
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

LAB SAMPLE ID: EE-91-24019

CLIENT SAMPLE ID: TG-CO29-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.68
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

LAB SAMPLE ID: EE-91-24020

CLIENT SAMPLE ID: TG-CO30-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.68
Toluene	ND		1.0
Total Xylenes	ND		2.3
Ethylbenzene	ND		0.80

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME: BETX

-SOLID

UNITS : UG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-24021

CLIENT SAMPLE ID: TG-CO31-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.67
Toluene	ND		1.0
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.79

LAB SAMPLE ID: EE-91-24022

CLIENT SAMPLE ID: TG-CO32-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.67
Toluene	ND		1.0
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.78

LAB SAMPLE ID: EE-91-24023

CLIENT SAMPLE ID: TG-CO33-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.66
Toluene	ND		0.99
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.77

LAB SAMPLE ID: EE-91-24024

CLIENT SAMPLE ID: TG-CO34-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.67
Toluene	ND		1.0
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.79

QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME: BETX

-SOLID

UNITS : UG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-24025

CLIENT SAMPLE ID: TG-C035-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.67
Toluene	ND		1.0
Total Xylenes	ND		2.2
Ethylbenzene	ND		0.79

LAB SAMPLE ID: EE-91-24026

CLIENT SAMPLE ID: TG-C036-0229-BKFS

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.60
Toluene	ND		0.90
Total Xylenes	ND		2.0
Ethylbenzene	ND		0.70

LAB SAMPLE ID: EE-91-24027

CLIENT SAMPLE ID: TG-C037-0229-BKFS

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.60
Toluene	ND		0.90
Total Xylenes	ND		2.0
Ethylbenzene	ND		0.70

QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
 J = ESTIMATED VALUE                    B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT



QUALITY CONTROL FOR ACCURACY AND PRECISION:  
 PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
 OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)  
 (Sample # 23995)

9102.506

(ug/kg)

Compound	Original Result	Amount Added	Amount Determined		Percent Recovery		RPD
			MS	MSD	MS	MSD	
benzene	ND	20	14	14	70	70	0
toluene	ND	20	13	13	65	65	0
ethyl benzene	ND	20	13	13	65	65	0

These recoveries and RPDs are within E & E, Inc. limits.

ND = NOT DETECTED

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)  
(Sample # 24017)

9102.506

(ug/kg)

Compound	Original Result	Amount Added	Amount Determined		Percent Recovery		RPD
			MS	MSD	MS	MSD	
benzene	ND	20	17	16	85	80	6.1
toluene	ND	20	16	15	80	75	6.5
ethyl benzene	ND	20	16	15	80	75	6.5

These recoveries and RPDs are within E & E, Inc. limits.

ND = NOT DETECTED

QUALITY CONTROL FOR ACCURACY: PERCENT  
RECOVERY OF SURROGATE SPIKES

9102.506

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Compound	E & E Laboratory No. 91-	Percent Recovery
Trifluorotoluene	23995	54
	23996	60
	23997	67
	23998	69
	23999	68
	24000	59
	24001	96
	24002	86
	24003	56
	24004	71
	24005	64
	24006	57
	24007	68
	24008	73
	24009	58
	24010	58
	24011	59
	24012	67
	24013	52
	24014	50
	24015	58
	24016	65
	24017	76
	24018	74
	24019	72
	24020	69
	24021	69
	24022	71
	24023	57
	24024	63
24025	61	
24026	79	
24027	63	
Method Blank #1	91	
Method Blank #2	91	
Method Blank #3	85	
Method Blank #4	74	

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Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME: BETX                    -SOLID                    UNITS : UG/KG

## LAB SAMPLE ID: METHOD BLANK 1

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.60
Toluene	ND		0.90
Total Xylenes	ND		2.0
Ethylbenzene	ND		0.70

## LAB SAMPLE ID: METHOD BLANK 2

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.60
Toluene	ND		0.90
Total Xylenes	ND		2.0
Ethylbenzene	ND		0.70

## LAB SAMPLE ID: METHOD BLANK 3

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.60
Toluene	ND		0.90
Total Xylenes	ND		2.0
Ethylbenzene	ND		0.70

QUALIFIERS: C = COMMENT                    ND = NOT DETECTED  
J = ESTIMATED VALUE                    B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME: BETX

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-24001

CLIENT SAMPLE ID: TG-C007-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	5.3		1.9
Toluene	6.3		2.8
Total Xylenes	41		5.8
Ethylbenzene	9.3		2.1

LAB SAMPLE ID: EE-91-24002

CLIENT SAMPLE ID: TG-C008-229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	0.28		0.094
Toluene	0.15		0.14
Total Xylenes	1.5		0.29
Ethylbenzene	0.69		0.10

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SBTX 1

JOB NUMBER :9102.506

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:BETX

-SOLID

UNITS : MG/KG

-----  
LAB SAMPLE ID: METHOD BLANK

PARAMETER	RESULTS	Q	DET.LIMIT
Benzene	ND		0.08
Toluene	ND		0.12
Total Xylenes	ND		0.25
Ethylbenzene	ND		0.09

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QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Laboratory Job Number: 9102.708

Customer Sample Code	Laboratory Sample Code	Analytical Requirements*					
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST-PCB	*METALS	*OTHER
TG-C039-0229-FL	25655				X		
-C040-	25656						
-C041-	7						
-C042-	8						
-C043-	9						
-C044-	60						
-C050-0229-PRA	1						
-C051-	2						
-C052-	3						
-C053	4						
-C054-	5						
-C055-	6						
C056-	7						
-C057-	8						
C058	9						
C059	10						
C060	1						
C061	2						
9344-0229 GSC	3						
-9345	4						
-9346-	5						
C096-0229 BKFS	6				X		

\*Check Appropriate Boxes

\*CLP, Non-CLP (Please indicate year of protocol)

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\*HSL, Priority Pollutant

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
PCB ANALYSES

Laboratory Job Number: 9102-708

Laboratory Sample ID	Matrix	Date Collected	Date Received at Lab	Date Extracted	Date Analyzed
25655	Soil	11-8-91	11-8-91	11-11-91	11-14-91
6					11-19-91
7					11-14-91
8					11-14-91
9					11-14-91
60					11-14-91
1					11-20-91
2					11-14-91
3					11-14-91
4					11-14-91
5					11-14-91
6					11-19-91
7					11-19-91
8					11-19-91
9					11-14-91
70					11-19-91
1					14-19-91
2					11-14-91
3					11-19-91
6					11-19-91
5					11-14-91
6	↓	↓	↓	↓	11-14-91

\*Technical holding times for PCBs in soil and water:

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- 14 days from sample collection to extraction.
- 40 days from extraction to analysis.



Ecology and Environment, Inc.  
 SAMPLE TRACKING REPORT

JOB NUMBER : 9102.708

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
25655.01	TG-C039-0229-FL	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25656.01	TG-C040-0229-FL	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25657.01	TG-C041-0229-FL	SPCB 1	11/08/91	11/11/91	11/19/91
		STSCPL1	11/08/91		11/09/91
25658.01	TG-C042-0229-FL	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25659.01	TG-C043-0229-FL	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25660.01	TG-C044-0229-FL	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25661.01	TG-C050-0229-PRA	SPCB 1	11/08/91	11/11/91	11/20/91
		STSCPL1	11/08/91		11/09/91
25662.01	TG-C051-0229-PRA	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25663.01	TG-C052-0229-PRA	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25664.01	TG-C053-0229-PRA	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25665.01	TG-C054-0229-PRA	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25666.01	TG-C055-0229-PRA	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25667.01	TG-C056-0229-DDBO	SPCB 1	11/08/91	11/11/91	11/19/91
		STSCPL1	11/08/91		11/09/91
25668.01	TG-C057-0229-DDBO	SPCB 1	11/08/91	11/11/91	11/19/91
		STSCPL1	11/08/91		11/09/91
25669.01	TG-C058-0229-DDBO	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25670.01	TG-C059-0229-DDBO	SPCB 1	11/08/91	11/11/91	11/19/91
		STSCPL1	11/08/91		11/09/91
25671.01	TG-C060-0229-DDBO	SPCB 1	11/08/91	11/11/91	11/19/91
		STSCPL1	11/08/91		11/09/91
25672.01	TG-C061-0229-DDBO	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25673.01	TG-9344-0229-GSC	SPCB 1	11/08/91	11/11/91	11/19/91
		STSCPL1	11/08/91		11/09/91
25674.01	TG-9345-0229-GSC	SPCB 1	11/08/91	11/11/91	11/19/91
		STSCPL1	11/08/91		11/09/91
25675.01	TG-9346-0229-GSC	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91
25676.01	TG-C096-0229-BKFS	SPCB 1	11/08/91	11/11/91	11/14/91
		STSCPL1	11/08/91		11/09/91

TEST CODE : STSCLP1

JOB NUMBER : 9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-25655		
TG-C039-0229-FL	78	
EE-91-25656		
TG-C040-0229-FL	90	
EE-91-25657		
TG-C041-0229-FL	76	
EE-91-25658		
TG-C042-0229-FL	78	
EE-91-25659		
TG-C043-0229-FL	85	
EE-91-25660		
TG-C044-0229-FL	81	
EE-91-25661		
TG-C050-0229-PRA	78	
EE-91-25662		
TG-C051-0229-PRA	85	
EE-91-25663		
TG-C052-0229-PRA	83	
EE-91-25664		
TG-C053-0229-PRA	81	
EE-91-25665		
TG-C054-0229-PRA	82	
EE-91-25666		
TG-C055-0229-PRA	92	
EE-91-25667		
TG-C056-0229-DDBO	64	

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-25668 TG-C057-0229-DDBO	51	-
EE-91-25669 TG-C058-0229-DDBO	81	-
EE-91-25670 TG-C059-0229-DDBO	70	-
EE-91-25671 TG-C060-0229-DDBO	80	-
EE-91-25672 TG-C061-0229-DDBO	89	-
EE-91-25673 TG-9344-0229-GSC	88	-
EE-91-25674 TG-9345-0229-GSC	86	-
EE-91-25675 TG-9346-0229-GSC	89	-
EE-91-25676 TG-C096-0229-BKFS	100	-

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25655

CLIENT SAMPLE ID: TG-C039-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.3
PCB-1242	ND		1.3
PCB-1254	1.3		1.3
PCB-1221	ND		1.3
PCB-1232	ND		1.3
PCB-1248	ND		1.3
PCB-1260	ND		1.3

LAB SAMPLE ID: EE-91-25656

CLIENT SAMPLE ID: TG-C040-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	ND		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	ND		1.1

LAB SAMPLE ID: EE-91-25657

CLIENT SAMPLE ID: TG-C041-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		2.6
PCB-1242	ND		2.6
PCB-1254	26		2.6
PCB-1221	ND		2.6
PCB-1232	ND		2.6
PCB-1248	ND		2.6
PCB-1260	ND		2.6

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25658

CLIENT SAMPLE ID: TG-C042-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.3
PCB-1242	ND		1.3
PCB-1254	2.9		1.3
PCB-1221	ND		1.3
PCB-1232	ND		1.3
PCB-1248	ND		1.3
PCB-1260	ND		1.3

LAB SAMPLE ID: EE-91-25659

CLIENT SAMPLE ID: TG-C043-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	5.0		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

LAB SAMPLE ID: EE-91-25660

CLIENT SAMPLE ID: TG-C044-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	1.6		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25661

CLIENT SAMPLE ID: TG-C050-0229-PRA

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.3
PCB-1242	ND		1.3
PCB-1254	ND		1.3
PCB-1221	ND		1.3
PCB-1232	ND		1.3
PCB-1248	ND		1.3
PCB-1260	ND		1.3

LAB SAMPLE ID: EE-91-25662

CLIENT SAMPLE ID: TG-C051-0229-PRA

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	ND		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

LAB SAMPLE ID: EE-91-25663

CLIENT SAMPLE ID: TG-C052-0229-PRA

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	5.9		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

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Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25664

CLIENT SAMPLE ID: TG-C053-0229-PRA

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	1.8		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

LAB SAMPLE ID: EE-91-25665

CLIENT SAMPLE ID: TG-C054-0229-PRA

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	4.3		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

LAB SAMPLE ID: EE-91-25666

CLIENT SAMPLE ID: TG-C055-0229-PRA

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	13		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	ND		1.1

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25669

CLIENT SAMPLE ID: TG-C058-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	ND		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

LAB SAMPLE ID: EE-91-25672

CLIENT SAMPLE ID: TG-C061-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	ND		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	ND		1.1

LAB SAMPLE ID: EE-91-25673

CLIENT SAMPLE ID: TG-9344-0229-GSC

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	ND		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	ND		1.1

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

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TEST CODE :SPCB 1

JOB NUMBER :9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25674

CLIENT SAMPLE ID: TG-9345-0229-GSC

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	ND		1.2
PCB-1221	ND		1.2
PCB-1232	ND		1.2
PCB-1248	ND		1.2
PCB-1260	ND		1.2

LAB SAMPLE ID: EE-91-25675

CLIENT SAMPLE ID: TG-9346-0229-GSC

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	ND		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	ND		1.1

LAB SAMPLE ID: EE-91-25676

CLIENT SAMPLE ID: TG-C096-0229-BKFS

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
 PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
 OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)  
 (Sample # 25676)

9102.708

(mg/kg)

Parameter	Original Result	Amount Added		Amount Determined		Percent Recovery		
		MS	MSD	MS	MSD	MS	MSD	RPD
PCB-1242	ND	1.7	1.7	1.5	1.5	88	88	0

ND = NOT DETECTED

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SOIL SAMPLES

9102.708

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(mg/kg)

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Parameter	E & E Laboratory		Original Value	Amount Added	Amount Determined	Percent Recovery
	Spiked	Blank				
PCB-1242			ND	1.7	1.8	106

ND = NOT DETECTED

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QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
OF HEXABROMOBENZENE SURROGATE SPIKES

9102.708

(mg/kg)			
E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
25655	0.83	0.72	87
25656	0.83	0.75	90
25657	0.83	0.88	106
25658	0.83	0.79	95
25659	0.83	0.81	98
25660	0.83	0.75	90
25661	0.83	1.1	132
25662	0.83	0.75	90
25663	0.83	0.71	86
25664	0.83	0.79	95
<b>25665</b>	0.83	0.59	71
25666	0.83	0.62	75
25669	0.83	0.58	70
25672	0.83	1.0	120
25673	1.7	1.6	94
25674	1.7	2.1	124
25675	0.83	0.65	78
25676	0.83	0.50	60

These recoveries are within E & E quality control limits (37-138%).

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SOIL -SOLID UNITS : MG/KG

LAB SAMPLE ID: METHOD BLANK 417

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

LAB SAMPLE ID: METHOD BLANK 418

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

LAB SAMPLE ID: METHOD BLANK 419

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SOIL -SOLID UNITS : MG/KG

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LAB SAMPLE ID: METHOD BLANK 420

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

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-----  
QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SEDIMENT

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25667

CLIENT SAMPLE ID: TG-C056-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.62
PCB-1242	ND		0.62
PCB-1254	3.4		0.62
PCB-1221	ND		0.62
PCB-1232	ND		0.62
PCB-1248	ND		0.62
PCB-1260	ND		0.62

LAB SAMPLE ID: EE-91-25668

CLIENT SAMPLE ID: TG-C057-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		2.0
PCB-1242	ND		2.0
PCB-1254	16		2.0
PCB-1221	ND		2.0
PCB-1232	ND		2.0
PCB-1248	ND		2.0
PCB-1260	ND		2.0

LAB SAMPLE ID: EE-91-25670

CLIENT SAMPLE ID: TG-C059-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.14
PCB-1242	ND		0.14
PCB-1254	0.33		0.14
PCB-1221	ND		0.14
PCB-1232	ND		0.14
PCB-1248	ND		0.14
PCB-1260	ND		0.14

QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

C-170

TEST CODE :SPCB 1

JOB NUMBER :9102.708

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SEDIMENT

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25671

CLIENT SAMPLE ID: TG-C060-0229-DDBO

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.12
PCB-1242	ND		0.12
PCB-1254	0.16		0.12
PCB-1221	ND		0.12
PCB-1232	ND		0.12
PCB-1248	ND		0.12
PCB-1260	ND		0.12

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

C-171



QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
OF HEXABROMOBENZENE SURROGATE SPIKES

9102.708

(mg/kg)

E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
25667	0.83	0.75	90
25668	0.83	0.83	100
25670	0.83	1.0	120
25671	1.7	1.7	100

These recoveries are within E & E quality control limits (37-138%).

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SEDIMENT -SOLID UNITS : MG/KG

LAB SAMPLE ID: METHOD BLANK 417

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

LAB SAMPLE ID: METHOD BLANK 419

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

LAB SAMPLE ID: METHOD BLANK 420

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY**

Laboratory Job Number: 9102.752

Customer Sample Code	Laboratory Sample Code	Analytical Requirements*					
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST-PCB	*METALS	*OTHER
TG-C067-0229-TRAF	26138				X		
C068	26139						
C069	26140						
C070	26141						
C071	26142						
C072	26143						
C073	26144						
C075	26145						
C076	26146						
C077	26147						
C078	26148						
C079	26149						
C080	26150						
C081	26151						
C082	26152						
C083	26153						
C084	26154						
C085	26155						
C086	26156						
C087	26157						
C088	26158						
C089	26159						
C090	26160						
C091	26161						
C092	26162						
C093	26163						
C094	26164						
C095	26165						

\*Check Appropriate Boxes

\*CLP, Non-CLP (Please indicate year of protocol)

\*HSL, Priority Pollutant



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
PCB ANALYSES

Laboratory Job Number: 9102.752

Laboratory Sample ID	Matrix	Date Collected	Date Received at Lab	Date* Extracted	Date* Analyzed
26138	Soil	11/14/91	11/14/91	11/19/91	11/27/91
26139					11/22/91
26140					11/20/91
26141					11/26/91
26142					11/22/91
26143					11/22/91
26144					11/22/91
26145					11/22/91
26146					11/20/91
26147					11/20/91
26148					11/26/91
26149					11/26/91
26150					11/22/91
26151					11/20/91
26152					11/20/91
26153					11/20/91
26154					11/22/91
26155					11/22/91
26156					11/20/91
26157					11/20/91
26158					11/30/91
26159	↓				11/20/91
26160	↓				11/20/91
26161	Sediment				11/20/91
26162	Soil				11/20/91
26163	Sediment				11/20/91
26164	Sediment	↓	↓	↓	11/25/91

\*Technical holding times for PCBs in soil and water:

- 14 days from <sup>recycled paper</sup> sample collection to extraction.
- 40 days from extraction to analysis.



Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
26138.01	TG-C067-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/27/91
		STSCPL1	11/14/91		11/18/91
26139.01	TG-C068-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/22/91
		STSCPL1	11/14/91		11/18/91
26140.01	TG-C069-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26141.01	TG-C070-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/26/91
		STSCPL1	11/14/91		11/18/91
26142.01	TG-C071-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/22/91
		STSCPL1	11/14/91		11/18/91
26143.01	TG-C072-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26144.01	TG-C073-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/22/91
		STSCPL1	11/14/91		11/18/91
26145.01	TG-C075-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/22/91
		STSCPL1	11/14/91		11/18/91
26146.01	TG-C076-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26147.01	TG-C077-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26148.01	TG-C078-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26149.01	TG-C079-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/26/91
		STSCPL1	11/14/91		11/18/91
26150.01	TG-C080-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/26/91
		STSCPL1	11/14/91		11/18/91
26151.01	TG-C081-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/22/91
		STSCPL1	11/14/91		11/18/91
26152.01	TG-C082-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26153.01	TG-C083-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26154.01	TG-C084-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26155.01	TG-C085-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/22/91
		STSCPL1	11/14/91		11/18/91
26156.01	TG-C086-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/22/91
		STSCPL1	11/14/91		11/18/91
26157.01	TG-C087-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26158.01	TG-C088-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26159.01	TG-C089-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26160.01	TG-C090-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCPL1	11/14/91		11/18/91
26161.01	TG-C091-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91

Ecology and Environment, Inc.  
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
26161.01	TG-C091-0229-TRAF	STSCLP1	11/14/91		11/18/91
26162.01	TG-C092-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCLP1	11/14/91		11/18/91
26163.01	TG-C093-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCLP1	11/14/91		11/18/91
26164.01	TG-C094-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/25/91
		STSCLP1	11/14/91		11/18/91
26165.01	TG-C095-0229-TRAF	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCLP1	11/14/91		11/18/91
26166.01	TG-C045-0229-FL	SPCB 1	11/14/91	11/19/91	11/26/91
		STSCLP1	11/14/91		11/18/91
26167.01	TG-C046-0229-FL	SPCB 1	11/14/91	11/19/91	11/26/91
		STSCLP1	11/14/91		11/18/91
26168.01	TG-C047-0229-FL	SPCB 1	11/14/91	11/19/91	11/26/91
		STSCLP1	11/14/91		11/18/91
26169.01	TG-C048-0229-FL	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCLP1	11/14/91		11/18/91
26170.01	TG-C097-0229-BKFS	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCLP1	11/14/91		11/18/91
26550.01	TG-C049-0229-FL	SPCB 1	11/14/91	11/19/91	11/20/91
		STSCLP1	11/14/91		11/20/91



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-26138		
TG-C067-0229-TRAF	59	
EE-91-26139		
TG-C068-0229-TRAF	67	
EE-91-26140		
TG-C069-0229-TRAF	65	
EE-91-26141		
TG-C070-0229-TRAF	43	
EE-91-26142		
TG-C071-0229-TRAF	53	
EE-91-26143		
TG-C072-0229-TRAF	64	
EE-91-26144		
TG-C073-0229-TRAF	55	
EE-91-26145		
TG-C075-0229-TRAF	73	
EE-91-26146		
TG-C076-0229-TRAF	70	
EE-91-26147		
TG-C077-0229-TRAF	73	
EE-91-26148		
TG-C078-0229-TRAF	66	
EE-91-26149		
TG-C079-0229-TRAF	48	
EE-91-26150		
TG-C080-0229-TRAF	52	

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-26151 TG-C081-0229-TRAF	67	-
EE-91-26152 TG-C082-0229-TRAF	72	-
EE-91-26153 TG-C083-0229-TRAF	73	-
EE-91-26154 TG-C084-0229-TRAF	77	-
EE-91-26155 TG-C085-0229-TRAF	51	-
EE-91-26156 TG-C086-0229-TRAF	53	-
EE-91-26157 TG-C087-0229-TRAF	54	-
EE-91-26158 TG-C088-0229-TRAF	70	-
EE-91-26159 TG-C089-0229-TRAF	50	-
EE-91-26160 TG-C090-0229-TRAF	76	-
EE-91-26161 TG-C091-0229-TRAF	59	-
EE-91-26162 TG-C092-0229-TRAF	76	-
EE-91-26163 TG-C093-0229-TRAF	73	-

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : STSCLP1

JOB NUMBER : 9102.752

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-26164 TG-C094-0229-TRAF	76	-
EE-91-26165 TG-C095-0229-TRAF	77	-
EE-91-26166 TG-C045-0229-FL	67	-
EE-91-26167 TG-C046-0229-FL	62	-
EE-91-26168 TG-C047-0229-FL	66	-
EE-91-26169 TG-C048-0229-FL	69	-
EE-91-26170 TG-C097-0229-BKFS	100	-
EE-91-26550 TG-C049-0229-FL	68	-

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26138

CLIENT SAMPLE ID: TG-C067-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		85
PCB-1242	ND		85
PCB-1254	290		85
PCB-1221	ND		85
PCB-1232	ND		85
PCB-1248	ND		85
PCB-1260	ND		85

LAB SAMPLE ID: EE-91-26139

CLIENT SAMPLE ID: TG-C068-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		7.5
PCB-1242	ND		7.5
PCB-1254	39		7.5
PCB-1221	ND		7.5
PCB-1232	ND		7.5
PCB-1248	ND		7.5
PCB-1260	ND		7.5

LAB SAMPLE ID: EE-91-26140

CLIENT SAMPLE ID: TG-C069-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.5
PCB-1242	ND		1.5
PCB-1254	ND		1.5
PCB-1221	ND		1.5
PCB-1232	ND		1.5
PCB-1248	ND		1.5
PCB-1260	ND		1.5

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26141

CLIENT SAMPLE ID: TG-C070-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		46
PCB-1242	ND		46
PCB-1254	120		46
PCB-1221	ND		46
PCB-1232	ND		46
PCB-1248	180		46
PCB-1260	ND		46

LAB SAMPLE ID: EE-91-26142

CLIENT SAMPLE ID: TG-C071-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		9.4
PCB-1242	ND		9.4
PCB-1254	70		9.4
PCB-1221	ND		9.4
PCB-1232	ND		9.4
PCB-1248	ND		9.4
PCB-1260	ND		9.4

LAB SAMPLE ID: EE-91-26143

CLIENT SAMPLE ID: TG-C072-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.6
PCB-1242	ND		1.6
PCB-1254	8.1		1.6
PCB-1221	ND		1.6
PCB-1232	ND		1.6
PCB-1248	ND		1.6
PCB-1260	ND		1.6

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26144

CLIENT SAMPLE ID: TG-C073-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		18
PCB-1242	ND		18
PCB-1254	96		18
PCB-1221	ND		18
PCB-1232	ND		18
PCB-1248	ND		18
PCB-1260	ND		18

LAB SAMPLE ID: EE-91-26145

CLIENT SAMPLE ID: TG-C075-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.4
PCB-1242	ND		1.4
PCB-1254	ND		1.4
PCB-1221	ND		1.4
PCB-1232	ND		1.4
PCB-1248	ND		1.4
PCB-1260	ND		1.4

LAB SAMPLE ID: EE-91-26146

CLIENT SAMPLE ID: TG-C076-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.4
PCB-1242	ND		1.4
PCB-1254	2.0		1.4
PCB-1221	ND		1.4
PCB-1232	ND		1.4
PCB-1248	ND		1.4
PCB-1260	ND		1.4

QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26147

CLIENT SAMPLE ID: TG-C077-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.4
PCB-1242	ND		1.4
PCB-1254	ND		1.4
PCB-1221	ND		1.4
PCB-1232	ND		1.4
PCB-1248	ND		1.4
PCB-1260	ND		1.4

LAB SAMPLE ID: EE-91-26148

CLIENT SAMPLE ID: TG-C078-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.5
PCB-1242	ND		1.5
PCB-1254	ND		1.5
PCB-1221	ND		1.5
PCB-1232	ND		1.5
PCB-1248	ND		1.5
PCB-1260	ND		1.5

LAB SAMPLE ID: EE-91-26149

CLIENT SAMPLE ID: TG-C079-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		42
PCB-1242	ND		42
PCB-1254	180		42
PCB-1221	ND		42
PCB-1232	ND		42
PCB-1248	ND		42
PCB-1260	ND		42

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26150

CLIENT SAMPLE ID: TG-C080-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		38
PCB-1242	ND		38
PCB-1254	140		38
PCB-1221	ND		38
PCB-1232	ND		38
PCB-1248	ND		38
PCB-1260	ND		38

LAB SAMPLE ID: EE-91-26151

CLIENT SAMPLE ID: TG-C081-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		4.5
PCB-1242	ND		4.5
PCB-1254	30		4.5
PCB-1221	ND		4.5
PCB-1232	ND		4.5
PCB-1248	ND		4.5
PCB-1260	ND		4.5

LAB SAMPLE ID: EE-91-26152

CLIENT SAMPLE ID: TG-C082-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.4
PCB-1242	ND		1.4
PCB-1254	PRESENT	L	1.4
PCB-1221	ND		1.4
PCB-1232	ND		1.4
PCB-1248	ND		1.4
PCB-1260	ND		1.4

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT



Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26153

CLIENT SAMPLE ID: TG-C083-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.4
PCB-1242	ND		1.4
PCB-1254	ND		1.4
PCB-1221	ND		1.4
PCB-1232	ND		1.4
PCB-1248	ND		1.4
PCB-1260	ND		1.4

LAB SAMPLE ID: EE-91-26154

CLIENT SAMPLE ID: TG-C084-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.3
PCB-1242	ND		1.3
PCB-1254	ND		1.3
PCB-1221	ND		1.3
PCB-1232	ND		1.3
PCB-1248	ND		1.3
PCB-1260	ND		1.3

LAB SAMPLE ID: EE-91-26155

CLIENT SAMPLE ID: TG-C085-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		20
PCB-1242	ND		20
PCB-1254	120		20
PCB-1221	ND		20
PCB-1232	ND		20
PCB-1248	ND		20
PCB-1260	ND		20

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
 J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
 L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26156

CLIENT SAMPLE ID: TG-C086-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		9.4
PCB-1242	ND		9.4
PCB-1254	45		9.4
PCB-1221	ND		9.4
PCB-1232	ND		9.4
PCB-1248	ND		9.4
PCB-1260	ND		9.4

LAB SAMPLE ID: EE-91-26157

CLIENT SAMPLE ID: TG-C087-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.8
PCB-1242	ND		1.8
PCB-1254	12		1.8
PCB-1221	ND		1.8
PCB-1232	ND		1.8
PCB-1248	ND		1.8
PCB-1260	ND		1.8

LAB SAMPLE ID: EE-91-26158

CLIENT SAMPLE ID: TG-C088-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.4
PCB-1242	ND		1.4
PCB-1254	7.4		1.4
PCB-1221	ND		1.4
PCB-1232	ND		1.4
PCB-1248	ND		1.4
PCB-1260	ND		1.4

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SOIL -SOLID UNITS : MG/KG  
RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26159  
CLIENT SAMPLE ID: TG-C089-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		2.0
PCB-1242	ND		2.0
PCB-1254	3.4		2.0
PCB-1221	ND		2.0
PCB-1232	ND		2.0
PCB-1248	ND		2.0
PCB-1260	ND		2.0

LAB SAMPLE ID: EE-91-26160  
CLIENT SAMPLE ID: TG-C090-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.3
PCB-1242	ND		1.3
PCB-1254	ND		1.3
PCB-1221	ND		1.3
PCB-1232	ND		1.3
PCB-1248	ND		1.3
PCB-1260	ND		1.3

LAB SAMPLE ID: EE-91-26162  
CLIENT SAMPLE ID: TG-C092-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.3
PCB-1242	ND		1.3
PCB-1254	ND		1.3
PCB-1221	ND		1.3
PCB-1232	ND		1.3
PCB-1248	ND		1.3
PCB-1260	ND		1.3

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SOIL

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26166

CLIENT SAMPLE ID: TG-C045-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		15
PCB-1242	ND		15
PCB-1254	96		15
PCB-1221	ND		15
PCB-1232	ND		15
PCB-1248	ND		15
PCB-1260	ND		15

LAB SAMPLE ID: EE-91-26167

CLIENT SAMPLE ID: TG-C046-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.6
PCB-1242	ND		1.6
PCB-1254	8.4		1.6
PCB-1221	ND		1.6
PCB-1232	ND		1.6
PCB-1248	ND		1.6
PCB-1260	ND		1.6

LAB SAMPLE ID: EE-91-26168

CLIENT SAMPLE ID: TG-C047-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		76
PCB-1242	ND		76
PCB-1254	450		76
PCB-1221	ND		76
PCB-1232	ND		76
PCB-1248	ND		76
PCB-1260	ND		76

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SOIL -SOLID UNITS : MG/KG  
RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26169  
CLIENT SAMPLE ID: TG-C048-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.4
PCB-1242	ND		1.4
PCB-1254	ND		1.4
PCB-1221	ND		1.4
PCB-1232	ND		1.4
PCB-1248	ND		1.4
PCB-1260	ND		1.4

LAB SAMPLE ID: EE-91-26170  
CLIENT SAMPLE ID: TG-C097-0229-BKFS

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

LAB SAMPLE ID: EE-91-26550  
CLIENT SAMPLE ID: TG-C049-0229-FL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.5
PCB-1242	ND		1.5
PCB-1254	ND		1.5
PCB-1221	ND		1.5
PCB-1232	ND		1.5
PCB-1248	ND		1.5
PCB-1260	ND		1.5

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
 PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
 OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)  
 (Sample # 26138)

9102.752

(mg/kg)

Parameter	Original Result	Amount Added		Amount Determined		Percent Recovery		
		MS	MSD	MS	MSD	MS	MSD	RPD
PCB-1242	ND	1.7	1.7	--	--	--	--	**

ND = NOT DETECTED

\*\* = SPIKE DILUTED OUT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
 PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
 OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)  
 (Sample # 26162)

9102.752

(mg/kg)

Parameter	Original Result	Amount Added		Amount Determined		Percent Recovery		
		MS	MSD	MS	MSD	MS	MSD	RPD
PCB-1242	ND	1.7	1.7	1.7	1.7	100	100	0

ND = NOT DETECTED

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
OF HEXABROMOBENZENE SURROGATE SPIKES

9102.752

(mg/kg)			
E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
26138	0.83	--	DL
26139	0.83	--	DL
26140	0.83	0.84	101
26141	0.83	--	DL
26142	0.83	--	DL
26143	0.83	0.92	111
26144	0.83	--	DL
26145	0.83	0.91	110
26146	0.83	0.68	82
26147	0.83	0.76	92
<b>26148</b>	0.83	0.69	83
26149	0.83	--	DL
26150	0.83	--	DL
26151	0.83	0.79	95
26152	0.83	0.70	84
26153	0.83	0.72	87
26154	0.83	0.66	80
26155	0.83	--	DL
26156	0.83	--	DL
26157	0.83	0.88	106
26158	0.83	0.71	86
26159	0.83	0.78	94
26160	0.83	0.82	99
26162	0.83	0.74	89

These recoveries are within E & E quality control limits (37-138%).

DL = SURROGATE DILUTED OUT



QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
OF HEXABROMOBENZENE SURROGATE SPIKES

9102.752

(mg/kg)

E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
26166	0.83	--	DL
26167	0.83	0.85	102
26168	0.83	--	DL
26169	0.83	0.86	104
26170	0.83	0.79	95
26550	0.83	0.82	99

These recoveries are within E & E quality control limits (37-138%).

DL = SURROGATE DILUTED OUT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SOIL -SOLID UNITS : MG/KG

LAB SAMPLE ID: METHOD BLANK 494

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

LAB SAMPLE ID: METHOD BLANK 495

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

LAB SAMPLE ID: METHOD BLANK 496

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.752

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SOIL -SOLID UNITS : MG/KG

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LAB SAMPLE ID: METHOD BLANK 497

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.0
PCB-1242	ND		1.0
PCB-1254	ND		1.0
PCB-1221	ND		1.0
PCB-1232	ND		1.0
PCB-1248	ND		1.0
PCB-1260	ND		1.0

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SEDIMENT -SOLID UNITS : MG/KG  
RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26161  
CLIENT SAMPLE ID: TG-C091-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.17
PCB-1242	ND		0.17
PCB-1254	0.22		0.17
PCB-1221	ND		0.17
PCB-1232	ND		0.17
PCB-1248	ND		0.17
PCB-1260	ND		0.17

LAB SAMPLE ID: EE-91-26163  
CLIENT SAMPLE ID: TG-C093-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.14
PCB-1242	ND		0.14
PCB-1254	ND		0.14
PCB-1221	ND		0.14
PCB-1232	ND		0.14
PCB-1248	ND		0.14
PCB-1260	ND		0.14

LAB SAMPLE ID: EE-91-26164  
CLIENT SAMPLE ID: TG-C094-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.13
PCB-1242	ND		0.13
PCB-1254	ND		0.13
PCB-1221	ND		0.13
PCB-1232	ND		0.13
PCB-1248	ND		0.13
PCB-1260	ND		0.13

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.752

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SEDIMENT

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

-----  
LAB SAMPLE ID: EE-91-26165

CLIENT SAMPLE ID: TG-C095-0229-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.13
PCB-1242	ND		0.13
PCB-1254	ND		0.13
PCB-1221	ND		0.13
PCB-1232	ND		0.13
PCB-1248	ND		0.13
PCB-1260	ND		0.13

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QUALIFIERS: C = COMMENT

ND = NOT DETECTED

J = ESTIMATED VALUE

B = ALSO PRESENT IN BLANK

L = PRESENT BELOW STATED DETECTION LIMIT

C-200

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
OF HEXABROMOBENZENE SURROGATE SPIKES

9102.752

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(mg/kg)

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E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
26161	0.83	0.92	111
26163	0.83	0.91	110
26164	0.83	0.79	95
26165	0.83	1.0	120

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These recoveries are within E & E quality control limits (37-138%).

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SEDIMENT -SOLID UNITS : MG/KG

LAB SAMPLE ID: METHOD BLANK 494

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

LAB SAMPLE ID: METHOD BLANK 495

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

LAB SAMPLE ID: METHOD BLANK 496

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :SPCB 1

JOB NUMBER :9102.752

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SEDIMENT -SOLID UNITS : MG/KG

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LAB SAMPLE ID: METHOD BLANK 497

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

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QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

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Ecology and Environment, Inc.  
 SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
26560.01	TG-C062-0229-POAF	SPCB 1	11/15/91	11/24/91	11/25/91
		STSCPL1	11/15/91		11/23/91
26561.01	TG-C063-0229-POAF	SPCB 1	11/15/91	11/24/91	11/25/91
		STSCPL1	11/15/91		11/23/91
26562.01	TG-C064-0229-POAF	SPCB 1	11/15/91	11/24/91	11/25/91
		STSCPL1	11/15/91		11/23/91
26563.01	TG-C065-0229-POAF	SPCB 1	11/15/91	11/24/91	11/25/91
		STSCPL1	11/15/91		11/23/91
26564.01	TG-C066-0229-POAF	SPCB 1	11/15/91	11/24/91	11/26/91
		STSCPL1	11/15/91		11/23/91
26565.01	TG-C098-0229-BKFS	SPCB 1	11/15/91	11/24/91	11/25/91
		STSCPL1	11/15/91		11/23/91

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT : TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME : SOLIDS - TOTAL UNITS : %  
PARAMETER : SOLIDS - TOTAL

SAMPLE ID	RESULTS	Q
EE-91-26560		-
TG-C062-0229-POAF	42	
EE-91-26561		
TG-C063-0229-POAF	45	
EE-91-26562		
TG-C064-0229-POAF	45	
EE-91-26563		
TG-C065-0229-POAF	45	
EE-91-26564		
TG-C066-0229-POAF	41	
EE-91-26565		
TG-C098-0229-BKFS	100	

QUALIFIERS: C = COMMENT ND = NOT DETECTED  
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SEDIMENT

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26560

CLIENT SAMPLE ID: TG-C062-0229-POAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.24
PCB-1242	ND		0.24
PCB-1254	0.71		0.24
PCB-1221	ND		0.24
PCB-1232	ND		0.24
PCB-1248	ND		0.24
PCB-1260	ND		0.24

LAB SAMPLE ID: EE-91-26561

CLIENT SAMPLE ID: TG-C063-0229-POAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.22
PCB-1242	ND		0.22
PCB-1254	0.71		0.22
PCB-1221	ND		0.22
PCB-1232	ND		0.22
PCB-1248	ND		0.22
PCB-1260	ND		0.22

LAB SAMPLE ID: EE-91-26562

CLIENT SAMPLE ID: TG-C064-0229-POAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.22
PCB-1242	ND		0.22
PCB-1254	0.67		0.22
PCB-1221	ND		0.22
PCB-1232	ND		0.22
PCB-1248	ND		0.22
PCB-1260	ND		0.22

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY

TEST NAME:PCB-SEDIMENT

-SOLID

UNITS : MG/KG

RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-26563

CLIENT SAMPLE ID: TG-C065-0229-POAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.22
PCB-1242	ND		0.22
PCB-1254	0.44		0.22
PCB-1221	ND		0.22
PCB-1232	ND		0.22
PCB-1248	ND		0.22
PCB-1260	ND		0.22

LAB SAMPLE ID: EE-91-26564

CLIENT SAMPLE ID: TG-C066-0229-POAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.24
PCB-1242	ND		0.24
PCB-1254	0.61		0.24
PCB-1221	ND		0.24
PCB-1232	ND		0.24
PCB-1248	ND		0.24
PCB-1260	ND		0.24

LAB SAMPLE ID: EE-91-26565

CLIENT SAMPLE ID: TG-C098-0229-BKFS

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
J = ESTIMATED VALUE                      B = ALSO PRESENT IN BLANK  
L = PRESENT BELOW STATED DETECTION LIMIT

QUALITY CONTROL FOR ACCURACY AND PRECISION:  
 PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)  
 OF SEDIMENT MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)  
 (Sample # 26565)

9102.765

(mg/kg)

Parameter	Original Result	Amount Added		Amount Determined		Percent Recovery		
		MS	MSD	MS	MSD	MS	MSD	RPD
PCB-1248	ND	1.7	1.7	1.5	1.5	88	88	0

ND = NOT DETECTED

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
FOR SPIKED SEDIMENT SAMPLES

9102.765

(mg/kg)

Parameter	E & E Laboratory		Original Value	Amount Added	Amount Determined	Percent Recovery
	Spiked	Blank				
PCB-1248			ND	1.7	1.4	82

ND = NOT DETECTED



QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY  
OF HEXABROMOBENZENE SURROGATE SPIKES

9102.765

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(mg/kg)

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E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
26560	0.83	0.51	61
26561	0.83	0.52	63
26562	0.83	0.44	53
26563	0.83	0.52	63
26564	0.83	0.65	78
26565	0.83	0.64	77

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These recoveries are within E & E quality control limits (37-138%).

TEST CODE :SPCB 1

JOB NUMBER :9102.765

Ecology and Environment, Inc.  
Analytical Services Center

CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY  
TEST NAME:PCB-SEDIMENT -SOLID UNITS : MG/KG

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LAB SAMPLE ID: METHOD BLANK 553

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

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LAB SAMPLE ID: METHOD BLANK 554

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	ND		0.10
PCB-1221	ND		0.10
PCB-1232	ND		0.10
PCB-1248	ND		0.10
PCB-1260	ND		0.10

-----  
QUALIFIERS: C = COMMENT                      ND = NOT DETECTED  
              J = ESTIMATED VALUE            B = ALSO PRESENT IN BLANK  
              L = PRESENT BELOW STATED DETECTION LIMIT

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