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Jasper W. Allen

2/92

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TG-5902 D3762

ADDENDUM TO THE REMEDIAL INVESTIGATION VOLUME II - SITE CHARACTERIZATION REPORT PHASE IIC SOIL AND SEDIMENT SAMPLING TENNESSEE GAS PIPELINE COMPANY COMPRESSOR STATION 224 CLYMER, NEW YORK

February 1992

7 1992

Prepared for:

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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 224 in Clymer, New York (Ecology and Environment, Inc. [E & E] 1991) submitted to the New York State Department of Environmental Conservation (NYSDEC) in August 1991. It details a supplemental sampling activity (Phase IIC) conducted in order to determine or better define the presence of polychlorinated biphenyls (PCBs) 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 224, Clymer, 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 12 surface and 15 subsurface soils for PCB-only analysis. Twenty-four sediment samples were also collected for PCB-only analysis. 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.

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2. STATION LOCATION AND LAYOUT

Tennessee's Station 224 is located in Chautauqua County near the town of Clymer, New York (see Figure 2-1). The station occupies approximately 206 acres along Ravlin Hill Road, approximately 1 mile south of the hamlet of French Creek. The primary operations portion of the station consists of one compressor building that houses four 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, office/garage, and meter building.

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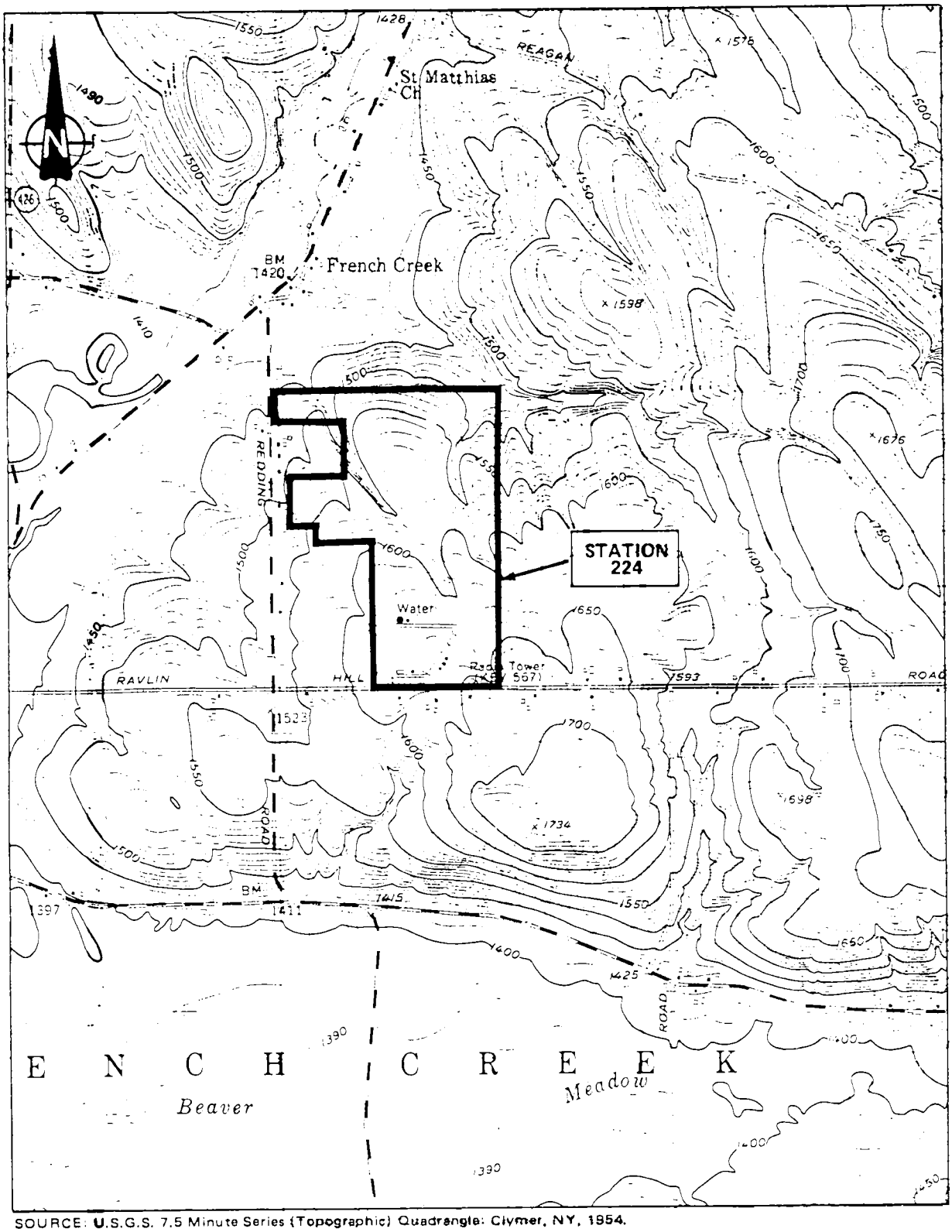

Figure 2-1
LOCATION OF TENNESSEE GAS PIPELINE COMPANY
COMPRESSOR STATION 224 NEAR CLYMER, NY

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TG5STA224FIG2-2

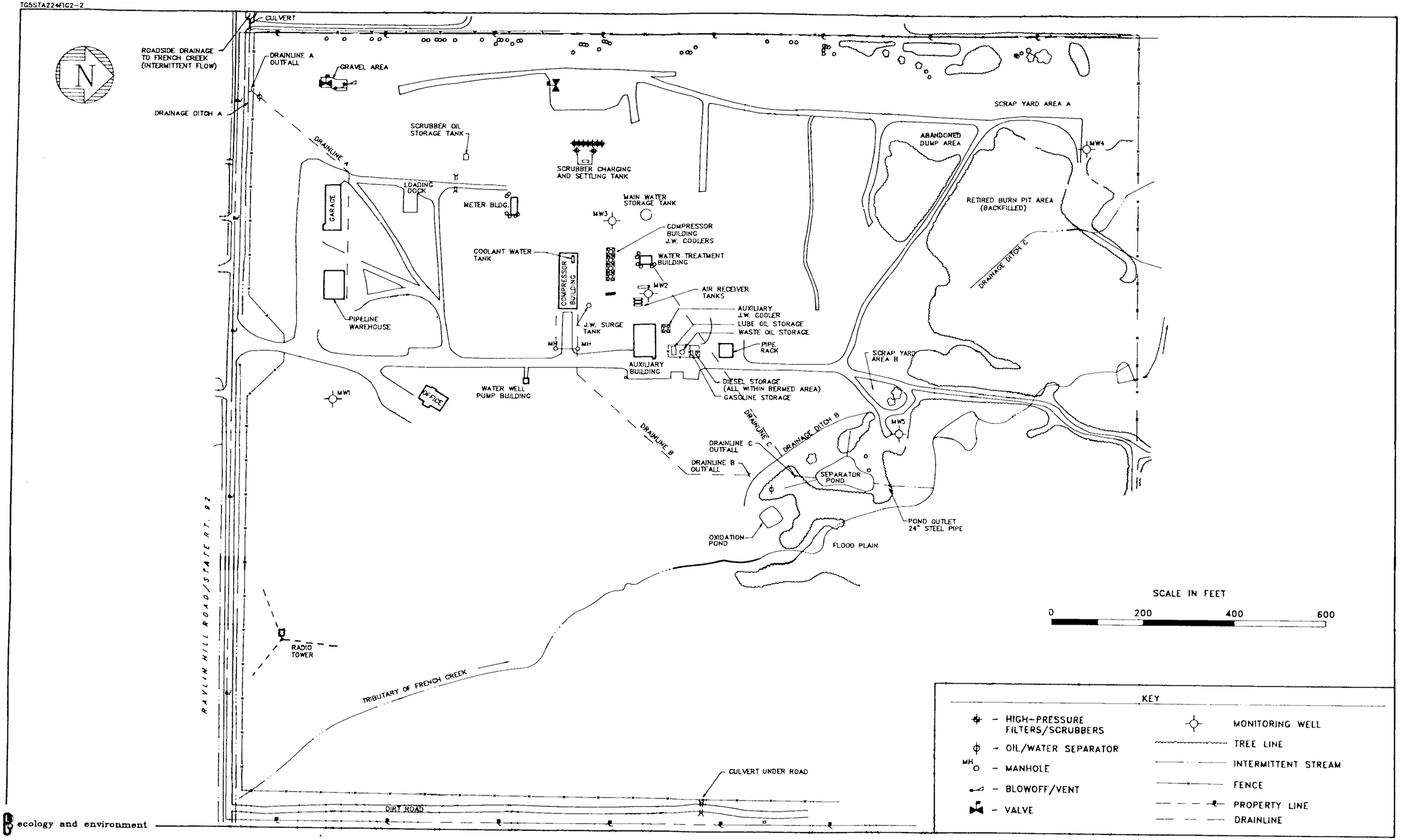

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Figure 2-2 PLOT PLAN – COMPRESSOR STATION 224

3. FIELD INVESTIGATION

3.1 WORK PLAN SUMMARY

E & E developed a field manual for Compressor Station 224 in October 1991. The scope of work identified in the manual included the sampling of areas recommended by NYSDEC following the submittal of the draft RI report.

3.2 FIELD WORK SUMMARY

Phase IIC field work activities involved soil sampling in the Separator Pond Area, Tributary Area, and areas that had previously been sampled as part of the Grid Sampling Program (GSP). Phase IIC soil and sediment sampling was conducted on November 7, 1991.

All sampling was performed in accordance to the SCP and shipped via Federal Express 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 Separator Pond Area

Sampling of the Separator Pond Area consisted of the collection of 20 soil samples which were submitted for PCB analysis. All samples were collected from 10 nodes located in the area around the Separator Pond. Phase IIC included the sampling of nodes G21 through G25 at the 0- to 6-inch and 6- to 12-inch depth intervals. Nodes G11, G13 through G16, and G21 through G23 were sampled at the 12- to 24-inch depth interval; nodes G15 and G16 were sampled at the 24- to 48-inch depth interval. In addition to the 20 samples, two duplicate samples were collected and submitted for PCB analysis for the purpose of QA/QC review of the data set.

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

3.2.2 Tributary Area

Sampling of the Tributary Area consisted of the collection of 24 sediment samples which were submitted for PCB analysis. All samples were collected from 24 nodes at the 0- to 6-inch depth interval. In addition to the 24 samples, one duplicate sample was 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.

3.2.3 Grid Sampling

Grid sampling consisted of the collection of seven soil samples which were submitted for PCB analysis. Samples were collected from grid blocks near the office and north of the Compressor Building.

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

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4. RESULTS OF THE SAMPLING PROGRAM

This section presents the analytical results for the Phase IIC investigation soil and sediment samples. 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 SEPARATOR POND AREA

Twenty soil samples were analyzed for PCBs. PCBs were present in 11 samples at concentrations ranging from 2.0 mg/kg to 350 mg/kg of Aroclor 1254. Aroclor 1248 was present in two samples above the detection limit at concentrations ranging from 22 mg/kg to 28 mg/kg..

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

4.2 TRIBUTARY AREA

Twenty-four sediment soil samples were analyzed for PCBs. PCBs were present above the detection limit in 19 of the Tributary Area samples at concentrations ranging from 0.20 mg/kg to 2.9 mg/kg of Aroclor 1254.

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Table 4-2 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.

4.3 GRID SAMPLING

Seven soil samples were analyzed for PCBs. PCBs were not present above the detection limit in any of the Phase IIC grid samples.

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

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Table 4-1

PCB RESULTS FOR PHASE IIC SOIL SAMPLES
SEPARATOR POND AREA
COMPRESSOR STATION 224

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
G11	C001	12 - 24	ND
G13	C002	12 - 24	ND
G14	C003	12 - 24	4.1
G15	C004	12 - 24	ND
	C005	24 - 48	7.6
G16	C006	12 - 24	6.4
	C007	24 - 48	ND
G21	C008	0 - 6	190
	C009	6 - 12	34
	C010	12 - 24	350
G22	C012	0 - 6	28 (1248)
	C013	6 - 12	19
			22 (1248)
	C014	12 - 24	20
G23	C015	0 - 6	ND
	C016	6 - 12	ND
	C017	12 - 24	ND
G24	C018	0 - 6	280
	C019	6 - 12	2.0
G25	C020	0 - 6	93
	C021	6 - 12	ND

02[TG5902]D3762/158/37

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.

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Table 4-2

PCB RESULTS FOR PHASE IIC SEDIMENT SAMPLES
TRIBUTARY AREA
COMPRESSOR STATION 224

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
53	C023	0 - 6	ND
54	C024	0 - 6	0.55
55	C025	0 - 6	0.40
56	C026	0 - 6	0.57
57	C027	0 - 6	0.57
58	C028	0 - 6	0.20
59	C029	0 - 6	0.44
60	C030	0 - 6	0.62
61	C031	0 - 6	0.42
62	C032	0 - 6	0.50
63	C034	0 - 6	ND
64	C035	0 - 6	0.37
65	C036	0 - 6	ND
66	C037	0 - 6	ND
67	C038	0 - 6	0.39
68	C039	0 - 6	0.63
69	C040	0 - 6	0.21
70	C041	0 - 6	0.20
71	C042	0 - 6	0.32
72	C043	0 - 6	0.20
73	C044	0 - 6	ND
74	C045	0 - 6	2.9
75	C046	0 - 6	1.4
76	C047	0 - 6	0.45

02[TG5902]D3762/159/37

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.

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Table 4-3

PCB RESULTS FOR PHASE IIC SOIL SAMPLES
GRID SAMPLING
COMPRESSOR STATION 224

Sample Node	Sample Number	Sample Depth (inches)	Analytical Result
L6	9150	0 - 6	ND
L7	9151	0 - 6	ND
M7	9152	0 - 6	ND
R8	9153	0 - 6	ND
R9	9154	0 - 6	ND
S8	9156	0 - 6	ND
S9	9157	0 - 6	ND

02[TG5902]D3762/159/37

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

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

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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 224 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 Quality Assurance Project Plan (QAPP) was also evaluated.

5.2 LABORATORY QUALITY CONTROL

All samples upon which this report is based were analyzed within the appropriate holding times. No PCBs were 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.

Based on an assessment of laboratory quality control parameters, all of the results are accurate and precise.

5.3 FIELD QUALITY CONTROL

No PCBs were detected in rinsate blank C039 (see Table 5-1). Three soil sample duplicate pairs and one sediment sample duplicate pair were collected and analyzed for PCBs. No PCBs were detected in either the original sample (9154) or the duplicate sample (9155) from the grid sampling effort. Aroclor 1254 was present in original sample C010 from the separator pond at a concentration of 350 mg/kg; its corresponding duplicate (C011) contained 230 mg/kg of Aroclor 1254 which results in a relative percent difference (RPD) of 40%. RPD was not calculated in the

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other sample duplicate pair from the Separator Pond Area (C021 and C022) because PCBs were present above the detection limit in the duplicate but not in the original sample. The sediment sample duplicate pair from the Tributary Area (C032 and C033) contained PCBs at concentrations of 0.50 mg/kg and 0.47 mg/kg of Aroclor 1254 which yields an RPD value of 6.2%.

Based on an assessment of field quality control parameters, decontamination procedures were effective, and proper sampling techniques were consistently employed. The RPD for field duplicates was slightly above the guideline of 35% for soils and sediments. However, these guidelines were established for laboratory replicates and are not completely applicable to field duplicates. In the judgement of the reviewer, the field duplicate RPDs are within acceptable QA/QC ranges.

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Table 5-1

QA/QC SUMMARY OF PCB RESULTS FOR
SOIL SAMPLE RINSATE BLANK
COMPRESSOR STATION 224

Sample Number	Analytical Results
C039	ND

02[G5902]D3762/161/38

Note: All concentrations are in mg/kg.

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

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Table 5-2

QA/QC SUMMARY OF PCB RESULTS FOR
SOIL/SEDIMENT SAMPLE DUPLICATES
COMPRESSOR STATION 224

Sample Number	Sample Result	Duplicate Number	Duplicate Result	Relative Percent Difference (RPD)
Separator Pond				
C010	350	C011	230	40
C021	ND	C022	45	*
			39 (1248)	*
Tributary Area				
C032	0.50	C033	0.47	6.2
Grid Sampling				
9154	ND	9155	ND	*

02[TG5902]3762/163/28

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

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

Key:

ND = Not detected.

Source: Ecology and Environment, Inc. 1992.

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APPENDIX A

SAMPLE DESCRIPTIONS AND DATA CROSS REFERENCE

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Appendix A

SAMPLE DESCRIPTIONS AND DATA CROSS REFERENCE
COMPRESSOR STATION 224

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
Separator Pond Area								
TG-C001-0224-POAO	G11	12 - 24	Soil	D N E PCB	C001	25502	9102.693	11/07/91
TG-C002-0224-POAO	G13	12 - 24	Soil	D N E PCB	C002	25503	9102.693	11/07/91
TG-C003-0224-POAO	G14	12 - 24	Soil	D N E PCB	C003	25504	9102.693	11/07/91
TG-C004-0224-POAO	G15	12 - 24	Soil	D N E PCB	C004	25505	9102.693	11/07/91
TG-C005-0224-POAO	G15	24 - 48	Soil	D N E PCB	C005	25506	9102.693	11/07/91
TG-C006-0224-POAO	G16	12 - 24	Soil	D N E PCB	C006	25507	9102.693	11/07/91
TG-C007-0224-POAO	G16	24 - 48	Soil	D N E PCB	C007	25508	9102.693	11/07/91
TG-C008-0224-POAO	G21	0 - 6	Soil	D N E PCB	C008	25509	9102.693	11/07/91
TG-C009-0224-POAO	G21	6 - 12	Soil	D N E PCB	C009	25510	9102.693	11/07/91
TG-C010-0224-POAO	G21	12 - 24	Soil	D N E PCB	C010	25511	9102.693	11/07/91
TG-C011-0224-POAO	G21	12 - 24	Soil	D D E PCB	C011	25512	9102.693	11/07/91
TG-C012-0224-POAO	G22	0 - 6	Soil	D N E PCB	C012	25513	9102.693	11/07/91
TG-C013-0224-POAO	G22	6 - 12	Soil	D N E PCB	C013	25514	9102.693	11/07/91
TG-C014-0224-POAO	G22	12 - 24	Soil	D N E PCB	C014	25515	9102.693	11/07/91
TG-C015-0224-POAO	G23	0 - 6	Soil	D N E PCB	C015	25516	9102.693	11/07/91

02[TG5902]D3762/165/13

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Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
Separator Pond Area (Cont.)								
TG-C016-0224-POAO	G23	6 - 12	Soil	D N E PCB	C016	25517	9102.693	11/07/91
TG-C017-0224-POAO	G23	12 - 24	Soil	D N E PCB	C017	25518	9102.693	11/07/91
TG-C018-0224-POAO	G24	0 - 6	Soil	D N E PCB	C018	25519	9102.693	11/07/91
TG-C019-0224-POAO	G24	6 - 12	Soil	D N E PCB	C019	25520	9102.693	11/07/91
TG-C020-0224-POAO	G25	0 - 6	Soil	D N E PCB	C020	25521	9102.693	11/07/91
TG-C021-0224-POAO	G25	6 - 12	Soil	D N E PCB	C021	25522	9102.693	11/07/91
TG-C022-0224-POAO	G25	6 - 12	Soil	D N E PCB	C022	25523	9102.693	11/07/91
Tributary Area								
TG-C023-0224-TRAF	53	0 - 6	Sediment	D N E PCB	C023	25524	9102.693	11/07/91
TG-C024-0224-TRAF	54	0 - 6	Sediment	D N E PCB	C024	25525	9102.693	11/07/91
TG-C025-0224-TRAF	55	0 - 6	Sediment	D N E PCB	C025	25526	9102.693	11/07/91
TG-C026-0224-TRAF	56	0 - 6	Sediment	D N E PCB	C026	25527	9102.693	11/07/91
TG-C027-0224-TRAF	57	0 - 6	Sediment	D N E PCB	C027	25528	9102.693	11/07/91
TG-C028-0224-TRAF	58	0 - 6	Sediment	D N E PCB	C028	25529	9102.693	11/07/91
TG-C029-0224-TRAF	59	0 - 6	Sediment	D N E PCB	C029	25530	9102.693	11/07/91
TG-C030-0224-TRAF	60	0 - 6	Sediment	D N E PCB	C030	25531	9102.693	11/07/91
TG-C031-0224-TRAF	61	0 - 6	Sediment	D N E PCB	C031	25532	9102.693	11/07/91

02[TG5902]D3762/165/13

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Appendix A (Cont.)

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
Tributary Area (Cont.)								
TG-C032-0224-TRAF	62	0 - 6	Sediment	D N E PCB	C032	25533	9102.693	11/07/91
TG-C033-0224-TRAF	62	0 - 6	Sediment	D D E PCB	C033	25534	9102.693	11/07/91
TG-C034-0224-TRAF	63	0 - 6	Sediment	D N E PCB	C034	25535	9102.693	11/07/91
TG-C035-0224-TRAF	64	0 - 6	Sediment	D N E PCB	C035	25536	9102.693	11/07/91
TG-C036-0224-TRAF	65	0 - 6	Sediment	D N E PCB	C036	25537	9102.693	11/07/91
TG-C037-0224-TRAF	66	0 - 6	Sediment	D N E PCB	C037	25538	9102.693	11/07/91
TG-C038-0224-TRAF	67	0 - 6	Sediment	D N E PCB	C038	25539	9102.693	11/07/91
TG-C039-0224-TRAF	68	0 - 6	Sediment	D N E PCB	C039	25540	9102.693	11/07/91
TG-C040-0224-TRAF	69	0 - 6	Sediment	D N E PCB	C040	25541	9102.693	11/07/91
TG-C041-0224-TRAF	70	0 - 6	Sediment	D N E PCB	C041	25542	9102.693	11/07/91
TG-C042-0224-TRAF	71	0 - 6	Sediment	D N E PCB	C042	25543	9102.693	11/07/91
TG-C043-0224-TRAF	72	0 - 6	Sediment	D N E PCB	C043	25544	9102.693	11/07/91
TG-C044-0224-TRAF	73	0 - 6	Sediment	D N E PCB	C044	25545	9102.693	11/07/91
TG-C045-0224-TRAF	74	0 - 6	Sediment	D N E PCB	C045	25546	9102.693	11/07/91
TG-C046-0224-TRAF	75	0 - 6	Sediment	D N E PCB	C046	25547	9102.693	11/07/91
TG-C047-0224-TRAF	76	0 - 6	Sediment	D N E PCB	C047	25548	9102.693	11/07/91

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Appendix A (Cont.)

Sample Number	Sample Node	Sample Depth (inches)	Matrix	Sample Description*	Original Sample Number	Lab Sample Number	Lab Job Number	Sample Date
Grid Sampling								
TG-9150-0224-GSC	L6	0 - 6	Soil	D N E PCB	9150	25549	9102.693	11/07/91
TG-9151-0224-GSC	L7	0 - 6	Soil	D N E PCB	9151	25550	9102.693	11/07/91
TG-9152-0224-GSC	M7	0 - 6	Soil	D N E PCB	9152	25551	9102.693	11/07/91
TG-9153-0224-GSC	R8	0 - 6	Soil	D N E PCB	9153	25552	9102.693	11/07/91
TG-9154-0224-GSC	R9	0 - 6	Soil	D N E PCB	9154	25553	9102.693	11/07/91
TG-9155-0224-GSC	R9	0 - 6	Soil	D D E PCB	9155	25554	9102.693	11/07/91
TG-9156-0224-GSC	S8	0 - 6	Soil	D N E PCB	9156	25555	9102.693	11/07/91
TG-9157-0224-GSC	S9	0 - 6	Soil	D N E PCB	9157	25556	9102.693	11/07/91
Drainline A Area[a]								
TG-B283-0224-DLAO	01	0 - 6	Soil	D N E CYN	B283	15100	9101.603	07/03/91
TG-B284-0224-DLAF	01	0 - 6	Soil	D N E CYN	B284	15101	9101.603	07/03/91
TG-B285-0224-DLAF	01	0 - 6	Soil	D D E CYN	B285	15102	9101.603	07/03/91
Blanks								
TG-B283-0224-BKFS			Soil	D F E PCB	C039	25557	9102.693	11/07/91

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Key at end of table.

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[a]Refer to Section 4.1.3.2 of the RI report (submitted August 1991).

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.
CYN = Total cyanide.

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APPENDIX B

LABORATORY REPORTS

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Laboratory Job Number: 9102.693

		Analytical Requirements*					
Customer Sample Code	Laboratory Sample Code	*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST PCB	*METALS	*OTHER
TG-C001-224-POA0	25502						
2	3						
3	4						
4	5						
5	6						
6	7						
7	8						
8	9						
9	10						
C010	11						
11	12						
12	13						
13	14						
14	15						
15	16						
16	17						
17	18						
18	19						
19	20						
20	21						
21	22						
22	23						
TG-C023-224-TRAP	24						
24	25						
25	26						
26	27						
27	28						
28	29						

*Check Appropriate Boxes

*CLP, Non-CLP (Please indicate year of protocol)
*HSL, Priority Pollutant

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Laboratory Job Number: 9102.693

Customer Sample Code	Laboratory Sample Code	Analytical Requirements*					
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST PCB	*METALS	*OTHER
TGC029-224-TRIP	30						
-C030-	31						
-C031-	32						
-C032-	33						
C033	34						
C034	35						
C035	36						
C036	37						
C037	38						
C038	39						
C039	40						
C040	41						
C041	42						
C042	43						
C043	44						
C044	45						
C045	46						
C046	47						
C047	48						
-9150-	49						
9151	50						
2	51						
3	52						
4	53						
5	54						
6	55						
7	56						
-C039-224-BKFS	57						

*Check Appropriate Boxes

*CLP, Non-CLP (Please indicate year of protocol)
*HSL, Priority Pollutant

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PCB ANALYSES

Laboratory Job Number: 9102.693

Laboratory Sample ID	Matrix	Date Collected	Date Received at Lab	Date* Extracted	Date* Analyzed
25502	Soil	11-7-91	11-7-91	11-9-91	11-15-91
3					11-13-91
4					
5					15
6					15
7					13
8					15
9					15
10					15
11					19
12					19
13					19
14					13
15					13
16					13
17					13
18					19
19					13
20					19
21					19
22					19
23					18
24					18
25					18
26					18
287					18
28					

*Technical holding times for PCBs in soil and water:

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

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PCB ANALYSES

Laboratory Job Number: 9102.693

Laboratory Sample ID	Matrix	Date Collected	Date Received at Lab	Date* Extracted	Date* Analyzed
25529	Soil	11-7-91	11-7-91	11-9-91	11-18-91
30					"
31					11-19-91
32					
33					
34					
35					
36					
37					
38					
39					11-18-91
40					20
41					18
42					19
43					19
44					18
45					19
46					20
47					-20-
48					11-13-91
49					13
50					13
51					13
52					13
53					13
54					14
55					

*Technical holding times for PCBs in soil and water:

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

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PCB ANALYSES

Laboratory Job Number: 9102.693

Laboratory Sample ID	Matrix	Date Collected	Date Received at Lab	Date* Extracted	Date* Analyzed
25556	Soil	11-7-91	11-7-91	11-9-91	11-13-91
57	"	"	"	"	-13-

*Technical holding times for PCBs in soil and water:

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

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JOB NUMBER : 9102.693

Ecology and Environment, Inc.
SAMPLE COMMENT REPORT

TEST NAME : PCB-SOIL -SOLID
LAB SAMPLE ID: 25515 TEST CODE:SPCB 1
CLIENT SAMPLE ID: TG-C014-0224-P0A0
COMMENT: Detection limits elevated due to limited sample amount used for original sample extraction.

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JOB NUMBER : 9102.693

Ecology and Environment, Inc.
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
25502.01	TG-C001-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/15/91
		STSCLP1	11/07/91		11/09/91
25503.01	TG-C002-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25504.01	TG-C003-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25505.01	TG-C004-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25506.01	TG-C005-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/15/91
		STSCLP1	11/07/91		11/09/91
25507.01	TG-C006-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/15/91
		STSCLP1	11/07/91		11/09/91
25508.01	TG-C007-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25509.01	TG-C008-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/15/91
		STSCLP1	11/07/91		11/09/91
25510.01	TG-C009-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/15/91
		STSCLP1	11/07/91		11/09/91
25511.01	TG-C010-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/15/91
		STSCLP1	11/07/91		11/09/91
25512.01	TG-C011-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25513.01	TG-C012-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25514.01	TG-C013-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25515.01	TG-C014-0224-P0A0	SPCB 1	11/07/91	11/11/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25516.01	TG-C015-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25517.01	TG-C016-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25518.01	TG-C017-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25519.01	TG-C018-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25520.01	TG-C019-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25521.01	TG-C020-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25522.01	TG-C021-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25523.01	TG-C022-0224-P0A0	SPCB 1	11/07/91	11/09/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25524.01	TG-C023-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25525.01	TG-C024-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91

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ecology and environment

JOB NUMBER : 9102.693

Ecology and Environment, Inc.
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
25525.01	TG-C024-0224-TRAF	STSCLP1	11/07/91		11/09/91
25526.01	TG-C025-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25527.01	TG-C026-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25528.01	TG-C027-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25529.01	TG-C028-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25530.01	TG-C029-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25531.01	TG-C030-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25532.01	TG-C031-0224-TRAF	SPCB 1	11/07/91	11/09/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25533.01	TG-C032-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25534.01	TG-C033-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25535.01	TG-C034-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25536.01	TG-C035-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25537.01	TG-C036-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25538.01	TG-C037-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25539.01	TG-C038-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25540.01	TG-C039-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25541.01	TG-C040-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25542.01	TG-C041-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/20/91
		STSCLP1	11/07/91		11/09/91
25543.01	TG-C042-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25544.01	TG-C043-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25545.01	TG-C044-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25546.01	TG-C045-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/18/91
		STSCLP1	11/07/91		11/09/91
25547.01	TG-C046-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/19/91
		STSCLP1	11/07/91		11/09/91
25548.01	TG-C047-0224-TRAF	SPCB 1	11/07/91	11/10/91	11/20/91
		STSCLP1	11/07/91		11/09/91

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ecology and environment

JOB NUMBER : 9102.693

Ecology and Environment, Inc.
SAMPLE TRACKING REPORT

LAB SAMPLE ID	CLIENT SAMPLE ID	TEST CODE	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED
25549.01	TG-9150-0224-GSC	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25550.01	TG-9151-0224-GSC	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25551.01	TG-9152-0224-GSC	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25552.01	TG-9153-0224-GSC	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25553.01	TG-9154-0224-GSC	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25554.01	TG-9155-0224-GSC	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25555.01	TG-9156-0224-GSC	SPCB 1	11/07/91	11/11/91	11/14/91
		STSCLP1	11/07/91		11/09/91
25556.01	TG-9157-0224-GSC	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91
25557.01	TG-C039-0224-BKFS	SPCB 1	11/07/91	11/10/91	11/13/91
		STSCLP1	11/07/91		11/09/91

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ecology and environment

TEST CODE :STSCLP1 JOB NUMBER :9102.693

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-91-25502 TG-C001-0224-P0A0	82	
EE-91-25503 TG-C002-0224-P0A0	85	
EE-91-25504 TG-C003-0224-P0A0	83	
EE-91-25505 TG-C004-0224-P0A0	87	
EE-91-25506 TG-C005-0224-P0A0	90	
EE-91-25507 TG-C006-0224-P0A0	91	
EE-91-25508 TG-C007-0224-P0A0	90	
EE-91-25509 TG-C008-0224-P0A0	75	
EE-91-25510 TG-C009-0224-P0A0	74	
EE-91-25511 TG-C010-0224-P0A0	77	
EE-91-25512 TG-C011-0224-P0A0	78	
EE-91-25513 TG-C012-0224-P0A0	75	
EE-91-25514 TG-C013-0224-P0A0	78	

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 :STSCLP1 JOB NUMBER :9102.693

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-91-25515 TG-C014-0224-P0A0	82	
EE-91-25516 TG-C015-0224-P0A0	74	
EE-91-25517 TG-C016-0224-P0A0	81	
EE-91-25518 TG-C017-0224-P0A0	81	
EE-91-25519 TG-C018-0224-P0A0	67	
EE-91-25520 TG-C019-0224-P0A0	80	
EE-91-25521 TG-C020-0224-P0A0	42	
EE-91-25522 TG-C021-0224-P0A0	71	
EE-91-25523 TG-C022-0224-P0A0	62	
EE-91-25524 TG-C023-0224-TRAF	61	
EE-91-25525 TG-C024-0224-TRAF	51	
EE-91-25526 TG-C025-0224-TRAF	72	
EE-91-25527 TG-C026-0224-TRAF	51	

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

recycled paper ecology and environment

TEST CODE :STSCLP1 JOB NUMBER :9102.693

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-91-25528 TG-C027-0224-TRAF	47	
EE-91-25529 TG-C028-0224-TRAF	54	
EE-91-25530 TG-C029-0224-TRAF	54	
EE-91-25531 TG-C030-0224-TRAF	52	
EE-91-25532 TG-C031-0224-TRAF	55	
EE-91-25533 TG-C032-0224-TRAF	80	
EE-91-25534 TG-C033-0224-TRAF	79	
EE-91-25535 TG-C034-0224-TRAF	96	
EE-91-25536 TG-C035-0224-TRAF	76	
EE-91-25537 TG-C036-0224-TRAF	75	
EE-91-25538 TG-C037-0224-TRAF	87	
EE-91-25539 TG-C038-0224-TRAF	88	
EE-91-25540 TG-C039-0224-TRAF	41	

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

recycled paper ecology and environment

TEST CODE :STSCLP1 JOB NUMBER :9102.693

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-91-25541 TG-C040-0224-TRAF	77	
EE-91-25542 TG-C041-0224-TRAF	73	
EE-91-25543 TG-C042-0224-TRAF	80	
EE-91-25544 TG-C043-0224-TRAF	74	
EE-91-25545 TG-C044-0224-TRAF	63	
EE-91-25546 TG-C045-0224-TRAF	55	
EE-91-25547 TG-C046-0224-TRAF	68	
EE-91-25548 TG-C047-0224-TRAF	55	
EE-91-25549 TG-9150-0224-GSC	79	
EE-91-25550 TG-9151-0224-GSC	86	
EE-91-25551 TG-9152-0224-GSC	83	
EE-91-25552 TG-9153-0224-GSC	86	
EE-91-25553 TG-9154-0224-GSC	82	

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 :STSCLP1 JOB NUMBER :9102.693

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-91-25554 TG-9155-0224-GSC	85	
EE-91-25555 TG-9156-0224-GSC	84	
EE-91-25556 TG-9157-0224-GSC	80	
EE-91-25557 TG-C039-0224-BKFS	100	

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 :9102.693

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-91-25502
CLIENT SAMPLE ID: TG-C001-0224-POA0

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-91-25503
CLIENT SAMPLE ID: TG-C002-0224-POA0

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-91-25504
CLIENT SAMPLE ID: TG-C003-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	4.1		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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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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-91-25505
CLIENT SAMPLE ID: TG-C004-0224-POA0

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-91-25506
CLIENT SAMPLE ID: TG-C005-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		2.2
PCB-1242	ND		2.2
PCB-1254	7.6		2.2
PCB-1221	ND		2.2
PCB-1232	ND		2.2
PCB-1248	ND		2.2
PCB-1260	ND		2.2

LAB SAMPLE ID: EE-91-25507
CLIENT SAMPLE ID: TG-C006-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		2.2
PCB-1242	ND		2.2
PCB-1254	6.4		2.2
PCB-1221	ND		2.2
PCB-1232	ND		2.2
PCB-1248	ND		2.2
PCB-1260	ND		2.2

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

recycled paper ecology and environment

TEST CODE :SPCB 1 JOB NUMBER :9102.693

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-91-25508
CLIENT SAMPLE ID: TG-C007-0224-POA0

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-91-25509
CLIENT SAMPLE ID: TG-C008-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		27
PCB-1242	ND		27
PCB-1254	190		27
PCB-1221	ND		27
PCB-1232	ND		27
PCB-1248	ND		27
PCB-1260	ND		27

LAB SAMPLE ID: EE-91-25510
CLIENT SAMPLE ID: TG-C009-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		2.7
PCB-1242	ND		2.7
PCB-1254	34		2.7
PCB-1221	ND		2.7
PCB-1232	ND		2.7
PCB-1248	ND		2.7
PCB-1260	ND		2.7

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 :9102.693

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-91-25511
CLIENT SAMPLE ID: TG-C010-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		26
PCB-1242	ND		26
PCB-1254	350		26
PCB-1221	ND		26
PCB-1232	ND		26
PCB-1248	ND		26
PCB-1260	ND		26

LAB SAMPLE ID: EE-91-25512
CLIENT SAMPLE ID: TG-C011-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		51
PCB-1242	ND		51
PCB-1254	230		51
PCB-1221	ND		51
PCB-1232	ND		51
PCB-1248	ND		51
PCB-1260	ND		51

LAB SAMPLE ID: EE-91-25513
CLIENT SAMPLE ID: TG-C012-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		13
PCB-1242	ND		13
PCB-1254	PRESENT	L	13
PCB-1221	ND		13
PCB-1232	ND		13
PCB-1248	28		13
PCB-1260	ND		13

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 :9102.693

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-91-25514
CLIENT SAMPLE ID: TG-CO13-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		13
PCB-1242	ND		13
PCB-1254	19		13
PCB-1221	ND		13
PCB-1232	ND		13
PCB-1248	22		13
PCB-1260	ND		13

LAB SAMPLE ID: EE-91-25515
CLIENT SAMPLE ID: TG-CO14-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND	C	3.0
PCB-1242	ND	C	3.0
PCB-1254	20	C	3.0
PCB-1221	ND	C	3.0
PCB-1232	ND	C	3.0
PCB-1248	ND	C	3.0
PCB-1260	ND	C	3.0

LAB SAMPLE ID: EE-91-25516
CLIENT SAMPLE ID: TG-CO15-0224-POA0

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

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 :9102.693

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-91-25517
CLIENT SAMPLE ID: TG-C016-0224-POA0

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-91-25518
CLIENT SAMPLE ID: TG-C017-0224-POA0

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-91-25519
CLIENT SAMPLE ID: TG-C018-0224-POA0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		60
PCB-1242	ND		60
PCB-1254	280		60
PCB-1221	ND		60
PCB-1232	ND		60
PCB-1248	ND		60
PCB-1260	ND		60

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 :9102.693

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

LAB SAMPLE ID: EE-91-25520
CLIENT SAMPLE ID: TG-C019-0224-P0A0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		1.2
PCB-1242	ND		1.2
PCB-1254	2.0		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-91-25521
CLIENT SAMPLE ID: TG-C020-0224-P0A0

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		48
PCB-1242	ND		48
PCB-1254	93		48
PCB-1221	ND		48
PCB-1232	ND		48
PCB-1248	PRESENT	L	48
PCB-1260	ND		48

LAB SAMPLE ID: EE-91-25522
CLIENT SAMPLE ID: TG-C021-0224-P0A0

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	PRESENT	L	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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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

LAB SAMPLE ID: EE-91-25523
CLIENT SAMPLE ID: TG-C022-0224-POA0
PCB-SOIL

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		16
PCB-1242	ND		16
PCB-1254	45		16
PCB-1221	ND		16
PCB-1232	ND		16
PCB-1248	39		16
PCB-1260	ND		16

LAB SAMPLE ID: EE-91-25524
CLIENT SAMPLE ID: TG-C023-0224-TRAF
PCB-SEDIMENT

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

LAB SAMPLE ID: EE-91-25525
CLIENT SAMPLE ID: TG-C024-0224-TRAF
PCB-SEDIMENT

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.20
PCB-1242	ND		0.20
PCB-1254	0.55		0.20
PCB-1221	ND		0.20
PCB-1232	ND		0.20
PCB-1248	ND		0.20
PCB-1260	ND		0.20

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 :9102.693

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

LAB SAMPLE ID: EE-91-25526
CLIENT SAMPLE ID: TG-C025-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.14
PCB-1242	ND		0.14
PCB-1254	0.40		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-91-25527
CLIENT SAMPLE ID: TG-C026-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.20
PCB-1242	ND		0.20
PCB-1254	0.57		0.20
PCB-1221	ND		0.20
PCB-1232	ND		0.20
PCB-1248	ND		0.20
PCB-1260	ND		0.20

LAB SAMPLE ID: EE-91-25528
CLIENT SAMPLE ID: TG-C027-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.21
PCB-1242	ND		0.21
PCB-1254	0.57		0.21
PCB-1221	ND		0.21
PCB-1232	ND		0.21
PCB-1248	ND		0.21
PCB-1260	ND		0.21

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 :9102.693

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

LAB SAMPLE ID: EE-91-25529
CLIENT SAMPLE ID: TG-C028-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.18
PCB-1242	ND		0.18
PCB-1254	0.20		0.18
PCB-1221	ND		0.18
PCB-1232	ND		0.18
PCB-1248	ND		0.18
PCB-1260	ND		0.18

LAB SAMPLE ID: EE-91-25530
CLIENT SAMPLE ID: TG-C029-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.18
PCB-1242	ND		0.18
PCB-1254	0.44		0.18
PCB-1221	ND		0.18
PCB-1232	ND		0.18
PCB-1248	ND		0.18
PCB-1260	ND		0.18

LAB SAMPLE ID: EE-91-25531
CLIENT SAMPLE ID: TG-C030-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.19
PCB-1242	ND		0.19
PCB-1254	0.62		0.19
PCB-1221	ND		0.19
PCB-1232	ND		0.19
PCB-1248	ND		0.19
PCB-1260	ND		0.19

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 :9102.693

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

LAB SAMPLE ID: EE-91-25532
CLIENT SAMPLE ID: TG-C031-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.18
PCB-1242	ND		0.18
PCB-1254	0.42		0.18
PCB-1221	ND		0.18
PCB-1232	ND		0.18
PCB-1248	ND		0.18
PCB-1260	ND		0.18

LAB SAMPLE ID: EE-91-25533
CLIENT SAMPLE ID: TG-C032-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.12
PCB-1242	ND		0.12
PCB-1254	0.50		0.12
PCB-1221	ND		0.12
PCB-1232	ND		0.12
PCB-1248	ND		0.12
PCB-1260	ND		0.12

LAB SAMPLE ID: EE-91-25534
CLIENT SAMPLE ID: TG-C033-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.13
PCB-1242	ND		0.13
PCB-1254	0.47		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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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

LAB SAMPLE ID: EE-91-25535
CLIENT SAMPLE ID: TG-C034-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.10
PCB-1242	ND		0.10
PCB-1254	PRESENT	L	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: EE-91-25536
CLIENT SAMPLE ID: TG-C035-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.13
PCB-1242	ND		0.13
PCB-1254	0.37		0.13
PCB-1221	ND		0.13
PCB-1232	ND		0.13
PCB-1248	ND		0.13
PCB-1260	ND		0.13

LAB SAMPLE ID: EE-91-25537
CLIENT SAMPLE ID: TG-C036-0224-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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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-91-25538
CLIENT SAMPLE ID: TG-C037-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.11
PCB-1242	ND		0.11
PCB-1254	PRESENT	L	0.11
PCB-1221	ND		0.11
PCB-1232	ND		0.11
PCB-1248	ND		0.11
PCB-1260	ND		0.11

LAB SAMPLE ID: EE-91-25539
CLIENT SAMPLE ID: TG-C038-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.11
PCB-1242	ND		0.11
PCB-1254	0.39		0.11
PCB-1221	ND		0.11
PCB-1232	ND		0.11
PCB-1248	ND		0.11
PCB-1260	ND		0.11

LAB SAMPLE ID: EE-91-25540
CLIENT SAMPLE ID: TG-C039-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.24
PCB-1242	ND		0.24
PCB-1254	0.63		0.24
PCB-1221	ND		0.24
PCB-1232	ND		0.24
PCB-1248	ND		0.24
PCB-1260	ND		0.24

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 :9102.693

Ecology and Environment, Inc.
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CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY
TEST NAME:PCB-SEDIMENT -SOLID UNITS : MG/KG
RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25541
CLIENT SAMPLE ID: TG-C040-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.13
PCB-1242	ND		0.13
PCB-1254	0.21		0.13
PCB-1221	ND		0.13
PCB-1232	ND		0.13
PCB-1248	ND		0.13
PCB-1260	ND		0.13

LAB SAMPLE ID: EE-91-25542
CLIENT SAMPLE ID: TG-C041-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.14
PCB-1242	ND		0.14
PCB-1254	0.20		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-91-25543
CLIENT SAMPLE ID: TG-C042-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.12
PCB-1242	ND		0.12
PCB-1254	0.32		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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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

LAB SAMPLE ID: EE-91-25544
CLIENT SAMPLE ID: TG-C043-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.14
PCB-1242	ND		0.14
PCB-1254	0.20		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-91-25545
CLIENT SAMPLE ID: TG-C044-0224-TRAF

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

LAB SAMPLE ID: EE-91-25546
CLIENT SAMPLE ID: TG-C045-0224-TRAF

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.36
PCB-1242	ND		0.36
PCB-1254	2.9		0.36
PCB-1221	ND		0.36
PCB-1232	ND		0.36
PCB-1248	ND		0.36
PCB-1260	ND		0.36

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 :9102.693

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

LAB SAMPLE ID: EE-91-25547
CLIENT SAMPLE ID: TG-C046-0224-TRAF
PCB-SEDIMENT

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.29
PCB-1242	ND		0.29
PCB-1254	1.4		0.29
PCB-1221	ND		0.29
PCB-1232	ND		0.29
PCB-1248	ND		0.29
PCB-1260	ND		0.29

LAB SAMPLE ID: EE-91-25548
CLIENT SAMPLE ID: TG-C047-0224-TRAF
PCB-SEDIMENT

PARAMETER	RESULTS	Q	DET.LIMIT
PCB-1016	ND		0.18
PCB-1242	ND		0.18
PCB-1254	0.45		0.18
PCB-1221	ND		0.18
PCB-1232	ND		0.18
PCB-1248	ND		0.18
PCB-1260	ND		0.18

LAB SAMPLE ID: EE-91-25549
CLIENT SAMPLE ID: TG-9150-0224-GSC
PCB-SOIL

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

TEST CODE :SPCB 1 JOB NUMBER :9102.693

Ecology and Environment, Inc.
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CLIENT :TG-5000 TENNESSEE GAS PIPELINE/NY
TEST NAME:PCB-SOIL -SOLID UNITS : MG/KG
RESULTS IN DRY WEIGHT

LAB SAMPLE ID: EE-91-25550
CLIENT SAMPLE ID: TG-9151-0224-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-91-25551
CLIENT SAMPLE ID: TG-9152-0224-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-91-25552
CLIENT SAMPLE ID: TG-9153-0224-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

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 :9102.693

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

LAB SAMPLE ID: EE-91-25553
CLIENT SAMPLE ID: TG-9154-0224-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-91-25554
CLIENT SAMPLE ID: TG-9155-0224-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-91-25555
CLIENT SAMPLE ID: TG-9156-0224-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

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 :9102.693

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

LAB SAMPLE ID: EE-91-25556
CLIENT SAMPLE ID: TG-9157-0224-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-91-25557
CLIENT SAMPLE ID: TG-C039-0224-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

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QUALITY CONTROL FOR ACCURACY AND PRECISION:
PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)
OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
(Sample # 25515)

9102.693

(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	2.2	2.0	129	118	8.9

ND = NOT DETECTED

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QUALITY CONTROL FOR ACCURACY AND PRECISION:
PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)
OF SOIL MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
(Sample # 25555)

9102.693

(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

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QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY
FOR SPIKED SOIL SAMPLES

9102.693

(mg/kg)

Parameter	E & E Laboratory No. 91- Spiked Blank	Original Value	Amount Added	Amount Determined	Percent Recovery
PCB-1242		ND	1.7	1.7	100

ND = NOT DETECTED

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QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY
FOR SPIKED SOIL SAMPLES

9102.693

(mg/kg)

Parameter	E & E Laboratory No. 91- Spiked Blank	Original Value	Amount Added	Amount Determined	Percent Recovery
PCB-1242		ND	1.7	1.7	100

ND = NOT DETECTED

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QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY OF HEXABROMOBENZENE SURROGATE SPIKES

9102.693

(mg/kg)

E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
25502	0.83	0.47	57
25503	0.83	0.73	88
25504	0.83	0.62	75
25505	0.83	0.77	93
25506	0.83	0.58	70
25507	0.83	0.53	64
25508	0.83	0.71	86
25509	0.83	--	DL
25510	0.83	0.55	66
25511	0.83	--	DL
25512	0.83	--	DL
25513	0.83	--	DL
25514	0.83	--	DL
25515	1.7	1.1	65
25516	0.83	0.66	80
25517	0.83	0.48	58
25518	0.83	0.83	100
25519	0.83	--	DL
25520	0.83	0.82	99
25521	0.83	--	DL
25522	0.83	0.49	59
25523	0.83	--	DL
25549	0.83	0.67	81
25550	0.83	0.40	48

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

DL = DILUTED OUT

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QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY OF HEXABROMOBENZENE SURROGATE SPIKES

9102.693

(mg/kg)

E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
25551	0.83	0.64	77
25552	0.83	0.78	94
25553	0.83	0.81	98
25554	0.83	0.80	96
25555	0.83	0.67	81
25556	0.83	0.73	88
25557	0.83	0.88	106

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

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QUALITY CONTROL FOR ACCURACY AND PRECISION:
PERCENT RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD)
OF SEDIMENT MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
(Sample # 25546)

9102.693

(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	1.6	1.6	94	94	0

ND = NOT DETECTED

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QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY OF HEXABROMOBENZENE SURROGATE SPIKES

9102.693

(mg/kg)

E & E Laboratory No. 91-	Amount Added	Amount Determined	Percent Recovery
25524	0.83	0.55	66
25525	0.83	0.60	72
25526	0.83	1.0	120
25527	0.83	0.79	95
25528	0.83	0.90	108
25529	0.83	0.76	92
25530	0.83	0.76	92
25531	0.83	0.94	113
25532	0.83	0.78	94
25533	0.83	0.94	113
25534	0.83	1.1	132
25535	0.83	1.0	120
25536	0.83	1.0	120
25537	0.83	0.92	111
25538	0.83	1.1	132
25539	0.83	1.0	120
25540	0.83	1.1	132
25541	0.83	0.89	107
25542	0.83	1.1	132
25543	0.83	0.81	98
25544	0.83	0.96	116
25545	0.83	0.96	116
25546	0.83	0.57	69
25547	0.83	0.85	102
25548	0.83	0.87	105

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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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 #1

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 #2

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 #3

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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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 #4

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 #5

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 #6

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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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 #7

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 #8

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

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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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 #1

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 #2

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 #3

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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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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 #4

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 #5

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 #6

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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TEST CODE :SPCB 1 JOB NUMBER :9102.693

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 #7

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 #8

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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