

February 22, 1999

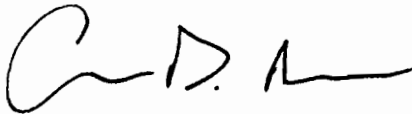
Ms. Ioana Munteanu-Ramnic
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21st Street
Long Island City, NY 11101

Re: Voluntary Cleanup Program
18-30 Whitestone Expressway, College Point, New York

Dear Ms. Munteanu-Ramnic:

Attached are six copies of the remediation report for the Whitestone Expressway site. If you have any questions, please call me at (212) 340-9815.

Sincerely,
AKRF, Inc.



Andrew D. Rudko, PhD
Vice President

MS\C:\FILES\WP\ANDY\CollPt\1830WhitestoneDEC9Let.wpd

cc: E. Goldman (Triangle Equities)
H. Goldman (Wachtel and Masyr)

RECEIVED
N.Y.S.D.E.C. — REGION 2

FEB 23 1999

HAZARDOUS WASTE
REMEDATION

REMEDIATION REPORT
1830 WHITESTONE EXPRESSWAY
WHITESTONE, QUEENS, NEW YORK

Prepared By:

AKRF Inc.
117 East 29th Street
New York, New York 10017
(212) 696-0670

RECEIVED
N.Y.S.D.E.C. - REGION 1
20 FEB 1999

HAZARDOUS WASTE
REMEDIATION

February 1999

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The field work was performed on January 11, 1999. The weather was clear and cold with temperatures around 30° F. All operations on the site were performed in accordance with the project Health and Safety Plan. Field notes from the remediation operations are in Appendix A. Photographs of field operations are in Appendix B.

3. SOIL REMEDIATION

The extent of contamination in the soil was delineated by field screening of soil samples using an immunoassay method (SW-846 Method 4020). The immunoassays were run using EnviroGard test kits from Strategic Diagnostics Inc. The kits contain PCB standards at 0, 1, 5, 10, and 50 parts per million. By comparing the results for each sample with the standards, it is possible to determine the range within which the level of PCBs in the sample falls: 0, 0-1, 1-5, 5-10, 10-50, or over 50 parts per million. According to the manufacturer, the method has a positive bias and thus provides a conservative estimate of PCB levels. Because of the cold temperatures, the tests were not performed on site, but at the property developer's offices a few blocks from the site. This permitted the screening tests to be run at a uniform temperature within the range of the test kits (64° F to 81° F).

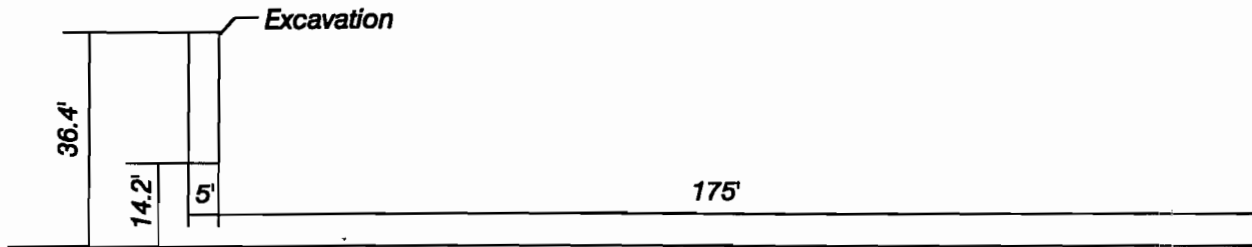
An initial test pit was excavated at the location of former boring B-1, located 10 feet from the southern boundary of the site and 180 feet from the eastern boundary of the site (see Figure 1). The pit was dug to a depth of nine feet in three-foot lifts, which were stockpiled separately on plastic sheeting. Screening analyses were performed on two composite samples of the soil removed from each three-foot depth, and on composite samples from the four walls and bottom of the initial test pit (see soil screening results, Appendix C). The initial field screening showed low levels of PCBs (less than 5 parts per million) in all samples except for the sample from the bottom of the pit (nine-foot depth) and one of the samples from the 3 to 6 foot level, both of which showed PCB levels between 5 and 10 parts per million.

Based on the screening results, it was decided to extend the test pit deeper. The pit was excavated to a depth of 12 feet, with the 9 to 12 foot soil being placed in a separate stockpile. Six samples were collected for screening: two composites from the 9 to 12 foot stockpile, and samples from the bottom of the pit and from the four sides at the 9 to 12 foot level. The screening analyses again showed low levels of PCBs (less than 5 parts per million) in all samples except for one of the composites from the 9 to 12 stockpile, which fell in the 10 to 50 parts per million range, and the sample from the north wall of the excavation, which indicated over 50 parts per million.

The excavation was extended to the north about 10 feet, and another set of six screening samples was collected. The two composite samples of excavated soil (from the 6 to 12 foot depth) were in the 1 to 5 and 5 to 10 parts per million range respectively. The bottom and side samples (from the 9 to 12 foot depth) were all in the 5 to 10 parts per million range except for the sample from the west wall which indicated over 50 parts per million.



Whitestone Expressway



**18-30 WHITESTONE
EXPRESSWAY**
Queens, New York
Test Pit Excavation

AKRF, Inc.

Environmental Consultants
117 East 29 Street New York, N.Y. 10016

DATE
02/18/99

PROJECT No.
30032-0001

FIGURE No.

1

Because it was now dark, excavation work could not continue and work was suspended pending the results of laboratory analyses of the end point samples. The dimensions and location of the excavation were measured and recorded (see Figure 1). Since the site is unfenced and could not be properly secured from trespassers, the excavation was temporarily backfilled with clean surface soil from elsewhere on the site.

4. END POINT SAMPLING

Five soil samples were taken from the sidewalls and bottom of the excavated area for laboratory analysis. One composite sample was collected from each of the sidewalls at a depth of 9 to 12 feet below grade, and one composite sample was collected from the bottom of the excavated area. All soil samples were properly containerized, each container was properly labeled, sealed, and refrigerated at approximately 4°C for shipment to the laboratory. A chain of custody was maintained throughout the field sampling, transport of samples to the laboratory, and during lab analysis. All soil samples were analyzed for PCBs by Method 8081 by Severn Trent Laboratories (Monroe, CT), a New York State Department of Health ELAP-certified laboratory.

The results of the end-point sample analyses are summarized below. Complete laboratory results are in Appendix D.

Table 1 Laboratory Analytical Results for End Point Sampling in Parts Per Billion (ppb)

	Bottom	East Wall	West Wall	South Wall	North Wall
Aroclor-1016	U	U	U	U	U
Aroclor-1221	U	U	U	U	U
Aroclor-1232	U	U	U	U	U
Aroclor-1242	1200	3000	6900	77	440
Aroclor-1248	U	U	U	U	U
Aroclor-1254	830	760J	1800	28J	300
Aroclor-1260	U	U	U	U	140
TOTAL	2030	3760	8700	105	880

U = Undetected J = Estimated concentration, below quantitation limit

All concentrations were below the 10 parts per million cleanup objective. Therefore, no further excavation was deemed necessary. The laboratory results were also well below the field analysis results for the corresponding samples. According to the test kit manufacturer, this is partly due to the intentional conservative bias of the immunoassay method, and partly because an Arochlor-1248 standard was used, but most of the PCBs present were actually Arochlor-1242.

5. DISPOSAL OF CONTAMINATED SOIL

The stockpiles were securely covered with 6-mil plastic sheeting. Piles were sized to be manageable, coverable, and fit in available areas. Plastic covering was sized and lapped to completely enclose the stockpiled soils. Plastic covering was applied and secured to protect the soils from wind and weather, and were shaped and secured to drain runoff. The soil stockpiles and plastic covering were maintained in good condition until the soil was removed from the site.

Composite soil samples from each soil stockpile were collected and submitted for analysis. The results are summarized below. Complete laboratory results are in Appendix D.

Table 2 Laboratory Analytical Results for Stockpiled Soil in Parts Per Billion (ppb)

	3-6' Stockpile	6-9' Stockpile	9-12' Stockpile	6-12' Stockpile	6-12' Stockpile
Aroclor-1016	U	U	U	U	U
Aroclor-1221	U	U	U	U	U
Aroclor-1232	U	U	U	U	U
Aroclor-1242	6100	260	2500	240	1300
Aroclor-1248	U	U	U	U	U
Aroclor-1254	1000J	370	380J	52	700
Aroclor-1260	U	180	U	30J	380
TOTAL	7100	810	2880	322	2380

U = Undetected J = Estimated concentration, below quantitation limit

Overall PCB concentrations in all the stockpiles were well below the 50 parts per million threshold for classification as a hazardous waste. All the stockpiled soil, a total of about 37 tons, was removed from the site on January 29, 1999 and transported to the R3 Technologies Inc. disposal facility in Morrisville, PA. The manifest and receipt from the disposal facility are in Appendix E.

6. AIR MONITORING

In accordance with the work plan, air monitoring was performed throughout the on-site excavations. Monitoring was performed directly downwind of the excavation area using a Dust Track real-time particulate monitor and a Photoionization Detector (PID) to measure total organic vapors. No exceedances of action levels were recorded. The results of dust monitoring and organic vapor monitoring are presented in Appendix F.

7. DATA USABILITY SUMMARY REPORT

The laboratory analyses were performed by Severn Trent Laboratories (Monroe, CT), a New York State Department of Health ELAP-certified laboratory. Ten soil samples were analyzed by GC/ECD in accordance with Methods 3550A/8081. All required holding times were met. All QC data fall within the required specifications except for one surrogate (decachlorobiphenyl) for which percent recovery was above advisory limits in one sample. In addition, because of required sample dilutions, surrogates were diluted out of a number of samples. No resampling or reanalysis is recommended.

1/11/99 Whitestone Expressway

Leary
Charles & M. McGoogan
on-site at 8:05 AM. Operator
already on-site. → Allen

3:10 Andy Kublo and two
reps. of Brookside Env. on-site

3:25 Beginning 1st pit

at 180' W. of E. inclined and
10' N of S. property line.
↳ where grass is not cut

Andy has already explained
we will pull soil out and
stockpile separately by depth.
Once we've reached the top proper
depth we will sample the sides
and bottom of pit and the stockpiles
and get to clients office to analyze
samples.

1/11/99

Weather is cold w/ slight
breeze to the S. Breeze
changes to the NW at 8:30. ^{at 8:30}

Dust monitor began
running at 8:25 AM. downwind of excav.

Initial Air Monitoring
— OWA → ○ ○
9:30 A.M.

0-3' stockpiled just S of pit
3'-6' stockpiled on plastic just
N of pit. 6'-9' on plastic N of pit

Profile: 0-4' brown sand w/ debris
4' - concrete
4'-6' - black layer
6'-9' brown sand
9' - groundwater

FINISH JOB TEST PIT 9 AM
Dust monitor statistics

9:12 A.M.

Ave.	0.041	mg/m ³
Max	.381	
Time	45 min, 56 sec.	
	used dust monitor	

9 AM - 9:10 AM, collect samples from sides and bottom of pit.

8:45 - 9 AM, Charles Leary collects samples from stockpiles.

fibrous debris - cloth and foam insulation material was pushed into the soil. Some coal fragments etc. were noted as well.

9:20 AM Charles and Andy take samples to clients office to analyze. I stay here to wait for Iona → NYS DEC.

10:30 A.M. Dick Taylor leaves site

Iona. Mountain Rammit - NYS DEC arrives on-site.

takes some photos and requests PID readings for stockpiled soil - all readings were 0.

10:45 A.M. Iona leaves.

12 PM Andy & Charles arrive back at site w/ sampling results - results indicated more soil needed to be excavated from bottom of pit. - Thus 9' - 12' was excavated, drained, and stockpiled in a separate pile. - Samples were taken from the bottom, from each side near the bottom, and from the stockpile.

2:30 PM - JVA meeting

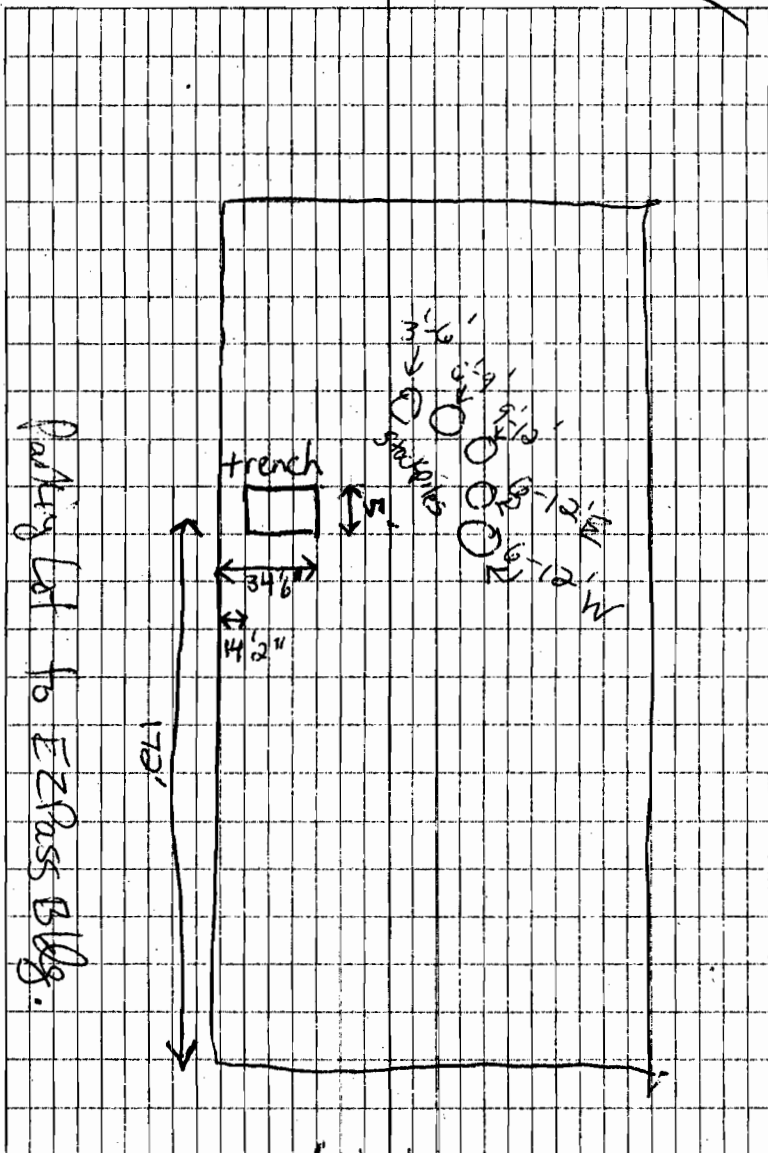
2:40 - done excavating - take
EW side samples, bottom, and N. sample
and samples from all stockpiles

(composite)
for laboratory analysis & for field
screening (although we are not
field screening stockpiles already screened) from

Location of trench 34' 6" to
14' 2" N of curb

and 172' West of East
fence line.

3:20 PM Leave site to go to clients
office & analyze samples.



White Stone Expressway

APPENDIX B
PHOTOGRAPHS OF FIELD ACTIVITIES



Photograph 1. Initial soil stockpiles



Photograph 2. Excavation in progress.



Photograph 3. Stockpiles covered with plastic pending removal.

APPENDIX C
SOIL SCREENING RESULTS

PCB Field Screening Analyses**18-30 Whitestone Expressway Site**Date 1/11/99Analyzed by CPL/ADR

First Round					
Sample ID	Reading relative to standard:				
	0	1	5	10	50
0'-3' sample A	-0.61	-0.36	+0.02	+0.13	+0.27
0'-3' sample B	+0.01	+0.29	+0.66	+0.77	+0.91
3'-6' sample A	-0.35	-0.05	+0.34	+0.43	+0.60
3'-6' sample B	-0.72	-0.43	-0.07	+0.09	+0.22
6'-9' sample A	-0.58	-0.27	+0.11	+0.23	+0.37
6'-9' sample B	-0.28	+0.02	+0.38	+0.51	+0.64
North Wall (1)	+0.10	+0.43	+0.81	+0.91	+1.06
South Wall (1)	-0.52	-0.21	+0.17	+0.27	+0.34
East Wall (1)	-0.41	-0.09	+0.28	+0.38	+0.51
West Wall (1)	-0.43	-0.11	+0.27	+0.40	+0.54
Bottom (1)	-0.73	-0.41	-0.05	+0.14	+0.21
Second Round					
Sample ID	Reading relative to standard:				
	0	1	5	10	50
South Wall (2)	-0.16	+0.26	+0.55	+0.60	
West Wall (2)	-0.24	+0.16	+0.48	+0.54	
East Wall (2)	-0.39	0.00	+0.30	+0.37	
Bottom (2)	-0.18	+0.25	+0.55	+0.66	
6'-9' sample C	-0.46	-0.10	+0.25	+0.35	
9'-12' sample A	-0.22	+0.16	+0.48	+0.48	
9'-12' sample B	-1.08	-0.60	-0.33	-0.40	-0.20

Third Round					
Sample ID	Reading relative to standard:				
	0	1	5	10	50
South Wall (3)	-0.44	-0.14	-0.05	+0.13	+0.15
East Wall (3)	-0.49	-0.21	-0.16	+0.05	+0.07
West Wall (3)	-0.66	-0.39	-0.24	-0.08	-0.09
Bottom (3)	-0.48	-0.17	-0.06	+0.09	+0.09
6'-12' sample A	-0.33	-0.05	+0.05	+0.22	+0.22
6'-12' sample B	-0.53	-0.29	-0.18	+0.06	+0.06
North wall (2) <i>repeated</i>	-0.67	-0.36	-0.25	-0.09	-0.08
9'-12' sample B <i>repeated</i>	-0.49	-0.23	-0.22	-0.05	+0.06
West Wall (3) <i>repeated</i>	-0.55	-0.34	-0.20	-0.07	-0.03

APPENDIX D
LABORATORY ANALYSIS RESULTS



Severn Trent Laboratories
200 Monroe Turnpike
Monroe CT 06468
Tel: (203) 261-4458
Fax: (203) 268-5346

SAMPLE DATA SUMMARY PACKAGE

Client:	AKRF
P.O.#:	30032-0004
Project ID:	WHITESTONE EXPRESSWAY
SDG#	A0038
STL ID	7099-0038A

Other Laboratory Locations:

- 149 Rangeway Road, North Billerica MA 01862
- 16203 Park Row, Suite 110, Houston TX 77084
- 120 Southcenter Court, Suite 300, Morrisville NC 27560
- 315 Fullerton Avenue, Newburgh NY 12550
- 11 East Olive Road, Pensacola FL 32514
- Westfield Executive Park, 53 Southampton Road, Westfield MA 01085
- 628 Route 10, Whippany NJ 07981

a part of

Severn Trent Services Inc

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY**

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
BOTTOM	990038A-01				X		
EAST	990038A-02				X		
WEST	990038A-03				X		
SOUTH	990038A-04				X		
NORTH	990038A-05				X		
3-6 STOCKPILE	990038A-06				X		
6-9 STOCKPILE	990038A-07				X		
9-12 STOCKPILE	990038A-08				X		
6-12 STOCKPILE E	990038A-09				X		
6-12 STOCKPILE W	990038A-10				X		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PESTICIDES/PCB
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
990038A-01	SOIL	01/11/99	01/12/99	1/12/99	1/19/99
990038A-02	SOIL	01/11/99	01/12/99		
990038A-03	SOIL	01/11/99	01/12/99		
990038A-04	SOIL	01/11/99	01/12/99		
990038A-05	SOIL	01/11/99	01/12/99		
990038A-06	SOIL	01/11/99	01/12/99		
990038A-07	SOIL	01/11/99	01/12/99		
990038A-08	SOIL	01/11/99	01/12/99		
990038A-09	SOIL	01/11/99	01/12/99		
990038A-10	SOIL	01/11/99	01/12/99		



Severn Trent Laboratories
200 Monroe Turnpike
Monroe CT 06468
Tel: (203) 261-4458
Fax: (203) 268-5346

7099-0038A
AKRF

Case Narrative

Polychlorinated Biphenyls (PCB's) - Pesticide/PCB samples were extracted and analyzed by GC/ECD using guidance provided in Methods 3550A/8081. The instrumentation used was a Hewlett-Packard Gas Chromatograph equipped with an Electron Capture Detector (Ni⁶³).

All samples were extracted and concentrated without any apparent problems.

All samples required acid and sulfur cleanup prior to analysis.

Surrogate percent recovery for Decachlorobiphenyl was above advisory QC limits in sample PBLK58MS.

Surrogates were diluted out of samples BOTTOM and WEST.

Manual integrations were performed if required, and any affected peaks were designated with an "FF" on the area report in the column titled "Code". Manual integrations were initialed by the analyst that performed the integration.

Sample Calculation:

Sample ID - EAST
Compound - Aroclor-1242

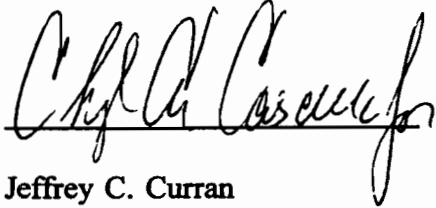
$$\frac{(2235700\text{area})(10000\text{ul})(10)}{(7501288\text{area/ng})(30\text{g})(0.82)(1\text{ul})} = 1200 \text{ ug/Kg}$$

Other Laboratory Locations:

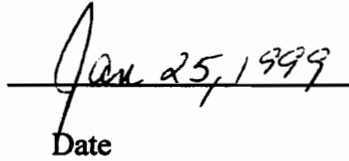
- 149 Rangeway Road, North Billerica MA 01862
- 16203 Park Row, Suite 110, Houston TX 77084
- 120 Southcenter Court, Suite 300, Morrisville NC 27560
- 315 Fullerton Avenue, Newburgh NY 12550
- 11 East Olive Road, Pensacola FL 32514
- Westfield Executive Park, 53 Southampton Road, Westfield MA 01085
- 628 Route 10, Whippany NJ 07981

a part of
Severn Trent Services Inc

I certify that this data package is in compliance with the terms of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Jeffrey C. Curran
Laboratory Manager



Date

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: BOTTOM

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-01

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016320

% Moisture: 18 decanted: (Y/N) _____ Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	400	U
11104-28-2	Aroclor-1221	820	U
11141-16-5	Aroclor-1232	400	U
53469-21-9	Aroclor-1242	1200	
12672-29-6	Aroclor-1248	400	U
11097-69-1	Aroclor-1254	830	
11096-82-5	Aroclor-1260	400	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: EAST

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-02

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016321

% Moisture: 28 decanted: (Y/N) _____ Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: 7 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	920	U
11104-28-2	Aroclor-1221	1900	U
11141-16-5	Aroclor-1232	920	U
53469-21-9	Aroclor-1242	3000	
12672-29-6	Aroclor-1248	920	U
11097-69-1	Aroclor-1254	760	J
11096-82-5	Aroclor-1260	920	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: WEST
Lab Code: IEACT Case No.: 0038A SDG No.: A0038
Matrix: (soil/water): SOIL Lab Sample ID: 990038A-03
Sample wt/vol: 30 (g/ml) G Lab File ID: C1016322
% Moisture: 9 decanted: (Y/N) _____ Date Received : 01/12/99
Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99
Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99
Injection Volume: 1.0 (uL) Dilution Factor: 50.0
GPC Cleanup: (Y/N) N pH: 7.4 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	1800	U
11104-28-2	Aroclor-1221	3700	U
11141-16-5	Aroclor-1232	1800	U
53469-21-9	Aroclor-1242	6900	
12672-29-6	Aroclor-1248	1800	U
11097-69-1	Aroclor-1254	1800	
11096-82-5	Aroclor-1260	1800	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: SOUTH
Lab Code: IEACT Case No.: 0038A SDG No.: A0038
Matrix: (soil/water): SOIL Lab Sample ID: 990038A-04
Sample wt/vol: 30 (g/ml) G Lab File ID: C1016323
% Moisture: 14 decanted: (Y/N) _____ Date Received : 01/12/99
Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99
Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7 Sulfur Cleanup: (Y/N) Y

CAS NO. COMP CUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	38.	U
11104-28-2	Aroclor-1221	78.	U
11141-16-5	Aroclor-1232	38.	U
53469-21-9	Aroclor-1242	77.	
12672-29-6	Aroclor-1248	38.	U
11097-69-1	Aroclor-1254	28.	J
11096-82-5	Aroclor-1260	38.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: NORTH

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-05

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016324

% Moisture: 17 decanted: (Y/N) _____ Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	80.	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	80.	U
53469-21-9	Aroclor-1242	440	
12672-29-6	Aroclor-1248	80.	U
11097-69-1	Aroclor-1254	300	
11096-82-5	Aroclor-1260	140	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: 3-6 STOCKPILE

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-06

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016325

% Moisture: 9 decanted: (Y/N) __ Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N) N pH: 8 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	1800	U
11104-28-2	Aroclor-1221	3700	U
11141-16-5	Aroclor-1232	1800	U
53469-21-9	Aroclor-1242	6100	
12672-29-6	Aroclor-1248	1800	U
11097-69-1	Aroclor-1254	1000	J
11096-82-5	Aroclor-1260	1800	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: 6-9 STOCKPILE

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-07

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016326

% Moisture: 10 decanted: (Y/N) __ Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 7.6 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	370	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	260	
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	370	
11096-82-5	Aroclor-1260	180	

1D
 PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: 9-12 STOCKPILE

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-08

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016327

% Moisture: 15 decanted: (Y/N) Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
 (ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	780	U
11104-28-2	Aroclor-1221	1600	U
11141-16-5	Aroclor-1232	780	U
53469-21-9	Aroclor-1242	2500	
12672-29-6	Aroclor-1248	780	U
11097-69-1	Aroclor-1254	380	J
11096-82-5	Aroclor-1260	780	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: 6-12 STOCKPILE E

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-09

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016328

% Moisture: 14 decanted: (Y/N) _____ Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	38.	U
11104-28-2	Aroclor-1221	78.	U
11141-16-5	Aroclor-1232	38.	U
53469-21-9	Aroclor-1242	240	
12672-29-6	Aroclor-1248	38.	U
11097-69-1	Aroclor-1254	52.	
11096-82-5	Aroclor-1260	30.	J

1D
 PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: 6-12 STOCKPILE W

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 990038A-10

Sample wt/vol: 30 (g/ml) G Lab File ID: C1015329

% Moisture: 9 decanted: (Y/N) Date Received : 01/12/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/19/99

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.8 Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
 (ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	360	U
11104-28-2	Aroclor-1221	740	U
11141-16-5	Aroclor-1232	360	U
53469-21-9	Aroclor-1242	1300	
12672-29-6	Aroclor-1248	360	U
11097-69-1	Aroclor-1254	700	
11096-82-5	Aroclor-1260	380	

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

GC Column: RTX-35 ID: 0.53 (mm)

	SAMPLE NO.	TCX		DCB		OTHER		TOT OUT
		%REC	#	%REC	#	%REC	#	
01	PBLK58	106		147				0
02	PBLK58QC	93		138				0
03	PBLK58MS	100		164*				1
04	PBLK58MSD	101		147				0
05	BOTTOM	88		D				0
06	EAST	82		382D				0
07	WEST	82		D				0
08	SOUTH	98		134				0
09	NORTH	91		145				0
10	3-6 STOCKPILE	85		426D				0
11	6-9 STOCKPILE	132		332D				0
12	9-12 STOCKPILE	90		132				0
13	6-12 STOCKPILE E	84		138				0
14	6-12 STOCKPILE W	109		863D				0
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

ADVISORY
QC LIMITS
(47-150)
(41-149)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

3F
SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix Spike - Sample No.: PBLK58 Conc. Units : UG/KG

	SPIKE ADDED	SAMPLE CONC	MS CONC	MS %REC #	MSD CONC	MSD %REC #	%RPD #	QC LIMITS RPD	LIMITS REC.
Aroclor-1260	67	0.0	69.	103	66.	98	5	50	36-151

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

3H
SOIL PESTICIDE QC CHECK RECOVERY

Lab Name: STL-CT Contract: _____

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Sample No.: PBLK58

COMPOUND	SPIKE ADDED (UG/KG)	SPIKE CONCENTRATION (UG/KG)	% REC #	QC. LIMITS REC.
Aroclor-1242	330	210	64	37-98
Aroclor-1260	330	270	82	46-115

Column to be used to flag recovery values with an asterisk

COMMENTS: _____

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: STL-CT Contract: _____ Client Id: PBLK58

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Lab sample ID: 011299-B02 Lab File ID: C1016316

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) Y Date Extracted: 01/12/99

Date Analyzed (1): 01/18/99 Date Analyzed (2): 01/14/99

Time Analyzed (1): 2205 Time Analyzed (2): 0139

Instrument ID (1): HP58901C Instrument ID (2): HP58904C

GC Column (1): RTX-35 ID: 0.53 (mm) GC Column (2): DB-1701 ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PBLK58QC	011299-B02QC	01/18/99	
02	PBLK58MS	011299-B02MS	01/18/99	
03	PBLK58MSD	011299-B02MSD	01/18/99	
04	BOTTOM	990038A-01	01/19/99	01/15/99
05	EAST	990038A-02	01/19/99	01/22/99
06	WEST	990038A-03	01/19/99	01/22/99
07	SOUTH	990038A-04	01/19/99	01/14/99
08	NORTH	990038A-05	01/19/99	01/15/99
09	3-6 STOCKPILE	990038A-06	01/19/99	01/22/99
10	6-9 STOCKPILE	990038A-07	01/19/99	01/15/99
11	9-12 STOCKPILE	990038A-08	01/19/99	01/22/99
12	6-12 STOCKPILE E	990038A-09	01/19/99	01/14/99
13	6-12 STOCKPILE W	990038A-10	01/19/99	01/22/99
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: STL-CT Contract: _____ Client ID: PBLK58

Lab Code: IEACT Case No.: 0038A SDG No.: A0038

Matrix: (soil/water): SOIL Lab Sample ID: 011299-B02

Sample wt/vol: 30 (g/ml) G Lab File ID: C1016316

% Moisture: 0 decanted: (Y/N) Date Received : _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 01/12/99

Concentrated Extract Volume: 10000 (ul) Date Analyzed : 01/18/99

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: Q
(ug/L or ug/Kg) UG/KG

12674-11-2	Aroclor-1016	33.	U
11104-28-2	Aroclor-1221	67.	U
11141-16-5	Aroclor-1232	33.	U
53469-21-9	Aroclor-1242	33.	U
12672-29-6	Aroclor-1248	33.	U
11097-69-1	Aroclor-1254	33.	U
11096-82-5	Aroclor-1260	33.	U

APPENDIX E
WASTE MANIFESTS

BILL OF LADING

1. Customer's US EPA ID No. **Not Required** Document No. **001** 2. Page 1
 Information in the shaded areas is not required by Federal law.

Customer's Name and Mailing Address **Triangle Equities**
1830 Whitestone Expwy
Whitestone, NY 11357

4. Phone **212 340-9815**

5. Transporter 1 Company Name **Triple "A" Rom Bros** 6. US EPA ID Number **2A-345**

7. Transporter 2 Company Name _____ 8. US EPA ID Number _____

9. Designated Facility Name and Site Address **R3 Technologies**
7 Steel Road East
Morrisville, PA 19067 10. US EPA ID Number **Not Required**

A. Document Number
 B. State ID
 C. State Transporter's ID **N.J.**
 D. Department Permit
 E. State Transporter's ID
 H. Facility Phone **215-428-1700**

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity	14. Unit W/Vol	15. Hazardous?
HM		No.	Type			
a.	Waste Petroleum Mixture, Solid NON-DOT / NON-RCRA HAZARDOUS	0-0-1	DT	35	T	
b.						
c.						
d.						

16. Additional Descriptions for Materials Listed Above: **solid mixture with petroleum hydrocarbons**

15. Special Handling Instructions and Additional Information

16. CUSTOMER CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Printed/Typed Name **Richard V. Taylor** Signature **Richard V. Taylor** Date **01/29/99**

17. Transporter 1 Acknowledgement of receipt of Materials
 Printed/Typed Name _____ Signature _____ Date _____

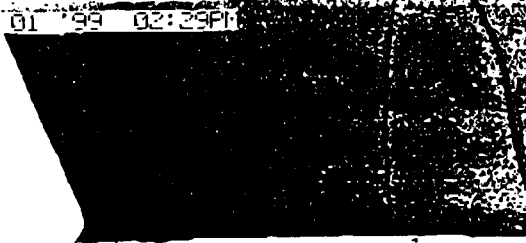
18. Transporter 2 Acknowledgement of receipt of Materials
 Printed/Typed Name **W. A. ...** Signature **W. A. ...** Date **1-29-99**

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name **Joseph ...** Signature **Joseph ...** Date **01/29/99**

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R3 TECHNOLOGIES, INC.
7 STEEL ROAD EAST
MORRISVILLE, PA 19067-0847
(215) 428-1700

40616

DATE: 01/29/99
TIME IN: 12:57
TIME OUT: 12:57
SCALE: M

CARRIER: TSD TOP SOIL DEPOT INC. / ROMBROS

CUSTOMER: BRO BROOKSIDE ENVIRONMENTAL

TRUCK: T3 TRAILER:

PRODUCT: PH PETROLEUM HYDROCARBN JOB: BRO9901010PH

WGT IN GROSS: 100940 LBS MANUAL WEIGHT

TARE: 26420 LBS P

NET: 74520 LBS = 37.26 TONS @ 0.00 PER TON
DRIVER SIGNATURE WEIGHMASTER SIGNATURE

WGT: \$ 0.00

[Handwritten signatures]
LIC: 57873

APPENDIX F
AIR MONITORING RESULTS

Air Monitoring Results for dust in mg/cubic meter during excavation

Time	Average	Maximum	Length
9:12	0.041	0.281	46 mins
12:20	0.023	0.308	175 mins

Air Monitoring Results for organic vapor in parts per million

Time	Reading
9:00	0.2
9:20	0.7
11:30	0.2
1:15	0.2
2:25	0.2