



# IEA

An Aquarion Company

200 Monroe Turnpike  
Monroe, Connecticut 06468

Phone 203-261-4458  
Fax 203-268-5346

March 16, 1993

Mr. Harry Gregory  
Roux Associates  
775 Park Avenue, Suite 255  
Huntington, NY 11743

Dear Mr. Gregory:

Please find enclosed the analytical results of 1 aqueous and 4 soil samples received at our laboratory on February 2, 1993. This report contains sections addressing the following information at a minimum:

- sample summary
- analytical methodology
- state certifications
- definitions of data qualifiers and terminology
- analytical results
- chain-of-custody

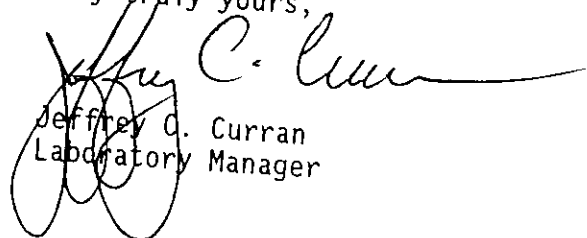
IEA Report #30930-0060B	Purchase Order #05526Y
Project ID: Amtrak Sunnyside	

Copies of this analytical report and supporting data are maintained in our files for a minimum of five years unless special arrangements have been made. Unless specifically indicated, all analytical testing was performed at this laboratory location and no portion of the testing was subcontracted.

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report. Please contact your customer service representative at (203) 261-4458 for any additional information. Thank you for utilizing our services; we hope you will consider us for your future analytical needs.

I have reviewed and approved the enclosed data for final release.

Very truly yours,



Jeffrey D. Curran  
Laboratory Manager

JCC/mt

Sunrise,  
Florida  
305-846-1730

Schaumburg,  
Illinois  
708-705-0740

N. Billerica,  
Massachusetts  
617-272-5212

Whippany,  
New Jersey  
201-428-8181

Research Triangle Park,  
North Carolina  
919-677-0090

Essex Junction,  
Vermont  
802-878-5138

30930-0060B  
ROUX ASSOCIATES  
SAMPLE SUMMARY

Client ID	Lab ID	Matrix	Date Collected	Date Received
CMW-31 —	0060032	Soil	02/01/93	02/02/93
CS-49 —	0060033	Soil	02/01/93	02/02/93
CS-53 —	0060034	Soil	02/01/93	02/02/93
CS-64 —	0060035	Soil	02/01/93	02/02/93
FB 020193	0060036	Aqueous	02/01/93	02/02/93

PROJECT SUMMARY

The client requested the samples be analyzed for PCB's.

METHODOLOGY

Polychlorinated biphenyls (PCB's) were determined using GC/ECD. The instrumentation used was a HP Model 5890 gas chromatograph equipped with an electron capture detector (Ni<sup>63</sup>).

The analyses were conducted according to NYSDEC '91 ASP Protocols.

DISCUSSION

Extractions - Sample FB 020193 was extracted at half volume, surrogate was injected at 0.5 mLs and final volume was 5.0 mLs; the CRQL was not elevated.

PCB's - Samples CMW-31, CS-49, CS-53 and CS-64 were confirmed by GC/MS for Aroclor 1260.

Due to high levels of Aroclor 1260, all soil samples required a dilution and sample CS-64 MSD had zero percent recovery.

Due to matrix interference, the first peak for Aroclor 1260 was outside the RT window in samples CMW-31 and CMW-31 DL on column DB-1701.

Method blank PBLK85 was contaminated with Aroclors 1248 and 1260, but below the CRQL limits.

Due to a large discrepancy between the results on the RTX-35 and DB-1701 columns, the result for sample CS-53 was taken from the RTX-35 column. Sample CS-53 DL which was within the calibration limits has a much lower percent RPD.

DCB was below advisory QC limits on column 1 in samples FB 020193 and MSB CS-64,

the QC check standard, and method blanks PBLK82 and PBLK85. DCB was below advisory QC limits on column 2 in sample FB 020193 and the QC check standard.

TCX was below advisory QC limits on column 1 in sample MSB CS-64, the QC check standard and method blank PBLK85.

Surrogates were diluted out in all samples with a dilution factor of 100 or higher.

Due to the sample matrix, DCB was lost in samples CS-64 MS, CS-64 MSD, CS-64 and CS-49.

DCB was above advisory QC limits on both columns in sample CMW-31; DCB was above advisory QC limits on column 1 in sample CS-49.

## RESULTS

The results are presented in the following Tables. Also enclosed are the data packages containing all relevant data.

TABLE 1.0  
 30930-0060B  
 ROUX ASSOCIATES  
POLYCHLORINATED BIPHENYLS (PCB'S)

Aqueous

All values are ug/L.

Sample Identification

Dilution Factor

1.0

1.0

Method Blank I.D.

PBLK82

PBLK82

Compound

Method  
Blank

FB  
020193

Quantitation  
Limits with no  
Dilution

Aroclor - 1016  
 Aroclor - 1221  
 Aroclor - 1232  
 Aroclor - 1242  
 Aroclor - 1248  
 Aroclor - 1254  
 Aroclor - 1260

U  
 U  
 U  
 U  
 U  
 U  
 U

U  
 U  
 U  
 U  
 U  
 U  
 U

1.0  
 2.0  
 1.0  
 1.0  
 1.0  
 1.0  
 1.0

U - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 1.1  
30930-0060B  
ROUX ASSOCIATES  
POLYCHLORINATED BIPHENYLS (PCB'S)

All values are ug/Kg.

Sample Identification

<u>Dilution Factor</u>	<u>1.0</u>	<u>12.1</u>	<u>121</u>	<u>11.4</u>	<u>114</u>	<u>114</u>	
<u>Method Blank I.D.</u>	<u>PBLK85</u>	<u>PBLK85</u>	<u>PBLK85</u>	<u>PBLK85</u>	<u>PBLK85</u>	<u>PBLK85</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>CMW-31</u>	<u>CMW-31 DL</u>	<u>CS-49</u>	<u>CS-49 DL</u>	<u>CS-53</u>	<u>Quantitation Limits with no Dilution</u>
Aroclor - 1016	U	U	U	U	U	U	33
Aroclor - 1221	U	U	U	U	U	U	67
Aroclor - 1232	U	U	U	U	U	U	33
Aroclor - 1242	U	U	U	U	U	U	33
Aroclor - 1248	22J	U	U	U	U	U	33
Aroclor - 1254	U	U	U	U	U	U	33
Aroclor - 1260	22JP	8,400BC	10,000BCD	14,000BCP	17,000BCDP	150,000BCP	33

Sample Identification

<u>Dilution Factor</u>	<u>1,140</u>	<u>12.1</u>	<u>121</u>	<u>12.1</u>	<u>12.1</u>	
<u>Method Blank I.D.</u>	<u>PBLK85</u>	<u>PBLK85</u>	<u>PBLK85</u>	<u>PBLK85</u>	<u>PBLK85</u>	
<u>Compound</u>	<u>CS-53 DL</u>	<u>CS-64</u>	<u>CS-64 DL</u>	<u>CS-64 MS</u>	<u>CS-64 MSD</u>	<u>Quantitation Limits with no Dilution</u>
Aroclor - 1016	U	U	U	U	U	33
Aroclor - 1221	U	U	U	U	U	67
Aroclor - 1232	U	U	U	U	U	33
Aroclor - 1242	U	U	U	U	U	33
Aroclor - 1248	U	U	U	U	U	33
Aroclor - 1254	U	U	U	U	U	33
Aroclor - 1260	88,000BCDP	1,500BCP	2,500BCDJ	1,800BP	1,500P	33

U, J, B, C, D, P - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

## APPENDIX

- U - Indicates that the compound was analyzed for but not detected.
- J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.
- B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.
- N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.
- S - Estimated due to surrogate outliers.
- X - Matrix spike compound.
- (1) - Cannot be separated.
- (2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.
- A - This flag indicates that a TIC is a suspected aldol condensation product.
- E - Indicates that it exceeds calibration curve range.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C - Confirmed by GC/MS.
- T - Compound present in TCLP blank.
- P - This flag is used for a pesticide/aroclor target analyte when there is a greater than 25 percent difference for detected concentrations between the two GC columns (see Form X).

## STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the IEA-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

### IEA-Connecticut Certification Summary (as of June 1992)

State	Responsible Agency	Certification	Lab Number
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Kansas	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	E-210/E-1185
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	252891
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	46410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/ Hazardous Waste	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	Chemistry...Non- Potable Water and Wastewater	A43