



United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
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North Chelmsford, MA 01863-2431

Laboratory Report

May 08, 2009

Cathy Young (HBR)
USEPA New England, Region 1
One Congress Street
Boston, MA. 01224-2023

Project Number: 09040020
Project: St John's Cemetery
Analysis: PCBs in Water Low Level
Analyst: Paul Carroll

Carroll
5-8-09

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-PESWALL6.

The analysis was carried out using high resolution capillary column chromatography. The 30 meter dual capillary system consists of J&W DB-5 and J&W DB-1701 columns both with a 0.25 mm ID.

Date Samples Received by the Laboratory: 04/20/2009

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Report may contain multiple sections and each section will be numbered independently.

If you have any questions please call me at 617-918-8340 .

Sincerely,

Daniel N. Boudreau 5/9/09

Daniel N. Boudreau
Chemistry Team Leader

Qualifiers: RL = Reporting limit
ND = Not Detected above Reporting limit
NA = Not Applicable due to high sample dilutions or sample interferences
J = Estimated value
E = Estimated value exceeds the calibration range
L = Estimated value is below the calibration range
B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
C = The identification has been confirmed by GC/MS.
R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

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St John's Cemetery

PCBs in Water Low Level

Client Sample ID: R01-090413CY-0383
Date of Collection: 4/13/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/27/09
Dry Weight Extracted: N/A
Wet Weight Extracted: N/A
Volume Extracted: 1000 mL

Lab Sample ID: AA92706
Matrix: Water
Final Volume: 5 mL
Percent Solids: N/A
Extract Dilution: 1
pH: 6.1
GPC Factor: N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	72	40 - 106
Decachlorobiphenyl	83	27 - 128

Comments:

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St John's Cemetery

PCBs in Water Low Level

Client Sample ID: R01-090413CY-0384
Date of Collection: 4/14/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/27/09
Dry Weight Extracted: N/A
Wet Weight Extracted: N/A
Volume Extracted: 990 mL

Lab Sample ID: AA92707
Matrix: Water
Final Volume: 5 mL
Percent Solids: N/A
Extract Dilution: 1
pH: 6.2
GPC Factor: N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	70	40 - 106
Decachlorobiphenyl	56	27 - 128

Comments:

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St John's Cemetery

PCBs in Water Low Level

Client Sample ID: R01-090413CY-0385
Date of Collection: 4/15/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/28/09
Dry Weight Extracted: N/A
Wet Weight Extracted: N/A
Volume Extracted: 1000 mL

Lab Sample ID: AA92708
Matrix: Water
Final Volume: 5 mL
Percent Solids: N/A
Extract Dilution: 1
pH: 6.4
GPC Factor: N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	61	40 - 106
Decachlorobiphenyl	51	27 - 128

Comments:

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St John's Cemetery

Blank for PCBs Water

Client Sample ID: N/A
Date of Collection: N/A
Date of Extraction: 4/21/09
Date of Analysis: 4/27/09
Dry Weight Extracted: N/A
Wet Weight Extracted: N/A
Volume Extracted: 1000 mL

Lab Sample ID: N/A
Matrix: Water
Final Volume: 5 mL
Percent Solids: N/A
Extract Dilution: 1
pH: DI
GPC Factor: N/A

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
12674-11-2	Aroclor-1016	ND	0.50	
11104-28-2	Aroclor-1221	ND	0.50	
11141-16-5	Aroclor-1232	ND	0.50	
53469-21-9	Aroclor-1242	ND	0.50	
12672-29-6	Aroclor-1248	ND	0.50	
11097-69-1	Aroclor-1254	ND	0.50	
11096-82-5	Aroclor-1260	ND	0.50	
11100-14-4	Aroclor-1262	ND	0.50	
37324-23-5	Aroclor-1268	ND	0.50	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	66	25 - 123
Decachlorobiphenyl	58	32 - 145

Comments:

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LABORATORY FORTIFIED BLANK (LFB) AND DUPLICATE (LFB Dup) RECOVERY

St John's Cemetery

COMPOUND	SPIKE ADDED ug/L	LFB CONCENTRATION ug/L	LFB RECOVERY %	QC LIMITS (% REC)
Aroclor-1016	3.0	2.78	93	46 - 113
Aroclor-1254	ND			70 - 130
Aroclor-1260	3.0	3.07	102	66 - 118

COMPOUND	LFB Dup CONCENTRATION ug/L	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
Aroclor-1016	2.63	88	6	
Aroclor-1260	2.89	96	6	50

Samples in Batch: AA92706, AA92707, AA92708

Comments: