Anderson Mulholland & Associates
ENVIRONMENTAL CONSULTANTS

TECHNICAL MEMORANDUM

Subject: Sediment Sampling, Tidal Flats
Stratford Army Engine Plant, Stratford, Connecticut

To Rod Pendleton, MACTEC

From: Wesley LaParl, Anderson, Mulholland & Associates, Inc.

Date: March 2, 2009

1.0 Introduction

This technical memorandum presents sediment sampling results for the Stratford Army Engine Plant (SAEP), in Stratford Connecticut. The sampling was performed on May 28, 2008. The objective was to collect sediment samples from the tidal flats of the Housatonic River adjacent to the SAEP to determine the current concentrations of polychlorinated byphenyls (PCBs) associated with a previously identified hot-spot. Samples were only collected from locations where high concentrations of PCBs were previously detected.

SAEP is in the process of preparing a Feasibility Study (FS) to address contaminated sediment in the Tidal Flats. The most recent sediment data was collected during the mid-to-late 1990s. Since redistribution and/or attenuation of PCBs may have occurred since that time, current conditions at the hot-spot locations were required. The results of this sampling event will be used to determine if significant changes in concentrations of PCBs have occurred, or if conditions have not changed and the existing sediment data set can be used for the FS.

2.0 Field Activities

The field activities consisted of collecting sediment samples from 12 locations in the Tidal Flats. Sample locations are shown on Figure 1. A sample summary is shown in Table 1. The sediment samples were collected from 0-6 inches which is the depth interval where the highest levels of contaminants were previously detected. One deeper sample was collected from 12-18 inches at

location TC-1. Sediment samples were collected during low tide when the sediments were exposed. Samples were collected from eight previously sampled locations to evaluate current concentrations. Four samples (TC-1A TC-2A, TC-1B, TC-2B) were collected between existing transects TC and TD to delineate the extent of PCBs. Sample locations were identified in the field using compass bearings and distances shown in Table 1.

Pre-cleaned disposable sampling equipment was used to collect sediment grab samples. Samples were homogenized prior to placement in sample containers. Sediments consisted of clayey silt.

Sediment samples were preserved by immediately placing on ice and cooled to 4 degrees Celsius. Samples were transported by courier to the analytical laboratory. Sediment samples were analyzed for PCBs by Method 8082. Sediment samples were collected and submitted for laboratory analysis in accordance with the Quality Assurance Project Plan (QAPP).

QA/QC samples included a duplicate sample, a co-located duplicate and a matrix spike/matrix spike duplicate. The co-located duplicate sample was taken 5 feet from the primary sample but not blended with the primary sample. The intent of the co-located sample was to measure the variability of the sediment matrix.

Laboratory analysis was performed by Accutest Laboratories, Inc. located in Marlboro, Massachusetts. Accutest is certified in the state of Connecticut. Samples were analyzed on a standard 15-day turnaround time. Accutest provided the reasonable confidence protocol (RCP) data package. Sediment analytical results were validated in accordance with the data validation protocols in the QAPP. All data was determined to be valid as reported and usable for decision-making purposes.

3.0 Summary of Analytical Results

Sediment analytical results are presented in Table 2. Sediment laboratory reports are provided in Attachment A. Results were compared to previous PCB sample results. Results were not compared to regulatory criteria, since there are no state or federal remediation standards for PCBs in sediment. Preliminary Remedial Goals (PRGs) will be developed for PCBs during the Feasibility Study. The following is a summary of the results.

Three PCB Aroclors were detected including; 1248, 1254, and 1260. Aroclor 1248 was detected in all twelve sediment sample locations at concentrations ranging from 0.235 parts per million (ppm) to 670 ppm. Aroclor 1254 was detected at seven of the twelve sample locations at

concentrations ranging from 0.181 ppm to 143 ppm. Aroclor 1260 was detected at only one sample location at 0.172 ppm.

The maximum concentration of PCBs was detected at location TC-1, which is located 50 feet from the base of the flood control dike. Aroclor 1248 was detected at 670 ppm and Aroclor 1254 was detected at 143 ppm at sample location TC-1. The maximum concentration of PCBs was also detected at location TC-1 during the 1996 sampling event. Concentrations of PCBs at the remaining sediment locations were similar to previous results, indicating that no significant attenuation of PCBs or migration of sediments in the tidal flats has occurred since 1996.

List of Figures

1 Sediment Sample Location Map

List of Tables

1 Sediment Sampling Summary
2 PCB Concentrations in Tidal Flats Sediment

Attachments

A. Laboratory reports

Figures

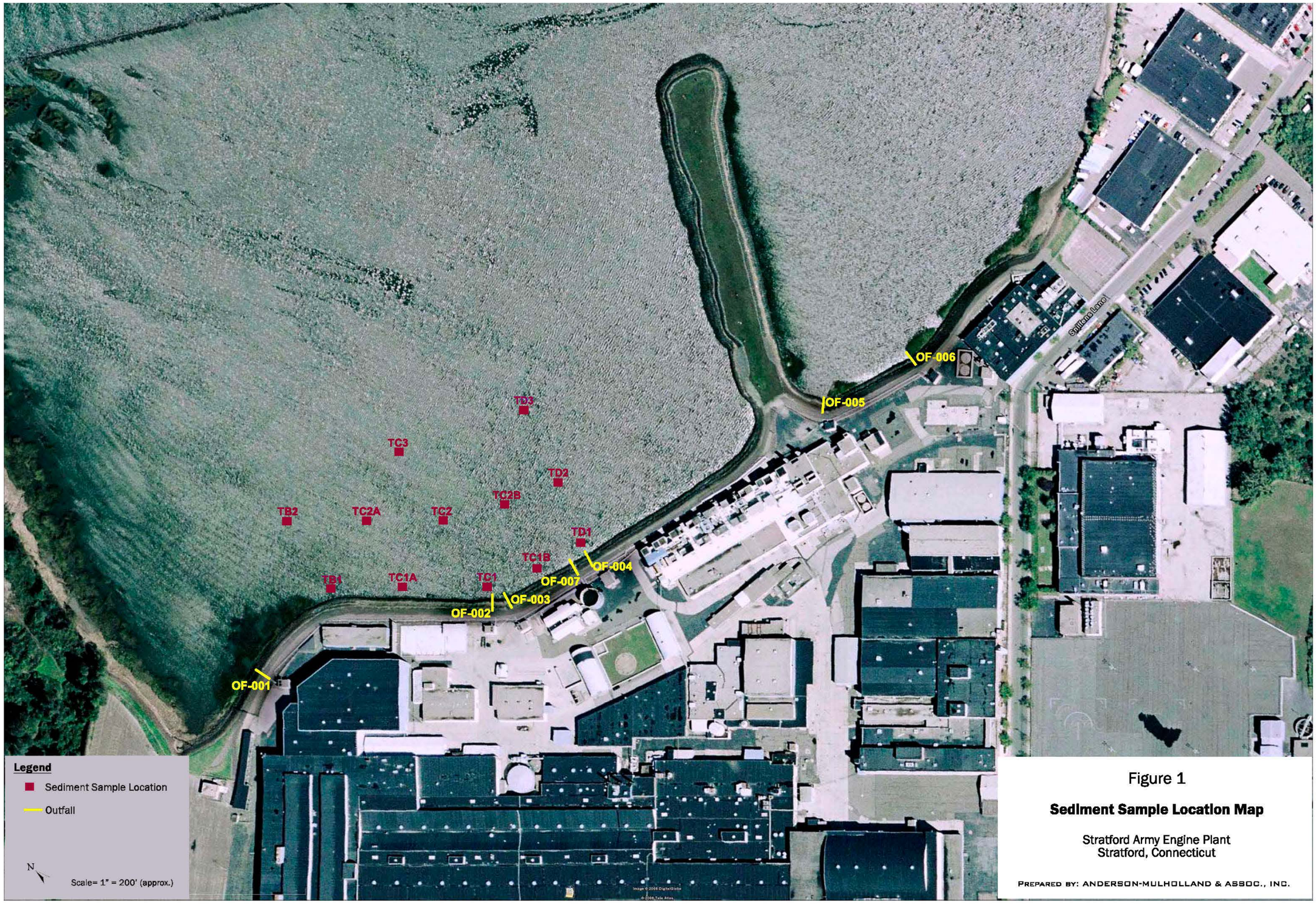


Figure 1

Sediment Sample Location Map

Stratford Army Engine Plant
Stratford, Connecticut

PREPARED BY: ANDERSON-MULHOLLAND & ASSOC., INC.

Tables

Table 1
Sediment Sample Summary
Tidal Flats
Stratford Army Engine Plant
Stratford Connecticut

Sample ID	Sample Depth Inches below surface	Bearing/Distance Degrees/feet	Analysis	Notes
TB-1	0-6	N19°E/85	PCBs	Existing location
TB-2	0-6	N19°E/217	PCBs	Existing location
TC-1	0-6	N20°E/50	PCBs	Existing location
TC-1	12-18	N20°E/50	PCBs	Deeper interval at existing location
TC-2	0-6	N20°E/241	PCBs	Existing location
TC-3	0-6	N20°E/286	PCBs	Existing location
TC-1A	0-6	N19°E/50	PCBs	New location
TC-2A	0-6	N19°E/50	PCBs	New location
TC-1B	0-6	N26°E/58	PCBs	New location
TC-2B	0-6	N26°E/245	PCBs	New location
TD-1	0-6	N36°E/62	PCBs	Existing location
TD-2	0-6	N36°E/240	PCBs	Existing location
TC-1D	0-6	N20°E/50	PCBs	Duplicate of TC-1
TC-1DD	0-6	N20°E/50	PCBs	Co-located 5 feet offset from TC-1(0-6)
Matrix Spike/MSD	0-6		PCBs	

Bearing and distance measured at transect intersection with base of flood control dike

Table 2
Polychlorinated Biphenyls in Tidal Flats Sediment
Stratford Army Engine Plant
Stratford, Connecticut

Sample ID	TB-1	TB-2	TC-1	TC-1	TC-1D	TC-1DD	TC-1A	TC-1B	TC-2
Sample Depth (inches)	(0-6)	(0-6)	(0-6)	(12-18)	(0-6)	(0-6)	(0-6)	(0-6)	(0-6)
Sample Date	28-May-08	28-May-08	28-May-08	28-May-08	28-May-08	28-May-08	28-May-08	28-May-08	28-May-08
(Reporting units are in ug/kg)					(Duplicate)	(Duplicate)[1]			
Aroclor 1016	180 U	180 U	150 U	160 U	160 U	170 U	180 U	170 U	180 U
Aroclor 1221	180 U	180 U	150 U	160 U	160 U	170 U	180 U	170 U	180 U
Aroclor 1232	180 U	180 U	150 U	160 U	160 U	170 U	180 U	170 U	180 U
Aroclor 1242	180 U	180 U	150 U	160 U	160 U	170 U	180 U	170 U	180 U
Aroclor 1248	364	235	670000 E	8740	98400	146000	897	1120	1300
Aroclor 1254	180 U	180 U	143000	1910	31000 U	34000 U	337	316	304
Aroclor 1260	180 U	180 U	29000 U	172	31000 U	34000 U	180 U	170 U	180 U
Aroclor 1262	180 U	180 U	150 U	160 U	160 U	170 U	180 U	170 U	180 U
Aroclor 1268	180 U	180 U	150 U	160 U	160 U	170 U	180 U	170 U	180 U

Sample ID	TC-2A	TC-2B	TC-3	TD-1	TD-2
Sample Depth (inches)	(0-6)	(0-6)	(0-6)	(0-6)	(0-6)
Sample Date	28-May-08	28-May-08	28-May-08	28-May-08	28-May-08
(Reporting units are in ug/kg)					
Aroclor 1016	170 U	160 U	190 U	230 U	170 U
Aroclor 1221	170 U	160 U	190 U	230 U	170 U
Aroclor 1232	170 U	160 U	190 U	230 U	170 U
Aroclor 1242	170 U	160 U	190 U	230 U	170 U
Aroclor 1248	205	553	980	483	421
Aroclor 1254	170 U	181	301	230 U	170 U
Aroclor 1260	170 U	160 U	190 U	230 U	170 U
Aroclor 1262	170 U	160 U	190 U	230 U	170 U
Aroclor 1268	170 U	160 U	190 U	230 U	170 U

U - compound was analyzed for, but not detected at or above the concentration shown
E - value exceeds calibration range
Notes:
1. Sample location TC-1DD is a co-located duplicate of TC-1 taken 5 feet from the original sample location.

Attachment A

New England ACCUTEST Laboratories

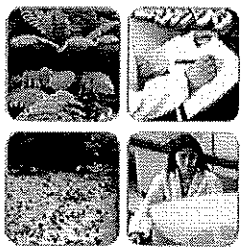
IT'S ALL IN THE CHEMISTRY

08/05/08

Technical Report for

Anderson Mulholland and Assoc.

2008 Sediment Sampling Stratford CT



Accutest Job Number: M73827

Sampling Date: 05/28/08

Report to:

Anderson Mulholland and Assoc.

Wlaparl@amaiconsult.com

ATTN: Wesley LaParl

Total number of pages in report: **33**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579) NY (11791) NJ (MA926) PA (68-01121) NC (653) IL (200018) NAVY USACE

Test results relate only to samples analyzed.

Sections: 1 2 3 4 5

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Sample Results 7
3.1: M73827-1: TD-1 8
3.2: M73827-2: TD-2 9
3.3: M73827-3: TC-1B 10
3.4: M73827-4: TC-2B 11
3.5: M73827-5: TC-2 12
3.6: M73827-6: TC-3 13
3.7: M73827-7: TC-1 (0-6) 14
3.8: M73827-8: TC-1D 15
3.9: M73827-9: TC-1DD 16
3.10: M73827-10: TC-1 (12-18) 17
3.11: M73827-11: TC-1A 18
3.12: M73827-12: TC-2A 19
3.13: M73827-13: TB-1 20
3.14: M73827-14: TB-2 21
Section 4: Misc. Forms **22**
4.1: Chain of Custody 23
4.2: RCP Form 25
4.3: Sample Tracking Chronicle 26
Section 5: GC Semi-volatiles - QC Data Summaries 29
5.1: Method Blank Summary 30
5.2: Blank Spike/Blank Spike Duplicate Summary 31
5.3: Matrix Spike/Matrix Spike Duplicate Summary 32
5.4: Surrogate Recovery Summaries 33

Sample Summary

Anderson Mulholland and Assoc.

2008 Sediment Sampling Stratford CT

Job No: M73827

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
M73827-1	05/28/08	10:45	MS	05/29/08	SO	Sediment	TD-1
M73827-2	05/28/08	10:53	MS	05/29/08	SO	Sediment	TD-2
M73827-3	05/28/08	11:13	MS	05/29/08	SO	Sediment	TC-1B
M73827-4	05/28/08	11:20	MS	05/29/08	SO	Sediment	TC-2B
M73827-5	05/28/08	11:44	MS	05/29/08	SO	Sediment	TC-2
M73827-6	05/28/08	11:39	MS	05/29/08	SO	Sediment	TC-3
M73827-7	05/28/08	11:48	MS	05/29/08	SO	Sediment	TC-1 (0-6)
M73827-8	05/28/08	11:49	MS	05/29/08	SO	Sediment	TC-1D
M73827-9	05/28/08	11:50	MS	05/29/08	SO	Sediment	TC-1DD
M73827-10	05/28/08	11:53	MS	05/29/08	SO	Sediment	TC-1 (12-18)
M73827-11	05/28/08	12:14	MS	05/29/08	SO	Sediment	TC-1A
M73827-12	05/28/08	12:10	MS	05/29/08	SO	Sediment	TC-2A
M73827-13	05/28/08	12:28	MS	05/29/08	SO	Sediment	TB-1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Anderson Mulholland and Assoc.

Job No: M73827

2008 Sediment Sampling Stratford CT

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
M73827-14	05/28/08	12:32	MS	05/29/08	SO	Sediment	TB-2

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

ACCUTEST Laboratories

2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Anderson Mulholland and Assoc.	Job No	M73827
Site:	2008 Sediment Sampling Stratford CT	Report Date	6/23/2008 9:29:23 AM

14 Sample(s) were collected on 05/28/2008 and were received at Accutest on 05/29/2008 properly preserved, at 2.3 Deg. C and intact. These Samples received an Accutest job number of M73827. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082

Matrix SO Batch ID: OP15887

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) OP15887-MS, OP15887-MSD were used as the QC samples indicated.
- Sample(s) M73827-7 have compounds reported with "E" qualifiers indicating estimated value exceeding calibration range.
- M73827-6 for Aroclor 1254: Estimated value due to the presence of other Arochlor pattern.
- OP15887-MB for Decachlorobiphenyl: Confirmed by reanalysis.
- OP15887-BSD for Decachlorobiphenyl: Confirmed by reanalysis.
- OP15887-MS for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M73827-1 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M73827-2 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M73827-3 for Aroclor 1254: Estimated value due to the presence of other Arochlor pattern.
- M73827-3 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M73827-5 for Aroclor 1254: Estimated value due to the presence of other Arochlor pattern.
- M73827-10 for Aroclor 1254: Estimated value due to the presence of other Arochlor pattern.
- M73827-7 for Aroclor 1254: Estimated value due to the presence of other Arochlor pattern.
- M73827-9 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- M73827-9 for Decachlorobiphenyl: Outside control limits due to dilution.
- M73827-8 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- M73827-8 for Decachlorobiphenyl: Outside control limits due to dilution.
- M73827-4 for Aroclor 1254: Estimated value due to the presence of other Arochlor pattern.
- M73827-7 for Decachlorobiphenyl: Outside control limits due to dilution.
- M73827-7 for Tetrachloro-m-xylene: Outside control limits due to possible matrix interference.
- M73827-12 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M73827-11 for Aroclor 1254: Estimated value due to the presence of other Arochlor pattern.
- M73827-10 for Decachlorobiphenyl: Outside control limits due to possible matrix interference.
- M73827-10 for Aroclor 1260: Estimated value due to the presence of other Arochlor pattern.
- M73827-9 for Tetrachloro-m-xylene: Outside control limits due to possible matrix interference.
- M73827-8 for Tetrachloro-m-xylene: Outside control limits due to possible matrix interference.

Extractables by GC By Method SW846 8082

Matrix SO	Batch ID: OP15887

- M73827-7 for Tetrachloro-m-xylene: Outside control limits due to dilution.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO	Batch ID: GN25926

- Sample(s) M73813-1DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN25929

- Sample(s) M73870-1DUP were used as the QC samples for Solids, Percent.

RLs not specified.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M73827).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TD-1		
Lab Sample ID:	M73827-1	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	43.0
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0328.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	230	ug/kg	
11104-28-2	Aroclor 1221	ND	230	ug/kg	
11141-16-5	Aroclor 1232	ND	230	ug/kg	
53469-21-9	Aroclor 1242	ND	230	ug/kg	
12672-29-6	Aroclor 1248	483	230	ug/kg	
11097-69-1	Aroclor 1254	ND	230	ug/kg	
11096-82-5	Aroclor 1260	ND	230	ug/kg	
37324-23-5	Aroclor 1262	ND	230	ug/kg	
11100-14-4	Aroclor 1268	ND	230	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		30-150%
877-09-8	Tetrachloro-m-xylene	74%		30-150%
2051-24-3	Decachlorobiphenyl	24% [a]		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TD-2		
Lab Sample ID:	M73827-2	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	57.8
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0329.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	170	ug/kg	
11104-28-2	Aroclor 1221	ND	170	ug/kg	
11141-16-5	Aroclor 1232	ND	170	ug/kg	
53469-21-9	Aroclor 1242	ND	170	ug/kg	
12672-29-6	Aroclor 1248	421	170	ug/kg	
11097-69-1	Aroclor 1254	ND	170	ug/kg	
11096-82-5	Aroclor 1260	ND	170	ug/kg	
37324-23-5	Aroclor 1262	ND	170	ug/kg	
11100-14-4	Aroclor 1268	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	53%		30-150%
877-09-8	Tetrachloro-m-xylene	47%		30-150%
2051-24-3	Decachlorobiphenyl	8% [a]		30-150%
2051-24-3	Decachlorobiphenyl	59%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-1B		
Lab Sample ID:	M73827-3	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	55.9
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0331.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	170	ug/kg	
11104-28-2	Aroclor 1221	ND	170	ug/kg	
11141-16-5	Aroclor 1232	ND	170	ug/kg	
53469-21-9	Aroclor 1242	ND	170	ug/kg	
12672-29-6	Aroclor 1248	1120	170	ug/kg	
11097-69-1	Aroclor 1254 [a]	316	170	ug/kg	
11096-82-5	Aroclor 1260	ND	170	ug/kg	
37324-23-5	Aroclor 1262	ND	170	ug/kg	
11100-14-4	Aroclor 1268	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		30-150%
877-09-8	Tetrachloro-m-xylene	61%		30-150%
2051-24-3	Decachlorobiphenyl	17% [b]		30-150%
2051-24-3	Decachlorobiphenyl	73%		30-150%

(a) Estimated value due to the presence of other Arochlor pattern.
(b) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-2B		
Lab Sample ID:	M73827-4	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	61.5
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0332.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	160	ug/kg	
11104-28-2	Aroclor 1221	ND	160	ug/kg	
11141-16-5	Aroclor 1232	ND	160	ug/kg	
53469-21-9	Aroclor 1242	ND	160	ug/kg	
12672-29-6	Aroclor 1248	553	160	ug/kg	
11097-69-1	Aroclor 1254 [a]	181	160	ug/kg	
11096-82-5	Aroclor 1260	ND	160	ug/kg	
37324-23-5	Aroclor 1262	ND	160	ug/kg	
11100-14-4	Aroclor 1268	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		30-150%
877-09-8	Tetrachloro-m-xylene	83%		30-150%
2051-24-3	Decachlorobiphenyl	37%		30-150%
2051-24-3	Decachlorobiphenyl	95%		30-150%

(a) Estimated value due to the presence of other Arochlor pattern.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-2		
Lab Sample ID:	M73827-5	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	55.1
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0333.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	180	ug/kg	
11104-28-2	Aroclor 1221	ND	180	ug/kg	
11141-16-5	Aroclor 1232	ND	180	ug/kg	
53469-21-9	Aroclor 1242	ND	180	ug/kg	
12672-29-6	Aroclor 1248	1300	180	ug/kg	
11097-69-1	Aroclor 1254 [a]	304	180	ug/kg	
11096-82-5	Aroclor 1260	ND	180	ug/kg	
37324-23-5	Aroclor 1262	ND	180	ug/kg	
11100-14-4	Aroclor 1268	ND	180	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		30-150%
877-09-8	Tetrachloro-m-xylene	89%		30-150%
2051-24-3	Decachlorobiphenyl	43%		30-150%
2051-24-3	Decachlorobiphenyl	95%		30-150%

(a) Estimated value due to the presence of other Arochlor pattern.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-3		
Lab Sample ID:	M73827-6	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	52.2
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0334.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	190	ug/kg	
11104-28-2	Aroclor 1221	ND	190	ug/kg	
11141-16-5	Aroclor 1232	ND	190	ug/kg	
53469-21-9	Aroclor 1242	ND	190	ug/kg	
12672-29-6	Aroclor 1248	980	190	ug/kg	
11097-69-1	Aroclor 1254 [a]	301	190	ug/kg	
11096-82-5	Aroclor 1260	ND	190	ug/kg	
37324-23-5	Aroclor 1262	ND	190	ug/kg	
11100-14-4	Aroclor 1268	ND	190	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		30-150%
877-09-8	Tetrachloro-m-xylene	76%		30-150%
2051-24-3	Decachlorobiphenyl	31%		30-150%
2051-24-3	Decachlorobiphenyl	82%		30-150%

(a) Estimated value due to the presence of other Arochlor pattern.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-1 (0-6)		
Lab Sample ID:	M73827-7	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	66.9
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0335.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2	BE0375.D	200	06/17/08	SL	06/02/08	OP15887	GBE879

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2	15.4 g	10.0 ml

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	150	ug/kg	
11104-28-2	Aroclor 1221	ND	150	ug/kg	
11141-16-5	Aroclor 1232	ND	150	ug/kg	
53469-21-9	Aroclor 1242	ND	150	ug/kg	
12672-29-6	Aroclor 1248	670000 [a]	29000	ug/kg	E
11097-69-1	Aroclor 1254 [b]	143000 [a]	29000	ug/kg	
11096-82-5	Aroclor 1260	ND [a]	29000	ug/kg	
37324-23-5	Aroclor 1262	ND	150	ug/kg	
11100-14-4	Aroclor 1268	ND	150	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	892% [d]	0% [c]	30-150%
877-09-8	Tetrachloro-m-xylene	67%	0% [c]	30-150%
2051-24-3	Decachlorobiphenyl	62%	0% [c]	30-150%
2051-24-3	Decachlorobiphenyl	118%	0% [c]	30-150%

(a) Result is from Run# 2
(b) Estimated value due to the presence of other Arochlor pattern.
(c) Outside control limits due to dilution.
(d) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-1D		
Lab Sample ID:	M73827-8	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	63.2
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0336.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2	BE0376.D	200	06/17/08	SL	06/02/08	OP15887	GBE879

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2	15.2 g	10.0 ml

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	160	ug/kg	
11104-28-2	Aroclor 1221	ND	160	ug/kg	
11141-16-5	Aroclor 1232	ND	160	ug/kg	
53469-21-9	Aroclor 1242	ND	160	ug/kg	
12672-29-6	Aroclor 1248	98400 [a]	31000	ug/kg	
11097-69-1	Aroclor 1254	ND [a]	31000	ug/kg	
11096-82-5	Aroclor 1260	ND [a]	31000	ug/kg	
37324-23-5	Aroclor 1262	ND	160	ug/kg	
11100-14-4	Aroclor 1268	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	267% [c]	0% [b]	30-150%
877-09-8	Tetrachloro-m-xylene	78%	0% [b]	30-150%
2051-24-3	Decachlorobiphenyl	48%	0% [b]	30-150%
2051-24-3	Decachlorobiphenyl	85%	0% [b]	30-150%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-1DD		
Lab Sample ID:	M73827-9	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	57.5
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0337.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2	BE0377.D	200	06/17/08	SL	06/02/08	OP15887	GBE879

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2	15.4 g	10.0 ml

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	170	ug/kg	
11104-28-2	Aroclor 1221	ND	170	ug/kg	
11141-16-5	Aroclor 1232	ND	170	ug/kg	
53469-21-9	Aroclor 1242	ND	170	ug/kg	
12672-29-6	Aroclor 1248	146000 [a]	34000	ug/kg	
11097-69-1	Aroclor 1254	ND [a]	34000	ug/kg	
11096-82-5	Aroclor 1260	ND [a]	34000	ug/kg	
37324-23-5	Aroclor 1262	ND	170	ug/kg	
11100-14-4	Aroclor 1268	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	973% [c]	0% [b]	30-150%
877-09-8	Tetrachloro-m-xylene	60%	0% [b]	30-150%
2051-24-3	Decachlorobiphenyl	33%	0% [b]	30-150%
2051-24-3	Decachlorobiphenyl	94%	0% [b]	30-150%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-1 (12-18)		
Lab Sample ID:	M73827-10	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	60.0
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0338.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2	BE0378.D	10	06/17/08	SL	06/02/08	OP15887	GBE879

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2	15.3 g	10.0 ml

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	160	ug/kg	
11104-28-2	Aroclor 1221	ND	160	ug/kg	
11141-16-5	Aroclor 1232	ND	160	ug/kg	
53469-21-9	Aroclor 1242	ND	160	ug/kg	
12672-29-6	Aroclor 1248	8740 [a]	1600	ug/kg	
11097-69-1	Aroclor 1254 [b]	1910 [a]	1600	ug/kg	
11096-82-5	Aroclor 1260 [b]	172	160	ug/kg	
37324-23-5	Aroclor 1262	ND	160	ug/kg	
11100-14-4	Aroclor 1268	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	103%	128%	30-150%
877-09-8	Tetrachloro-m-xylene	85%	94%	30-150%
2051-24-3	Decachlorobiphenyl	28% [c]	60%	30-150%
2051-24-3	Decachlorobiphenyl	72%	122%	30-150%

(a) Result is from Run# 2
(b) Estimated value due to the presence of other Arochlor pattern.
(c) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-1A		
Lab Sample ID:	M73827-11	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	53.7
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0339.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	180	ug/kg	
11104-28-2	Aroclor 1221	ND	180	ug/kg	
11141-16-5	Aroclor 1232	ND	180	ug/kg	
53469-21-9	Aroclor 1242	ND	180	ug/kg	
12672-29-6	Aroclor 1248	897	180	ug/kg	
11097-69-1	Aroclor 1254 [a]	337	180	ug/kg	
11096-82-5	Aroclor 1260	ND	180	ug/kg	
37324-23-5	Aroclor 1262	ND	180	ug/kg	
11100-14-4	Aroclor 1268	ND	180	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	81%		30-150%
2051-24-3	Decachlorobiphenyl	38%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%

(a) Estimated value due to the presence of other Arochlor pattern.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TC-2A		
Lab Sample ID:	M73827-12	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	57.8
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0340.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	170	ug/kg	
11104-28-2	Aroclor 1221	ND	170	ug/kg	
11141-16-5	Aroclor 1232	ND	170	ug/kg	
53469-21-9	Aroclor 1242	ND	170	ug/kg	
12672-29-6	Aroclor 1248	205	170	ug/kg	
11097-69-1	Aroclor 1254	ND	170	ug/kg	
11096-82-5	Aroclor 1260	ND	170	ug/kg	
37324-23-5	Aroclor 1262	ND	170	ug/kg	
11100-14-4	Aroclor 1268	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	60%		30-150%
877-09-8	Tetrachloro-m-xylene	50%		30-150%
2051-24-3	Decachlorobiphenyl	16% [a]		30-150%
2051-24-3	Decachlorobiphenyl	56%		30-150%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-1		
Lab Sample ID:	M73827-13	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	53.8
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0342.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	180	ug/kg	
11104-28-2	Aroclor 1221	ND	180	ug/kg	
11141-16-5	Aroclor 1232	ND	180	ug/kg	
53469-21-9	Aroclor 1242	ND	180	ug/kg	
12672-29-6	Aroclor 1248	364	180	ug/kg	
11097-69-1	Aroclor 1254	ND	180	ug/kg	
11096-82-5	Aroclor 1260	ND	180	ug/kg	
37324-23-5	Aroclor 1262	ND	180	ug/kg	
11100-14-4	Aroclor 1268	ND	180	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		30-150%
877-09-8	Tetrachloro-m-xylene	73%		30-150%
2051-24-3	Decachlorobiphenyl	43%		30-150%
2051-24-3	Decachlorobiphenyl	84%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-2		
Lab Sample ID:	M73827-14	**Date Sampled:**	05/28/08
Matrix:	SO - Sediment	**Date Received:**	05/29/08
Method:	SW846 8082 SW846 3545	**Percent Solids:**	55.0
Project:	2008 Sediment Sampling Stratford CT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BE0343.D	1	06/16/08	SL	06/02/08	OP15887	GBE877
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	180	ug/kg	
11104-28-2	Aroclor 1221	ND	180	ug/kg	
11141-16-5	Aroclor 1232	ND	180	ug/kg	
53469-21-9	Aroclor 1242	ND	180	ug/kg	
12672-29-6	Aroclor 1248	235	180	ug/kg	
11097-69-1	Aroclor 1254	ND	180	ug/kg	
11096-82-5	Aroclor 1260	ND	180	ug/kg	
37324-23-5	Aroclor 1262	ND	180	ug/kg	
11100-14-4	Aroclor 1268	ND	180	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%		30-150%
877-09-8	Tetrachloro-m-xylene	56%		30-150%
2051-24-3	Decachlorobiphenyl	30%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

CHAIN OF CUSTODY

495 Technology Center West, Building One
Marlborough, Massachusetts 01752
TEL: 508-481-6200 FAX: 508-481-7753

Page 1 of 2

Accutest Job #: M73827

Accutest Quote #:

Client Information

Name: Anderson Mulholland and Assoc.
Address: 110 Corporate Park Dr. Suite 202
City: Whit Plains State: NY Zip: 10604
Send Report to: Wes Laparl
Phone #: (914) 251 - 0400

Facility Information

Site Name: SAEP
Location: Stratford, Connecticut
Project Name: 2008 Sediment Sampling
FAX #: (914) 251 - 1286

Analytical Information

Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	PCBs by 8082
TD-1 -1	5-28-08	1045	MS	SD	1					X	✓
TD-2 -2		1053	MS	SD	1					X	✓
TC-1B -3		1113	MS	SD	1					X	✓
TC-2B -4		1120	MS	SD	1					X	✓
TC-2 -5		1144	MS	SD	1					X	✓
TC-3 -6		1139	MS	SD	1					X	✓
TC-1 (0-6) -7		1148	MS	SD	1					X	✓
TC-1D -8		1149	MS	SD	1					X	✓
TC-1DD -9		1150	MS	SD	1					X	✓
TC-1 (12-18) -10		1153	MS	SD	1					X	✓
TC-1A -11	↓	1214	MS	SD	1					X	✓

Turnaround Information

- [X] 14 Days Standard
- [ ] 7 Day *RUSH*
- [ ] 48 HOUR *EMERGENCY*
- [ ] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data unless previously approved

Data Deliverable Information

- [ ] Standard
- [ ] Commercial "B"
- [ ] Disk Deliverable
- [ ] State Forms
- [X] Other (Specify) RCP data package

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Michael Mann	5-28-08 @ 1530	FEDEX Airbill	2 8545-5718-7547		2 Fed Ex
3	Fed Ex	5/29/08 0900	Chris Barry	4		4
5			5	Seal #	Preserved where applicable	On Ice: 2.5°

CHAIN OF CUSTODY

495 Technology Center West, Building One
Marlborough, Massachusetts 01752
TEL: 508-481-6200 FAX: 508-481-7753

Page 2 of 2

Accutest Job #: M73827

Accutest Quote #:

Client Information

Name: Anderson Mulholland and Assoc.

Address: 110 Corporate Park Dr. Suite 202

City: Whit Plains State: NY Zip: 10604

Send Report to: Wes Laparl

Phone #: (914) 251 - 0400

Facility Information

Site Name: SAEP

Location: Stratford, Connecticut

Project Name: 2008 Sediment Sampling

FAX #: (914) 251 - 1286

Analytical Information

Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2SO4	None	PCBs by 8082
TC-2A -12	5-28-08	1210	MS	SD	1					X	✓
TB-1 -13		1228	MS	SD	1					X	✓
TB-2 -14		1232	MS	SD	1					X	✓

Turnaround Information

- [X] 14 Days Standard — Approved By:
- [ ] 7 Day *RUSH*
- [ ] 48 HOUR *EMERGENCY*
- [ ] Other _____ (Days)

RUSH TAT is for FAX data unless previously approved

Data Deliverable Information

- [ ] Standard
- [ ] Commercial "B"
- [ ] Disk Deliverable
- [ ] State Forms
- [X] Other (Specify) RCP data package

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 FedEx	5/29/08 9:00	1	2		2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserved where applicable	On Ice:
5		5			✓ 2.3°

4.1 4

M73827: Chain of Custody
Page 2 of 2

Rea onable Con i ence rotocol
aborator nal i
C Certi ication or

aborator Na e: cc te t Ne n lan Client: n er on M lhollan an oc

ro ect ocation: Se i ent Sa plin Strat or C ro ect N ber:

Sa plin Date :

aborator Sa ple ID : M73827-1, M73827-2, M73827-3, M73827-4, M73827-5, M73827-6, M73827-7, M73827-8, M73827-9, M73827-10, M73827-11, M73827-12, M73827-13, M73827-14

Metho : SM21 2540 B MOD., SW846 8082

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirments met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☐ No ☑
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☐ No ☑
	b) Were these reporting limits met?	Yes ☐ No ☑
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☑ No ☐
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: or all e tion to hich the re pon e a No ith the exception o e tion a itional in or ation t be pro i e in an attache narrati e l the an er to e tion or B i No the ata pac a e oe not eet the re ire ent or Rea onable Con i ence

I the n er i ne atte t n er pain an penaltie o per r that to the be t o no le e an belie an ba e pon per onal in ir o tho e re pon ible or pro i in the in or ation containe in thi anal tical report ch in or ation i acc rate an co plete

Authorized
Signature: Position: Lab Director

Printed Name: Reza Tand Date: 6/23/2008
Accutest New England

Internal Sample Tracking Chronicle

Anderson Mulholland and Assoc.

2008 Sediment Sampling Stratford CT

Job No: M73827

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M73827-1 TD-1	Collected: 28-MAY-08 10:45 By: MS		Received: 29-MAY-08 By:			
M73827-1	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-1	SW846 8082	16-JUN-08 02:24	SL	02-JUN-08	AJ	P8082RCP
M73827-2 TD-2	Collected: 28-MAY-08 10:53 By: MS		Received: 29-MAY-08 By:			
M73827-2	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-2	SW846 8082	16-JUN-08 03:04	SL	02-JUN-08	AJ	P8082RCP
M73827-3 TC-1B	Collected: 28-MAY-08 11:13 By: MS		Received: 29-MAY-08 By:			
M73827-3	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-3	SW846 8082	16-JUN-08 04:24	SL	02-JUN-08	AJ	P8082RCP
M73827-4 TC-2B	Collected: 28-MAY-08 11:20 By: MS		Received: 29-MAY-08 By:			
M73827-4	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-4	SW846 8082	16-JUN-08 05:04	SL	02-JUN-08	AJ	P8082RCP
M73827-5 TC-2	Collected: 28-MAY-08 11:44 By: MS		Received: 29-MAY-08 By:			
M73827-5	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-5	SW846 8082	16-JUN-08 05:44	SL	02-JUN-08	AJ	P8082RCP
M73827-6 TC-3	Collected: 28-MAY-08 11:39 By: MS		Received: 29-MAY-08 By:			
M73827-6	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-6	SW846 8082	16-JUN-08 06:24	SL	02-JUN-08	AJ	P8082RCP
M73827-7 TC-1 (0-6)	Collected: 28-MAY-08 11:48 By: MS		Received: 29-MAY-08 By:			
M73827-7	SM21 2540 B MOD.	30-MAY-08	WC			%SOL

Internal Sample Tracking Chronicle

Anderson Mulholland and Assoc.

Job No: M73827

2008 Sediment Sampling Stratford CT

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M73827-7	SW846 8082	16-JUN-08 07:04	SL	02-JUN-08	AJ	P8082RCP
M73827-7	SW846 8082	17-JUN-08 14:49	SL	02-JUN-08	AJ	P8082RCP
M73827-8	Collected: 28-MAY-08 11:49 By: MS		Received: 29-MAY-08 By:			
TC-1D						
M73827-8	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-8	SW846 8082	16-JUN-08 07:44	SL	02-JUN-08	AJ	P8082RCP
M73827-8	SW846 8082	17-JUN-08 15:29	SL	02-JUN-08	AJ	P8082RCP
M73827-9	Collected: 28-MAY-08 11:50 By: MS		Received: 29-MAY-08 By:			
TC-1DD						
M73827-9	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-9	SW846 8082	16-JUN-08 08:24	SL	02-JUN-08	AJ	P8082RCP
M73827-9	SW846 8082	17-JUN-08 16:09	SL	02-JUN-08	AJ	P8082RCP
M73827-10	Collected: 28-MAY-08 11:53 By: MS		Received: 29-MAY-08 By:			
TC-1 (12-18)						
M73827-10	SM21 2540 B MOD.	30-MAY-08	WC			%SOL
M73827-10	SW846 8082	16-JUN-08 09:04	SL	02-JUN-08	AJ	P8082RCP
M73827-10	SW846 8082	17-JUN-08 16:49	SL	02-JUN-08	AJ	P8082RCP
M73827-11	Collected: 28-MAY-08 12:14 By: MS		Received: 29-MAY-08 By:			
TC-1A						
M73827-11	SM21 2540 B MOD.	31-MAY-08	WC			%SOL
M73827-11	SW846 8082	16-JUN-08 09:44	SL	02-JUN-08	AJ	P8082RCP
M73827-12	Collected: 28-MAY-08 12:10 By: MS		Received: 29-MAY-08 By:			
TC-2A						
M73827-12	SM21 2540 B MOD.	31-MAY-08	WC			%SOL
M73827-12	SW846 8082	16-JUN-08 10:25	SL	02-JUN-08	AJ	P8082RCP
M73827-13	Collected: 28-MAY-08 12:28 By: MS		Received: 29-MAY-08 By:			
TB-1						
M73827-13	SM21 2540 B MOD.	31-MAY-08	WC			%SOL

Internal Sample Tracking Chronicle

Anderson Mulholland and Assoc.

Job No: M73827

2008 Sediment Sampling Stratford CT

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M73827-13	SW846 8082	16-JUN-08 11:45	SL	02-JUN-08	AJ	P8082RCP
M73827-14	Collected: 28-MAY-08 12:32 By: MS		Received: 29-MAY-08 By:			
TB-2						
M73827-14	SM21 2540 B MOD.	31-MAY-08	WC			%SOL
M73827-14	SW846 8082	16-JUN-08 12:25	SL	02-JUN-08	AJ	P8082RCP

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: M73827
Account: AMANYWP Anderson Mulholland and Assoc.
Project: 2008 Sediment Sampling Stratford CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15887-MB	BE0320.D	1	06/15/08	SL	06/02/08	OP15887	GBE877

The QC reported here applies to the following samples: **Method:** SW846 8082

M73827-1, M73827-2, M73827-3, M73827-4, M73827-5, M73827-6, M73827-7, M73827-8, M73827-9, M73827-10, M73827-11, M73827-12, M73827-13, M73827-14

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	96	ug/kg	
11104-28-2	Aroclor 1221	ND	96	ug/kg	
11141-16-5	Aroclor 1232	ND	96	ug/kg	
53469-21-9	Aroclor 1242	ND	96	ug/kg	
12672-29-6	Aroclor 1248	ND	96	ug/kg	
11097-69-1	Aroclor 1254	ND	96	ug/kg	
11096-82-5	Aroclor 1260	ND	96	ug/kg	
37324-23-5	Aroclor 1262	ND	96	ug/kg	
11100-14-4	Aroclor 1268	ND	96	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	88%	30-150%
877-09-8	Tetrachloro-m-xylene	84%	30-150%
2051-24-3	Decachlorobiphenyl	23%* [a]	30-150%
2051-24-3	Decachlorobiphenyl	99%	30-150%

(a) Confirmed by reanalysis.

Blank Spike/Blank Spike Duplicate Summary

Job Number: M73827
Account: AMANYWP Anderson Mulholland and Assoc.
Project: 2008 Sediment Sampling Stratford CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15887-BS	BE0321.D	1	06/15/08	SL	06/02/08	OP15887	GBE877
OP15887-BSD	BE0322.D	1	06/15/08	SL	06/02/08	OP15887	GBE877

The QC reported here applies to the following samples: **Method:** SW846 8082

M73827-1, M73827-2, M73827-3, M73827-4, M73827-5, M73827-6, M73827-7, M73827-8, M73827-9, M73827-10, M73827-11, M73827-12, M73827-13, M73827-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	263	260	99	263	99	1	66-140/30
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/30
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/30
11096-82-5	Aroclor 1260	263	274	104	277	105	1	67-140/30
37324-23-5	Aroclor 1262		ND		ND		nc	40-140/30
11100-14-4	Aroclor 1268		ND		ND		nc	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	93%	94%	30-150%
877-09-8	Tetrachloro-m-xylene	87%	88%	30-150%
2051-24-3	Decachlorobiphenyl	30%	18%* [a]	30-150%
2051-24-3	Decachlorobiphenyl	99%	100%	30-150%

(a) Confirmed by reanalysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M73827
Account: AMANYWP Anderson Mulholland and Assoc.
Project: 2008 Sediment Sampling Stratford CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15887-MS	BE0323.D	1	06/15/08	SL	06/02/08	OP15887	GBE877
OP15887-MSD	BE0324.D	1	06/15/08	SL	06/02/08	OP15887	GBE877
M73915-1	BE0325.D	1	06/16/08	SL	06/02/08	OP15887	GBE877

The QC reported here applies to the following samples: **Method:** SW846 8082

M73827-1, M73827-2, M73827-3, M73827-4, M73827-5, M73827-6, M73827-7, M73827-8, M73827-9, M73827-10, M73827-11, M73827-12, M73827-13, M73827-14

CAS No.	Compound	M73915-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		286	304	106	369	126	19	34-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	101		286	339	68	406	89	18	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M73915-1	Limits
877-09-8	Tetrachloro-m-xylene	90%	94%	95%	30-150%
877-09-8	Tetrachloro-m-xylene	78%	85%	84%	30-150%
2051-24-3	Decachlorobiphenyl	24%* [a]	37%	28%* [a]	30-150%
2051-24-3	Decachlorobiphenyl	93%	101%	104%	30-150%

(a) Outside control limits due to possible matrix interference.

Semivolatile Surrogate Recovery Summary

Job Number: M73827
Account: AMANYWP Anderson Mulholland and Assoc.
Project: 2008 Sediment Sampling Stratford CT

Method: SW846 8082 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
M73827-1	BE0328.D	81.0	74.0	24.0* [c]	90.0
M73827-2	BE0329.D	53.0	47.0	8.0* [c]	59.0
M73827-3	BE0331.D	71.0	61.0	17.0* [c]	73.0
M73827-4	BE0332.D	92.0	83.0	37.0	95.0
M73827-5	BE0333.D	100.0	89.0	43.0	95.0
M73827-6	BE0334.D	84.0	76.0	31.0	82.0
M73827-7	BE0375.D	0.0* [d]	0.0* [d]	0.0* [d]	0.0* [d]
M73827-7	BE0335.D	892.0* [c]	67.0	62.0	118.0
M73827-8	BE0376.D	0.0* [d]	0.0* [d]	0.0* [d]	0.0* [d]
M73827-8	BE0336.D	267.0* [c]	78.0	48.0	85.0
M73827-9	BE0377.D	0.0* [d]	0.0* [d]	0.0* [d]	0.0* [d]
M73827-9	BE0337.D	973.0* [c]	60.0	33.0	94.0
M73827-10	BE0378.D	128.0	94.0	60.0	122.0
M73827-10	BE0338.D	103.0	85.0	28.0* [c]	72.0
M73827-11	BE0339.D	93.0	81.0	38.0	79.0
M73827-12	BE0340.D	60.0	50.0	16.0* [c]	56.0
M73827-13	BE0342.D	80.0	73.0	43.0	84.0
M73827-14	BE0343.D	63.0	56.0	30.0	71.0
OP15887-BS	BE0321.D	93.0	87.0	30.0	99.0
OP15887-BSD	BE0322.D	94.0	88.0	18.0* [e]	100.0
OP15887-MB	BE0320.D	88.0	84.0	23.0* [e]	99.0
OP15887-MS	BE0323.D	90.0	78.0	24.0* [c]	93.0
OP15887-MSD	BE0324.D	94.0	85.0	37.0	101.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	30-150%
S2 = Decachlorobiphenyl	30-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to possible matrix interference.
(d) Outside control limits due to dilution.
(e) Confirmed by reanalysis.