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SANDERS CREEK SEDIMENT SAMPLING REPORT AND BASIS FOR ESTABLISHING PCB CLEANUP OBJECTIVE

**(Down-Gradient from Court Street to Confluence with Ley Creek;
Up-Gradient from Carrier Facility
Eastern Boundary to Sanders Creek Parkway)**

**UNITED TECHNOLOGIES/CARRIER
THOMPSON ROAD FACILITY
SYRACUSE, NEW YORK**

**EnSafe Project Number
0888808319**

Prepared for:

**United Technologies Corporation
UTC Shared Remediation Services
United Technologies Building
Hartford, Connecticut 06010**

Prepared by:

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December 2009

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December 2009

Prepared By:

May M. Helfin, PE

December 30, 2009
Date

Reviewed By:

Brian Mulhearn

December 30, 2009
Date

Table of Contents

Figures

Tables

Appendices

1.0 INTRODUCTION

Carrier Corporation (Carrier), a wholly-owned subsidiary of United Technologies Corporation (UTC) has prepared this report in response to comments dated February 24, 2009, made by the New York State Department of Environment and Conservation (NYSDEC) on the Focused Corrective Measures Study (FCMS) dated September 2008. The FCMS was prepared in response to the requests outlined in the NYSDEC letter dated May 23, 2008. Specifically, the FCMS identified, screened, developed, evaluated, and compared remedial action alternatives to reduce exposure to polychlorinated biphenyls (PCBs) by various ecosystems in Sanders Creek and therefore reduce the concentration of PCBs in the tissue of wildlife, over time. Sediment removal (dredging) has been selected as the preferred corrective measure.

Comment #9 of NYSDEC's February 24, 2009, letter brought forth their concern as to the total extent of the PCB impact downstream:

> "The recommended corrective measures will be a reasonable first step to remediating the known PCB contamination in the stream. However, some question remains as to the total extent of the PCB issues downstream. The potential erosion of contaminated sediments to areas downstream of the study site has not been investigated, although the fish tissue study indicated continued impact at the most downstream location. After the implementation of the corrective measures stated here, some additional investigation will be required to confirm that these proposed corrective measures have appropriately removed the PCB impact to the stream adjacent and downstream of the site."

In Carrier's *Response to Comments*, Carrier submitted a *Sediment Sampling Work Plan* (April 2009) to address the extent of PCBs in Sanders Creek up to its confluence with Ley Creek to address comment #9 above. Specifically, rather than conducting additional investigations in Sanders Creek after the corrective measure has been implemented, and possibly determining that a second mobilization is necessary to address contaminants farther downstream, Carrier has obtained sediment samples in Sanders Creek between Court Street and its confluence with Ley Creek. Sediment samples beyond the Ley Creek were not obtained due to unknown source(s) of contamination that may be contributed via Ley Creek. The October 2009, down-gradient sampling will be used to determine the extent of corrective action that was presented in the FCMS. A remediation plan for Sanders Creek will be submitted to NYSDEC in early spring 2010, describing the extent of corrective actions proposed for Sanders Creek.

Comment #3 of NYSDEC's July 27, 2009, letter in response to the work plan brought forth concerns related to the development of a site-specific Clean-up Objective for Sanders Creek (3.b.1):

> "This Clean-up Objective will be based upon background concentrations calculated from samples taken upstream of the Carrier Plant. However, the samples used in the calculation must reflect a central tendency of the data which is not unfairly biased by anomalously high levels that may be found in samples close to an upstream source. Carrier should propose additional upstream samples they wish to add to the planned sampling program as part of a response to these comments."

To develop a Clean-up Objective, Carrier obtained up-gradient sediment samples in Sanders Creek just west of Kinne Street culvert to a point just before the creek passes under the Sanders Creek Parkway culvert. One up-gradient sample was obtained from the drainage swale that runs along Kinne Street and discharges into Sanders Creek just prior to fronting on Carrier's property. Background threshold values (BTVs) for Sanders Creek are included in Appendix A of this report.

The background of work previously conducted can be found in the previously submitted *Corrective Action Implementation Plan, Sanders Creek Sediment and Fish Sampling Work Plan,* September 2006.

2.0 SANDERS CREEK SEDIMENT SAMPLING

2.1 Down-Gradient Sediment Sampling

Carrier collected sediment samples in select locations of Sanders Creek within a section west of Court Street downstream to the creeks confluence with Ley Creek (Figure 1). All sample locations were selected in the field by NYSDEC representative Mr. Larry Rosenmann. Areas of collection for sediment samples focused on the depositional environment of the stream. Composite samples were collected primarily in stream locations of ponded or slow moving water. Composite sediment samples were obtained by collecting sediment from several locations within an approximate 5-foot radius. The full depth of sediment (0- to 6-inch interval) was sampled at each location. Deeper sediments were not present at any of the down-gradient locations. The sediment was then mixed/composited in a stainless steel bowl, placed into glass jars with Teflon-lined lids and submitted to Accutest Laboratories (Northeast in Dayton, New Jersey — New York certification #11791) for Total PCBs using U.S. Environmental Protection Agency (USEPA) Method 8082 and TOC analysis using USEPA Method 5310B.

The distance from Court Street to the end of the proposed sampling area is approximately 3,600 feet (Figure 1). As agreed to in the field by Mr. Rosenmann, the number of data collection locations is sufficient to determine the presence or absence of PCBs and TOC concentrations in the creek sediment beyond those areas previously sampled by the NYSDEC and Carrier. As indicated in the photographs included in Appendix B, sediments deposition does not occur in many areas of Sanders Creek from Court Street to its confluence with Ley Creek. Additionally, Sanders Creek enters a culvert as it crosses under Mautz Road and continues in the culvert for approximately 1,200 feet before it exits the culvert at Deere Road. Sediments in this 1,200-foot span were not sampled due to health and safety concerns. Sediment sample distribution was as follows:

- Between Court Street and Mautz Road, west of the previous sample locations SED 01 and SED 02 (sediment sample CS05).
- In the ponded areas on either side of approximately 1,200-foot culvert that runs underground from Mautz Road to Deere Road (CS04 and CS03).
- East of the confluence of Sanders Creek and Ley Creek (CS02 and CS01).

Table 1-1 summarizes the data collected during the October 2009 sampling activities. The Accutest analytical report is included in Appendix C.

Table 1-1
Sanders Creek Down-Gradient Sediment Sampling
October 2009

		Sample Location:	CS01	CS01	CS02	CS03	CS03	CS04	CS05
		Sample Identification:	CARSEDCS012009DG	CARSEDCS012009DG Dup	CARSEDCS022009DG	CARSEDCS032009DG	CARSEDCS032009DG Dup	CARSEDCS042009DG	CARSEDCS052009DG
		Sample Date:	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009
		Matrix:	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	**Analyte**	**Units**							
Solids	Solids	percent	**77.4**	**82.3**	**72.6**	**81.1**	**69.6**	**75.5**	**63.1**
SW8082	Aroclor-1016	µg/kg	14 U	13 U	14 U	13 U	15 U	14 U	16 U
SW8082	Aroclor-1221	µg/kg	25 U	23 U	26 U	24 U	28 U	26 U	30 U
SW8082	Aroclor-1232	µg/kg	12 U	11 U	13 U	12 U	14 U	12 U	15 U
SW8082	Aroclor-1242	µg/kg	14 U	13 U	14 U	13 U	15 U	14 U	17 U
SW8082	Aroclor-1248	µg/kg	7.5 U	7 U	7.9 U	7.2 U	8.3 U	7.7 U	9.1 U
SW8082	Aroclor-1254	µg/kg	**197**	**84.2**	**187**	**213**	**209**	9.8 U	**657**
SW8082	Aroclor-1260	µg/kg	**630**	**98.1**	**233**	**188**	**487**	**3,300**	**2,180**
SW8082	Total PCB	µg/kg	**827**	**182.3**	**420**	**401**	**696**	**3,300**	**2,837**
SM 5310B	Organic Carbon, total (TOC)	mg/kg	**14,600**	**3,360**	**25,200**	**3,600**	**12,300**	**4,770**	**15,000**
	Total PCB normalized for TOC	µg PCB/gOC	56.64384	54.25595	16.66667	111.38889	56.58537	691.82390	189.13333

Notes:
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram, dry weight basis
U = undetected
Bold = detected value
Undetected values are reported down to the method detection limit (MDL)

2.2 Up-Gradient Sediment Sampling Locations

Carrier collected 12 sediment samples (CS06 through CS17) in select locations of Sanders Creek within a section east of the Carrier Facility (just west of Kinne Street) upstream to the west side of the Sanders Creek Parkway culvert (Figure 2). All up-gradient sample locations were selected in the field by NYSDEC representative Mr. Larry Rosenmann. Composite samples were collected in stream locations of ponded or slow moving water and at stream bars as well as in areas of sediment deposition where the stream channel was more lenticular with faster moving water to maintain consistency with the sampling approach previously discussed in Section 2.1. Composite sediment samples were obtained by collecting sediment from several locations within an approximate 5-foot diameter radius of the sample point from the 0- to 6-inch depth interval. The sediment was then mixed/composited in a stainless steel bowl, placed into glass jars with Teflon-lined lids and submitted to Accustest Laboratories for Total PCBs using USEPA Method 8082 and TOC analysis using USEPA Method 5310B.

The distance from the eastern boundary of the Carrier facility to Sanders Creek Parkway is approximately 1500 feet (Figure 2). Sediment sample distribution was as follows:

- In Sanders Creek, just prior to Kinne Street discharge into creek (sediment sample CS06)
- In Kinne Street drainage swale, just prior to discharging into Sanders Creek (CS17)
- Sanders Creek from Kinne Street culvert to Sanders Creek Parkway culvert (CS07 and CS16)

Table 2-1 summarizes the data collected during the October 2009 up-gradient sampling activities.

2.2.1 Background Threshold Values

Carrier calculated BTVs for PCBs in sediments in Sanders Creek using U.S. Environmental Protection Agency (USEPA) software, ProUCL Version 4.00.04 (ProUCL). The rationale for using the ProUCL statistical model was to take into consideration parametric and nonparametric statistical methods for data sets with and without non-detects.

LEGEND

- SOIL SAMPLE LOCATION (ALL RESULTS IN µg/kg) – October 2009
- SANDERS CREEK
- L17 NYSDEC SEDIMENT SAMPLE LOCATION (APPROXIMATE)
- SED02 CARRIER SEDIMENT SAMPLE LOCATION (APRIL 2006)

0 150 300
SCALE IN FEET

FIGURE 1
SANDERS CREEK
DOWNGRADIENT SEDIMENT SAMPLING
OCTOBER 2009
CARRIER FACILITY, THOMPSON ROAD
SYRACUSE, NEW YORK

REQUESTED BY:	M.H.
DRAWN BY:	E.R.
DWG DATE:	15DEC09
DWG NO:	8318R013

ENSAFE
(800) 588-7962
MEMPHIS, TENNESSEE

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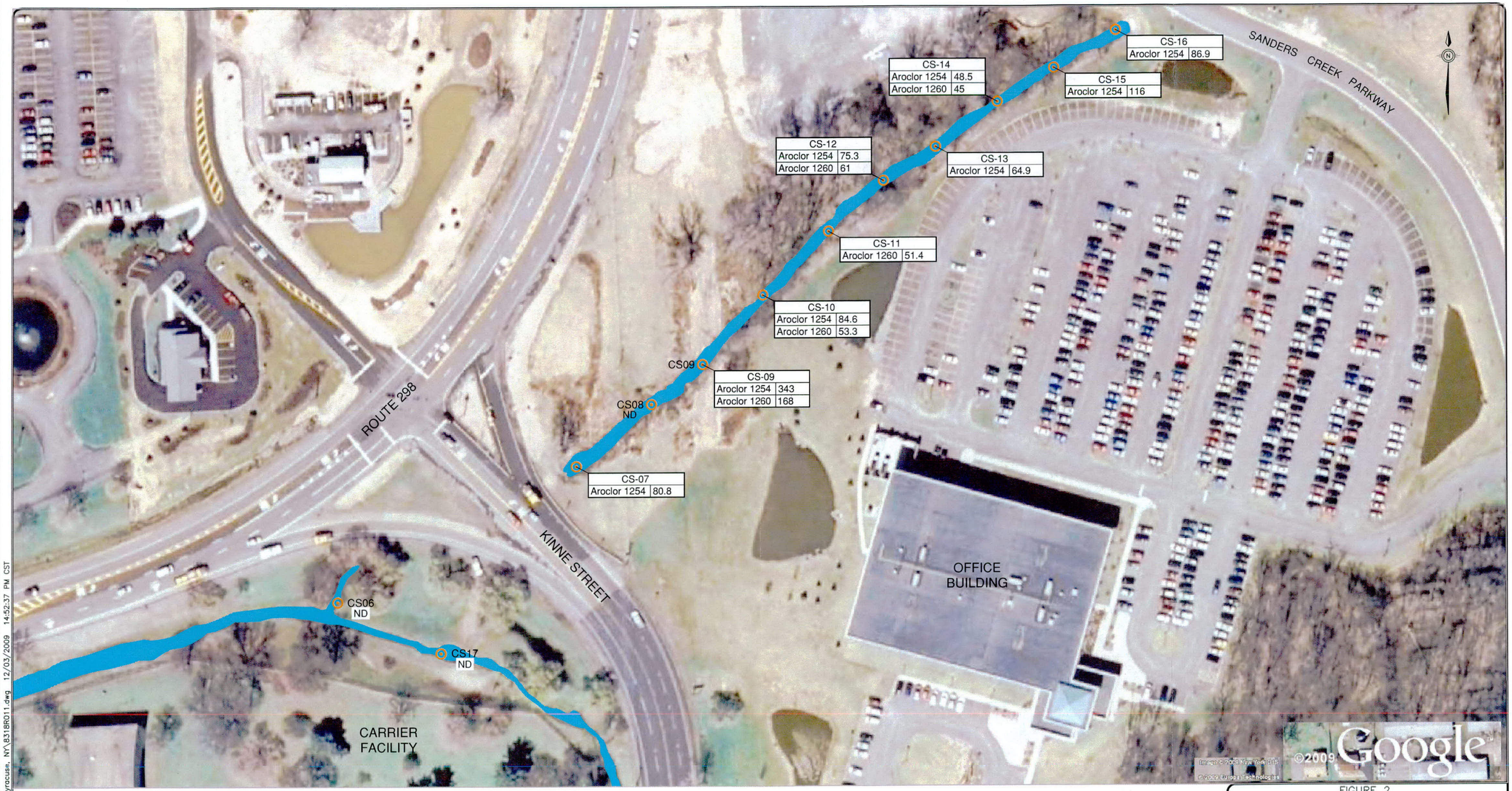


LEGEND

- SOIL SAMPLE LOCATION (ALL RESULTS IN µg/kg) – October 2009
- SANDERS CREEK
- ND NOT DETECTED

0 50 100
SCALE IN FEET

FIGURE 2
SANDERS CREEK
UPGRADIENT SEDIMENT SAMPLING
OCTOBER 2009
CARRIER FACILITY, THOMPSON ROAD
SYRACUSE, NEW YORK

REQUESTED BY:	M.H.
DRAWN BY:	E.R.
DWG DATE:	15DEC09
DWG NO:	8318R012

ENSAFE
(800) 588-7962
MEMPHIS, TENNESSEE

I:\2009 Projects-BST\8318 UTC Syracuse, NY\8318R011.dwg 12/03/2009 14:52:37 PM CST

Table 2-1
Sanders Creek Up-Gradient Sediment Sampling
October 2009

		Sample Location:	CS06	CS07	CS08	CS09	CS10	CS11
		Sample Identification:	CARSEDCS062009UG	CARSEDCS072009UG	CARSEDCS082009UG	CARSEDCS092009UG	CARSEDCS102009UG	CARSEDCS112009UG
		Sample Date:	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009	10/27/2009
		Matrix:	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	**Analyte**	**Units**						
Solids	Solids	percent	**67.3**	**62.5**	**61.7**	**59.9**	**63.6**	**61.7**
SW8082	Aroclor-1016	µg/kg	15 U	17 U	17 U	18 U	16 U	17 U
SW8082	Aroclor-1221	µg/kg	28 U	31 U	31 U	32 U	30 U	31 U
SW8082	Aroclor-1232	µg/kg	14 U	15 U	15 U	16 U	15 U	15 U
SW8082	Aroclor-1242	µg/kg	15 U	17 U	17 U	18 U	16 U	17 U
SW8082	Aroclor-1248	µg/kg	8.5 U	9.3 U	9.4 U	9.7 U	9.1 U	9.4 U
SW8082	Aroclor-1254	µg/kg	11 U	**80.8**	12 U	**343**	**84.6**	12 U
SW8082	Aroclor-1260	µg/kg	17 U	18 U	18 U	**168**	**53.3**	**51.4**
SW8082	Total PCB	µg/kg	NA	**80.8**	NA	**511**	**137.9**	**51.4**
SM 5310B	Organic Carbon, total (TOC)	mg/kg	**10,900**	**10,100**	**14,300**	**25,300**	**12,100**	**15,700**
	Total PCB normalized for TOC	µg PCB/gOC	NA	8	NA	20.19763	11.39669	3.27389

Table 2-1 (continued)
Sanders Creek Up-Gradient Sediment Sampling
October 2009

		Sample Location:	CS12	CS13	CS14	CS15	CS16	CS17
		Sample Identification:	CARSEDCS122009UG	CARSEDCS132009UG	CARSEDCS142009UG	CARSEDCS152009UG	CARSEDCS162009UG	CARSEDCS172009UG
		Sample Date:	10/29/2009	10/29/2009	10/29/2009	10/29/2009	10/29/2009	10/29/2009
		Matrix:	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	**Analyte**	**Units**						
Solids	Solids	percent	**70.7**	**69.1**	**77.7**	**45**	**70**	**75.4**
SW8082	Aroclor-1016	µg/kg	15 U	15 U	13 U	23 U	15 U	14 U
SW8082	Aroclor-1221	µg/kg	28 U	28 U	25 U	42 U	28 U	26 U
SW8082	Aroclor-1232	µg/kg	13 U	14 U	12 U	21 U	14 U	12 U
SW8082	Aroclor-1242	µg/kg	15 U	15 U	13 U	23 U	15 U	14 U
SW8082	Aroclor-1248	µg/kg	8.3 U	8.4 U	7.4 U	13 U	8.3 U	7.7 U
SW8082	Aroclor-1254	µg/kg	**75.3**	**64.9**	**48.5**	**116**	**86.9**	9.8 U
SW8082	Aroclor-1260	µg/kg	**61**	16 U	**45**	25 U	16 U	15 U
SW8082	Total PCB	µg/kg	**136.3**	**64.9**	**93.5**	**116**	**86.9**	NA
SM 5310B	Organic Carbon, total (TOC)	mg/kg	**8,060**	**11,900**	**10,200**	**34,400**	**10,400**	**11,300**
	Total PCB normalized for TOC	µg PCB/gOC	16.91067	5.45378	9.16667	3.37209	8.35577	NA

Notes:

µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram, dry weight basis
U = undetected
bold = detected value
Undetected values are reported down to the method detection limit (MDL)

3.0 FUTURE ACTIVITIES

No further sediment sampling activities, conducted as part of the order, are scheduled pending review of this data package by NYSDEC. Other activities to be conducted at the site as part of the CO include creek dredging related activities as outlined below:

Sediment Sampling Report submittal to NYSDEC	December 31, 2009
NYDEC Review/Approval	30 days after Submittal (January 31, 2010)
Remediation Action Plan	May 2010
Cleanup actions in Sanders Creek	Following approval of the Remediation Action Plan, October 2010 (tentative)

Note: Dates are conditional based upon approval date of report and proposed work plan, site conditions, and other factors.

Appendix A
Background Threshold Values of Up-Gradient Sediment Samples

Background Threshold Values of Up-Gradient Sediment Samples

EnSafe was contracted by UTC Carrier to calculate background threshold values (BTVs) for sediment in Sanders Creek, which is near the Carrier facility in Syracuse, New York. U.S. Environmental Protection Agency (USEPA) software, ProUCL Version 4.00.04 (ProUCL) was used to compute BTVs for PCBs. The rationale for using the ProUCL statistical model was to take into consideration parametric and nonparametric statistical methods for data sets with and without nondetects. ProUCL tests data distributions and calculates upper percentiles, upper prediction limits (UPLs), upper tolerance limits (UTLs), and other statistics based on data that is entered into the software. Upper limits based upon background (or reference) data are used as estimates of BTVs, compliance limits (CL), or not-to-exceed values. These upper limits are often used in site (point-by-point) versus background comparison evaluations.

ProUCL 4.00.04 contains all statistical methods as available in ProUCL 4.00.02 to address various environmental issues for both full data sets without nondetects (NDs) and for data sets with NDs (also known as left-censored data sets). In addition to having all methods available in ProUCL 4.00.02, the software can compute upper prediction and upper tolerance limits based upon gamma distribution.

ProUCL calculates BTVs using various parametric and non-parametric methods. Depending upon the results of the distribution testing, the program recommends a particular estimate as the most appropriate given the data distribution for a parameter. BTVs were developed using upgradient sediment sample results and ProUCL for PCB Aroclor 1254, PCB Aroclor 1260, and Total PCBs.

ProUCL recommended using nonparametric UPLs due to the number of samples and the number of nondetected values. BTVs are summarized below in Table A-1, and sample data are shown in Table A-2.

Table A-1
Background Threshold Values from ProUCL

Compound	BTV	Distribution	Type
Aroclor 1254	251.59 µg/kg	Nonparametric	KM 95% UPL
Aroclor 1260	310.60 µg/kg	Nonparametric	KM 95% UPL
Total PCBs	521.21 µg/kg	Nonparametric	KM 95% UPL
Total PCBs normalized for TOC	37.71 µg PCB/gOC	Nonparametric	KM 95% UPL

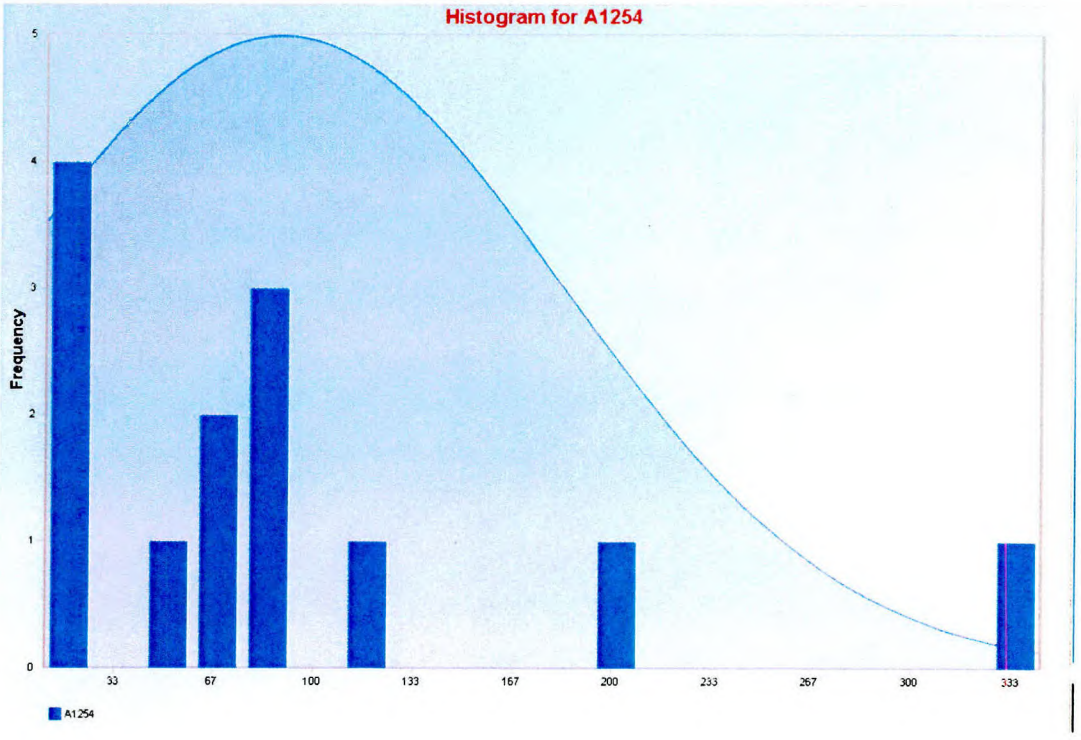
Twelve samples were collected (plus a field duplicate), and Aroclors 1254 and 1260 were the only PCBs reported. In some samples, only one Aroclor was reported, so there is some uncertainty based on data variability and non-detects. Histograms are presented below for PCB Aroclor 1254 (A1254), PCB Aroclor 1260 (A1260), Total PCBs (TPCB), and Total PCBs normalized for TOC (TPCBNTOC). ProUCL output is documented in Attachment A-1.

Table A-2
Sander's Creek Sediment PCB Data
UTC Carrier Syracuse

Down-Gradient Results															
Compound	**Units**	**CS01 - DG 10/27/2009**		**CS02 - DG 10/27/2009**		**CS03 - DG 10/27/2009**		**CS04 - DG 10/27/2009**		**CS05 - DG 10/27/2009**					
Aroclor 1016	µg/kg	14	U	14	U	13	U	14	U	16	U				
Aroclor 1221	µg/kg	25	U	26	U	24	U	26	U	30	U				
Aroclor 1232	µg/kg	12	U	13	U	12	U	12	U	15	U				
Aroclor 1242	µg/kg	14	U	14	U	13	U	14	U	17	U				
Aroclor 1248	µg/kg	7.5	U	7.9	U	7.2	U	7.7	U	9.1	U				
Aroclor 1254	µg/kg	197		187		213		9.8	U	657					
Aroclor 1260	µg/kg	630		233		188		3300		2180					
Total PCB	µg/kg	827		420		401		3300		2837					
TOC	g/kg	14.6		25.2		3.6		4.77		15					
Total PCB normalized for TOC	µg PCB/gOC	56.6438356		16.6666667		111.388889		691.823899		189.133333					
Up-Gradient Results Used to Calculate BTVs															
Compound	**Units**	**CS06 - UG 10/27/2009**		**CS07 - UG 10/27/2009**		**CS08 - UG 10/27/2009**		**CS09 - UG 10/27/2009**		**CS10 - UG 10/27/2009**		**CS11 - UG 10/27/2009**		**CS12 - UG 10/29/2009**	
Aroclor 1016	µg/kg	15	U	17	U	17	U	18	U	16	U	17	U	15	U
Aroclor 1221	µg/kg	28	U	31	U	31	U	32	U	30	U	31	U	28	U
Aroclor 1232	µg/kg	14	U	15	U	15	U	16	U	15	U	15	U	13	U
Aroclor 1242	µg/kg	15	U	17	U	17	U	18	U	16	U	17	U	15	U
Aroclor 1248	µg/kg	8.5	U	9.3	U	9.4	U	9.7	U	9.1	U	9.4	U	8.3	U
Aroclor 1254	µg/kg	11	U	80.8		12	U	343		84.6		12	U	75.3	
Aroclor 1260	µg/kg	17	U	18	U	18	U	168		53.3		51.4		61	
Total PCB	µg/kg	NA		80.8		NA		511		137.9		51.4		136.3	
TOC	µg/kg	10.9		10.1		14.3		25.3		12.1		15.7		8.06	
Total PCB normalized for TOC	µg PCB/gOC	NA		8		NA		20.1976285		11.3966942		3.27388535		16.91067	

Table A-2
Sander's Creek Sediment PCB Data
UTC Carrier Syracuse

Down-Gradient Results		CS01 - DG		CS02 - DG		CS03 - DG		CS04 - DG		CS05 - DG		
Compound	**Units**	**10/27/2009**		**10/27/2009**		**10/27/2009**		**10/27/2009**		**10/27/2009**		
		CS13 - UG		**CS14 - UG**		**CS15 - UG**		**CS16 - UG**		**CS17 - UG**		**CSFD - UG**
Compound	**Units**	**10/29/2009**		**10/29/2009**		**10/29/2009**		**10/29/2009**		**10/29/2009**		**10/27/2009**
Aroclor 1016	µg/kg	15	U	13	U	23	U	15	U	14	U	15 U
Aroclor 1221	µg/kg	28	U	25	U	42	U	28	U	26	U	28 U
Aroclor 1232	µg/kg	14	U	12	U	21	U	14	U	12	U	14 U
Aroclor 1242	µg/kg	15	U	13	U	23	U	15	U	14	U	15 U
Aroclor 1248	µg/kg	8.4	U	7.4	U	13	U	8.3	U	7.7	U	8.3 U
Aroclor 1254	µg/kg	64.9		48.5		116		86.9		9.8	U	209
Aroclor 1260	µg/kg	16	U	45		25	U	16	U	15	U	487
Total PCB	µg/kg	64.9		93.5		116		86.9		NA		696
TOC	µg/kg	11.9		10.2		34.4		10.4		11.3		12.3
Total PCB normalized for TOC	µg PCB/gOC	5.45378151		9.16666667		3.37209302		8.35576923		NA		56.5853659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2
3
4
5
33
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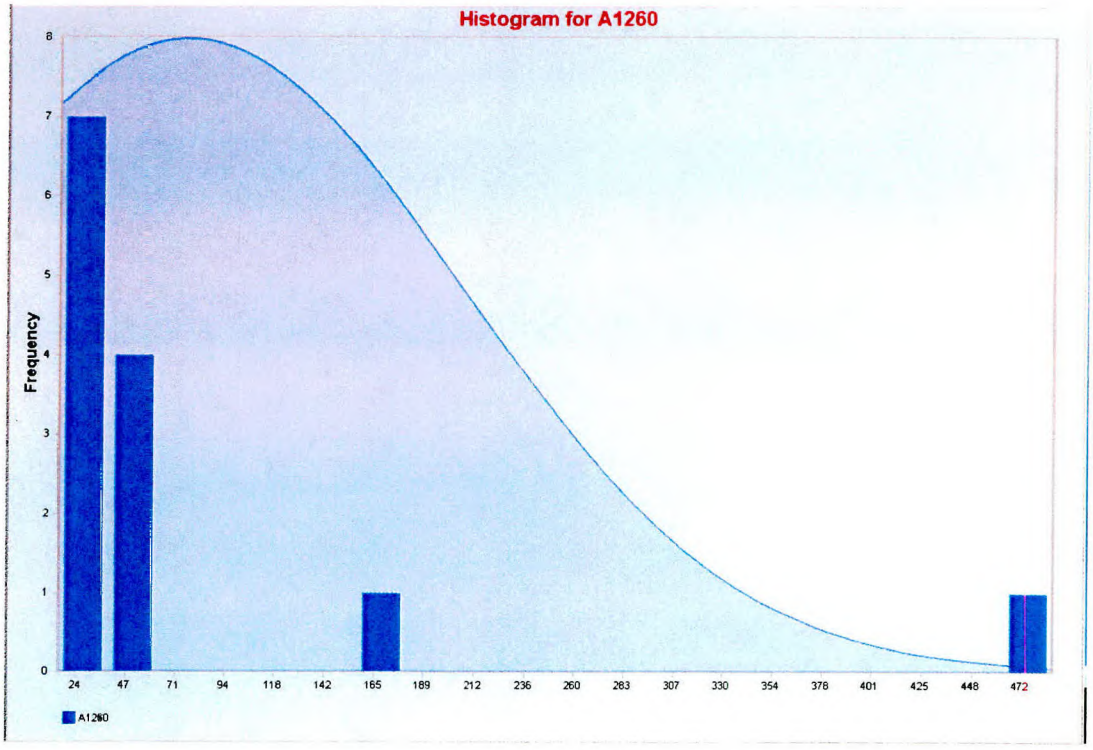
100
133
167
200
233
267
300
333
A1254


Histogram for A1260
Frequency
0
1
2
3
4
5
6
7
8
24
47
71
94
118
142
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307
330
354
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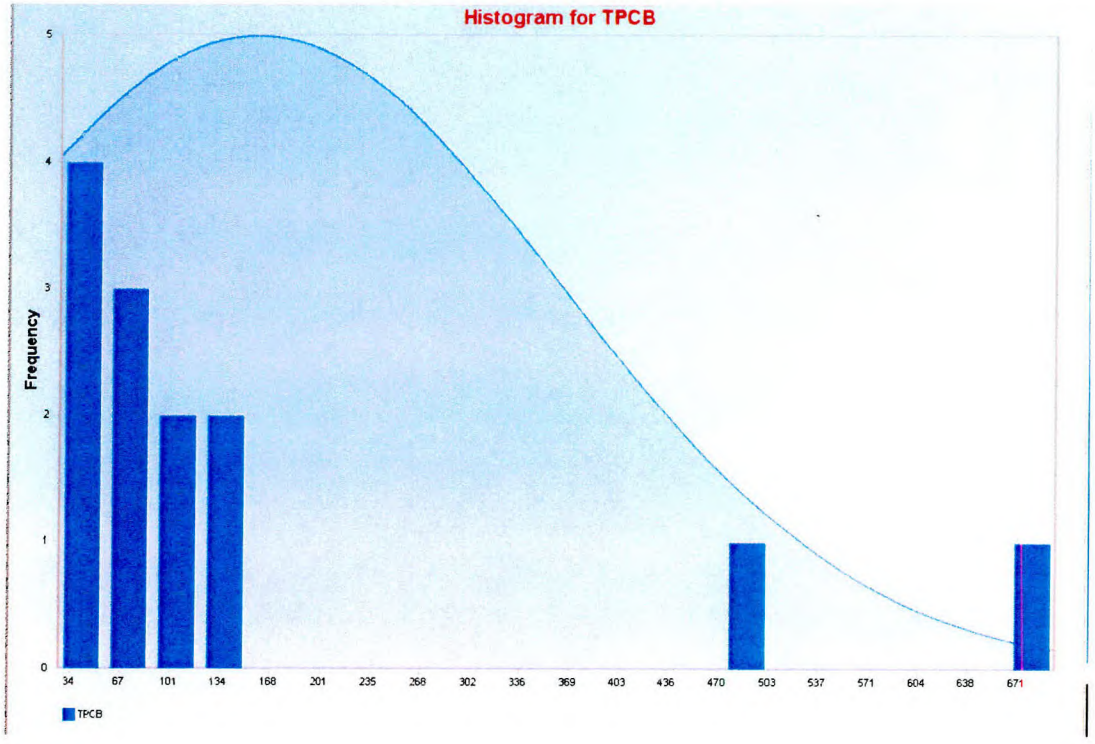
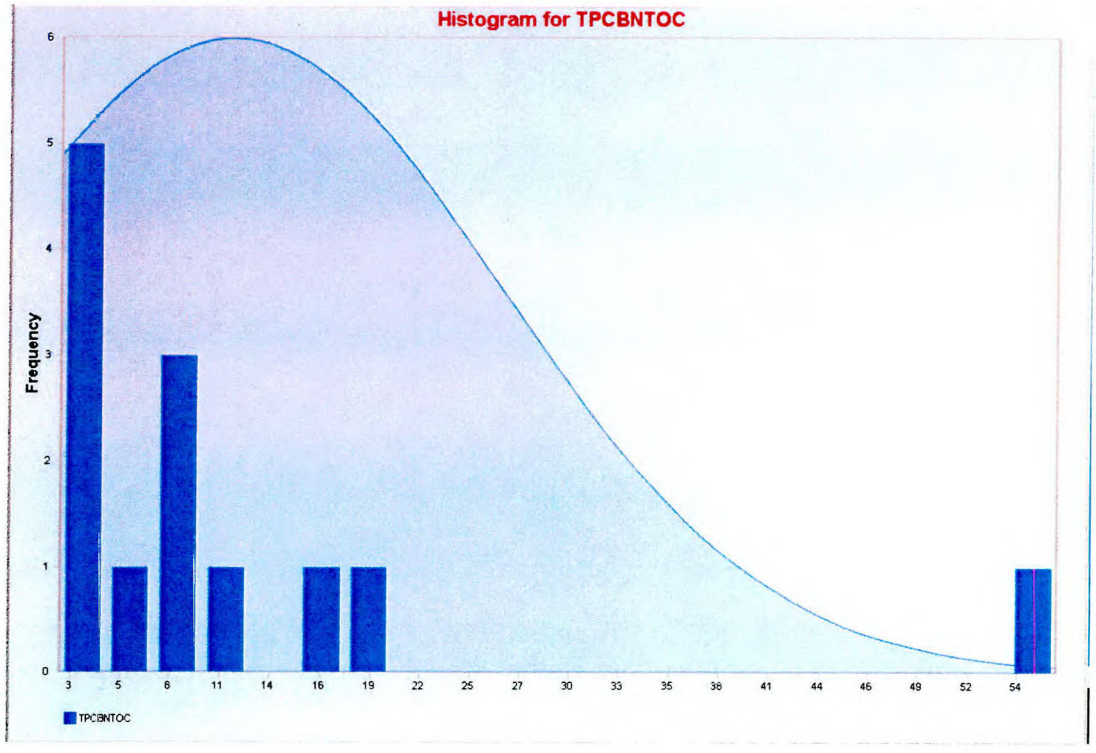
401
425
448
472
A1260


Histogram for TPCB
Frequency
0
1
2
3
4
5
34
67
101
134
168
201
235
268
302
336
369
403
436
470
503
537
571
604
638
671
TPCB


Histogram for TPCBNTOC
Frequency
0
1
2
3
4
5
6
3
5
8
11
14
16
19
22
25
27
30
33
35
38
41
44
46
49
52
54
TPCBNTOC

Attachment A-1
ProUCL output

General Background Statistics for Data Sets with Non-Detects

User Selected Options

From File	G:\BMulhearn\UTC\Carrier – Sanders Creek, Syracuse NY\2009 discussions and notes\ Background Sediment Appendix\ProUCL\UTC up-gradient BTV.wst
Full Precision	ON
Confidence Coefficient	95%
Coverage	90%
Different or Future K Values	1
Number of Bootstrap Operations	2000

A1254

General Statistics

Number of Valid Data	13	Number of Detected Data	9
Number of Distinct Detected Data	9	Number of Non-Detect Data	4
		Percent Non-Detects	30.77%

Raw Statistics

Minimum Detected	48.5
Maximum Detected	343
Mean of Detected	123.22222
SD of Detected	94.607291
Minimum Non-Detect	9.8
Maximum Non-Detect	12

Log-transformed Statistics

Minimum Detected	3.8815638
Maximum Detected	5.8377304
Mean of Detected	4.6226906
SD of Detected	0.608893
Minimum Non-Detect	2.2823824
Maximum Non-Detect	2.4849066

Data with Multiple Detection Limits

Note: Data have multiple DLs - Use of KM Method is recommended
For all methods (except KM, DL/2, and ROS Methods),
Observations < Largest ND are treated as NDs

Single Detection Limit Scenario

Number treated as Non-Detect with Single DL	4
Number treated as Detected with Single DL	9
Single DL Non-Detect Percentage	30.77%

Warning: There are only 9 Detected Values in this data

Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions

It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.

Background Statistics

Normal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.7308865
5% Shapiro Wilk Critical Value	0.829

Data not Normal at 5% Significance Level

Lognormal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.8885989
5% Shapiro Wilk Critical Value	0.829

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

DL/2 Substitution Method	
Mean	87.030769
SD	95.70676
95% UTL 90% Coverage	293.27884
95% UPL (t)	264.04686
90% Percentile (z)	209.68392
95% Percentile (z)	244.45438
99% Percentile (z)	309.67799

Maximum Likelihood Estimate(MLE) Method	
Mean	64.637994
SD	120.29922
95% UTL with 90% Coverage	323.88282
95% UPL (t)	287.1395
90% Percentile (z)	218.80765
95% Percentile (z)	262.51261
99% Percentile (z)	344.49584

Assuming Lognormal Distribution

DL/2 Substitution Method	
Mean (Log Scale)	3.7293629
SD (Log Scale)	1.4814447
95% UTL 90% Coverage	1014.2212
95% UPL (t)	645.09301
90% Percentile (z)	278.08052
95% Percentile (z)	476.33559
99% Percentile (z)	1307.2993

Log ROS Method	
Mean in Original Scale	92.482043
SD in Original Scale	90.964906
95% UTL with 90% Coverage	424.08311
95% BCA UTL with 90% Coverage	302.8
95% Bootstrap (%) UTL with 90% Coverage	343
95% UPL (t)	324.68622
90% Percentile (z)	197.58852
95% Percentile (z)	271.47167
99% Percentile (z)	492.62879

Gamma Distribution Test with Detected Values Only

k star (bias corrected)	1.9201333
Theta Star	64.173786
nu star	34.562399
A-D Test Statistic	0.7541737
5% A-D Critical Value	0.7274858
K-S Test Statistic	0.3006036
5% K-S Critical Value	0.2816032

Data not Gamma Distributed at 5% Significance Level

Data Distribution Test with Detected Values Only

Data appear Lognormal at 5% Significance Level

Nonparametric Statistics

Kaplan-Meier (KM) Method	
Mean	100.23077
SD	81.837582
SE of Mean	24.074505
95% KM UTL with 90% Coverage	276.59076
95% KM Chebyshev UPL	470.41842
95% KM UPL (t)	251.59488
90% Percentile (z)	205.10985
95% Percentile (z)	234.84161
99% Percentile (z)	290.61345

Assuming Gamma Distribution

Gamma ROS Statistics with Extrapolated Data	
Mean	101.47334
Median	75.993323
SD	84.964552
k star	1.9186316
Theta star	52.888391
Nu star	49.884423
95% Percentile of Chisquare (2k)	9.2226547

Gamma ROS Limits with Extrapolated Data

95% Wilson Hilferty (WH) Approx. Gamma UPL	255.49796
95% Hawkins Wixley (HW) Approx. Gamma UPL	257.0781

90% Percentile	199.2949
95% Percentile	243.88568
99% Percentile	343.03525

95% WH Approx. Gamma UTL with 90% Coverage	295.58883
95% HW Approx. Gamma UTL with 90% Coverage	300.39788

Note: UPL represents a preferred estimate of BTV

For an Example: KM-UPL may be used when multiple detection limits are present

Note: DL/2 is not a recommended method.

A1260

General Statistics

Number of Valid Data	13
Number of Distinct Detected Data	6

Number of Detected Data	6
Number of Non-Detect Data	7
Percent Non-Detects	53.85%

Raw Statistics

Minimum Detected	45
Maximum Detected	487
Mean of Detected	144.28333
SD of Detected	174.19286
Minimum Non-Detect	15
Maximum Non-Detect	25

Log-transformed Statistics

Minimum Detected	3.8066625
Maximum Detected	6.1882641
Mean of Detected	4.5242232
SD of Detected	0.9441219
Minimum Non-Detect	2.7080502
Maximum Non-Detect	3.2188758

Data with Multiple Detection Limits

Note: Data have multiple DLs – Use of KM Method is recommended
For all methods (except KM, DL/2, and ROS Methods),
Observations < Largest ND are treated as NDs

Single Detection Limit Scenario

Number treated as Non-Detect with Single DL	7
Number treated as Detected with Single DL	6
Single DL Non-Detect Percentage	53.85%

Warning: There are only 6 Detected Values in this data

Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions

It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.

Background Statistics

Normal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.6650356
5% Shapiro Wilk Critical Value	0.788

Data not Normal at 5% Significance Level

Lognormal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.7894374
5% Shapiro Wilk Critical Value	0.788

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

DL/2 Substitution Method

Mean	71.4
SD	132.578
95% UTL 90% Coverage	357.10559
95% UPL (t)	316.61193
90% Percentile (z)	241.30555
95% Percentile (z)	289.47141
99% Percentile (z)	379.82255

Maximum Likelihood Estimate(MLE) Method

Mean	-20.53508
SD	212.00484
95% UTL with 90% Coverage	436.33534
95% UPL (t)	371.58212
90% Percentile (z)	251.16005
95% Percentile (z)	328.18185
99% Percentile (z)	472.66192

Assuming Lognormal Distribution

DL/2 Substitution Method

Mean (Log Scale)	3.2599515
SD (Log Scale)	1.3673723
95% UTL 90% Coverage	496.03117
95% UPL (t)	326.68567
90% Percentile (z)	150.25135
95% Percentile (z)	246.92354
99% Percentile (z)	626.99283

Log ROS Method

Mean in Original Scale	69.93692
SD in Original Scale	133.33784
95% UTL with 90% Coverage	643.90739
95% BCA UTL with 90% Coverage	391.3
95% Bootstrap (%) UTL with 90% Coverage	487
95% UPL (t)	395.47253
90% Percentile (z)	159.73608
95% Percentile (z)	285.24729
99% Percentile (z)	846.4302

Gamma Distribution Test with Detected Values Only

k star (bias corrected)	0.7399638
Theta Star	194.98702
nu star	8.8795656
A-D Test Statistic	0.8217045
5% A-D Critical Value	0.7113323
K-S Test Statistic	0.3682045
5% K-S Critical Value	0.3390976

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics with Extrapolated Data

Mean	144.02554
Median	140.93197
SD	122.21693
k star	1.6102653
Theta star	89.442117
Nu star	41.866897

Data Distribution Test with Detected Values Only

Data appear Lognormal at 5% Significance Level

Nonparametric Statistics

Kaplan-Meier (KM) Method

Mean	90.823077
SD	118.82827
SE of Mean	36.102619
95% KM UTL with 90% Coverage	346.89799
95% KM Chebyshev UPL	628.336
95% KM UPL (t)	310.60395
90% Percentile (z)	243.10763
95% Percentile (z)	286.27818
99% Percentile (z)	367.25896

Gamma ROS Limits with Extrapolated Data

95% Wilson Hilferty (WH) Approx. Gamma UPL	388.2116

95% Percentile of Chisquare (2k)	8.1936863
90% Percentile	294.99164
95% Percentile	366.43033
99% Percentile	527.01203

95% Hawkins Wixley (HW) Approx. Gamma UPL		395.50428
95% WH Approx. Gamma UTL with	90% Coverage	453.78656
95% HW Approx. Gamma UTL with	90% Coverage	468.37488

Note: UPL represents a preferred estimate of BTV

For an Example: KM-UPL may be used when multiple detection limits are present

Note: DL/2 is not a recommended method.

TPCB

General Statistics

Number of Valid Data	13
Number of Distinct Detected Data	10

Number of Detected Data	10
Number of Non-Detect Data	3
Percent Non-Detects	23.08%

Raw Statistics

Minimum Detected	51.4
Maximum Detected	696
Mean of Detected	197.47
SD of Detected	220.18163
Minimum Non-Detect	24.8
Maximum Non-Detect	30

Log-transformed Statistics

Minimum Detected	3.9396382
Maximum Detected	6.5453497
Mean of Detected	4.8883879
SD of Detected	0.8526893
Minimum Non-Detect	3.2108437
Maximum Non-Detect	3.4011974

Data with Multiple Detection Limits

Note: Data have multiple DLs - Use of KM Method is recommended
For all methods (except KM, DL/2, and ROS Methods),
Observations < Largest ND are treated as NDs

Single Detection Limit Scenario

Number treated as Non-Detect with Single DL	3
Number treated as Detected with Single DL	10
Single DL Non-Detect Percentage	23.08%

Background Statistics

Normal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.6582489
5% Shapiro Wilk Critical Value	0.842

Data not Normal at 5% Significance Level

Lognormal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.8458562
5% Shapiro Wilk Critical Value	0.842

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

DL/2 Substitution Method

Mean	155.08462
SD	206.99683
95% UTL 90% Coverage	601.16278
95% UPL (t)	537.93916

Assuming Lognormal Distribution

DL/2 Substitution Method

Mean (Log Scale)		4.3652833
SD (Log Scale)		1.2389495
95% UTL	90% Coverage	1135.9442
95% UPL (t)		778.06003

90% Percentile (z)	420.36172
95% Percentile (z)	495.5641
99% Percentile (z)	636.63124

Maximum Likelihood Estimate(MLE) Method	
Mean	122.02691
SD	237.20542
95% UTL with 90% Coverage	633.20459
95% UPL (t)	560.75428
90% Percentile (z)	426.01788
95% Percentile (z)	512.1951
99% Percentile (z)	673.84923

Gamma Distribution Test with Detected Values Only

k star (bias corrected)	1.0481497
Theta Star	188.39865
nu star	20.962995
A-D Test Statistic	1.1053317
5% A-D Critical Value	0.7409997
K-S Test Statistic	0.3436259
5% K-S Critical Value	0.2716349

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics with Extrapolated Data	
Mean	151.9
Median	86.9
SD	209.42513
k star	0.1511142
Theta star	1005.2001
Nu star	3.9289688
95% Percentile of Chisquare (2k)	1.6610356
90% Percentile	450.88844
95% Percentile	834.83662
99% Percentile	1947.3255

90% Percentile (z)	384.92979
95% Percentile (z)	603.75825
99% Percentile (z)	1404.6042

Log ROS Method	
Mean in Original Scale	156.2189
SD in Original Scale	206.16698
95% UTL with 90% Coverage	970.29867
95% BCA UTL with 90% Coverage	640.5
95% Bootstrap (%) UTL with 90% Coverage	696
95% UPL (t)	686.49065
90% Percentile (z)	360.72385
95% Percentile (z)	544.39854
99% Percentile (z)	1178.1685

Data Distribution Test with Detected Values Only

Data appear Lognormal at 5% Significance Level

Nonparametric Statistics

Kaplan-Meier (KM) Method	
Mean	163.76154
SD	193.26298
SE of Mean	56.500948
95% KM UTL with 90% Coverage	580.24325
95% KM Chebyshev UPL	1037.9756
95% KM UPL (t)	521.2144
90% Percentile (z)	411.43801
95% Percentile (z)	481.65085
99% Percentile (z)	613.35845

Gamma ROS Limits with Extrapolated Data

95% Wilson Hilferty (WH) Approx. Gamma UPL	776.81707
95% Hawkins Wixley (HW) Approx. Gamma UPL	1108.2463
95% WH Approx. Gamma UTL with 90% Coverage	1010.9698
95% HW Approx. Gamma UTL with 90% Coverage	1557.0395

Note: UPL represents a preferred estimate of BTV

For an Example: KM-UPL may be used when multiple detection limits are present

Note: DL/2 is not a recommended method.

TPCBNTOC

General Statistics

Number of Valid Data	13	Number of Detected Data	10
Number of Distinct Detected Data	10	Number of Non-Detect Data	3
		Percent Non-Detects	23.08%

Raw Statistics

Minimum Detected	3.2738854
Maximum Detected	56.585366
Mean of Detected	14.271255
SD of Detected	15.841912
Minimum Non-Detect	2.098
Maximum Non-Detect	2.56

Log-transformed Statistics

Minimum Detected	1.1859775
Maximum Detected	4.0357504
Mean of Detected	2.2818372
SD of Detected	0.8610413
Minimum Non-Detect	0.7409845
Maximum Non-Detect	0.9400073

Data with Multiple Detection Limits

Note: Data have multiple DLs – Use of KM Method is recommended
For all methods (except KM, DL/2, and ROS Methods),
Observations < Largest ND are treated as NDs

Single Detection Limit Scenario

Number treated as Non-Detect with Single DL	3
Number treated as Detected with Single DL	10
Single DL Non-Detect Percentage	23.08%

Background Statistics

Normal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.6745643
5% Shapiro Wilk Critical Value	0.842

Data not Normal at 5% Significance Level

Lognormal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.9471045
5% Shapiro Wilk Critical Value	0.842

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

DL/2 Substitution Method

Mean	11.241273
SD	14.878844
95% UTL 90% Coverage	43.305181
95% UPL (t)	38.760695
90% Percentile (z)	30.309279
95% Percentile (z)	35.714793
99% Percentile (z)	45.854639

Maximum Likelihood Estimate(MLE) Method

Assuming Lognormal Distribution

DL/2 Substitution Method

Mean (Log Scale)	1.7849095
SD (Log Scale)	1.2039891
95% UTL 90% Coverage	79.798607
95% UPL (t)	55.244474
90% Percentile (z)	27.879276
95% Percentile (z)	43.176457
99% Percentile (z)	98.08231

Log ROS Method

Mean	8.9180886
SD	16.987109
95% UTL with 90% Coverage	45.525308
95% UPL (t)	40.336888
90% Percentile (z)	30.687945
95% Percentile (z)	36.859396
99% Percentile (z)	48.436013

Mean in Original Scale	11.267156
SD in Original Scale	14.859796
95% UTL with 90% Coverage	75.847847
95% BCA UTL with 90% Coverage	56.585366
95% Bootstrap (%) UTL with 90% Coverage	56.585366
95% UPL (t)	53.057463
90% Percentile (z)	27.297686
95% Percentile (z)	41.756801
99% Percentile (z)	92.684838

Gamma Distribution Test with Detected Values Only

k star (bias corrected)	1.0976345
Theta Star	13.001828
nu star	21.952691
A-D Test Statistic	0.4909845
5% A-D Critical Value	0.7397216
K-S Test Statistic	0.1924341
5% K-S Critical Value	0.271263

Data appear Gamma Distributed at 5% Significance Level

Data Distribution Test with Detected Values Only

Data appear Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

Gamma ROS Statistics with Extrapolated Data	
Mean	10.977889
Median	8
SD	15.079513
k star	0.1610863
Theta star	68.149132
Nu star	4.1882427
95% Percentile of Chisquare (2k)	1.747632
90% Percentile	32.832516
95% Percentile	59.549803
99% Percentile	135.98714

Nonparametric Statistics

Kaplan-Meier (KM) Method	
Mean	11.733401
SD	13.97193
SE of Mean	4.0847312
95% KM UTL with 90% Coverage	41.842911
95% KM Chebyshev UPL	74.934634
95% KM UPL (t)	37.575425
90% Percentile (z)	29.63915
95% Percentile (z)	34.715181
99% Percentile (z)	44.236971

Gamma ROS Limits with Extrapolated Data

95% Wilson Hilferty (WH) Approx. Gamma UPL	56.284706
95% Hawkins Wixley (HW) Approx. Gamma UPL	80.754832
95% WH Approx. Gamma UTL with 90% Coverage	73.169217
95% HW Approx. Gamma UTL with 90% Coverage	113.34883

Note: UPL represents a preferred estimate of BTV

For an Example: KM-UPL may be used when multiple detection limits are present

Note: DL/2 is not a recommended method.

Appendix B
Sanders Creek Photographs — Downstream of Court Street

Sanders Creek
Court Street to Confluence with Ley Creek
March 2009

Deer Road Culvert

81 Culvert at Deer Road looking west

82 Culvert at Deer Road looking west

83 Culvert at Deer Road looking west


84 Culvert at Deer Road; about 18 inch culvert

85 Drainage ditch leading to Deer Road culvert

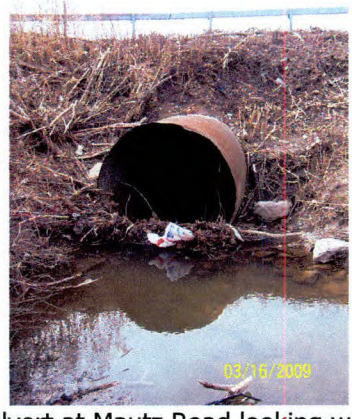
Sanders Creek
Court Street to Confluence with Ley Creek
March 2009

Mautz Road Culvert

86 Culvert at Mautz Road looking east from North; ~ 18 inch diameter

87 Drainage from culvert crossing Thompson Road

88 Culvert at Mautz Road looking west — no concrete collar around culvert



89 Culvert at Mautz Road looking west — diameter ~ 4 feet

90 Culvert at Mautz Road looking west

91 Culvert at Mautz Road looking west

Sanders Creek
Court Street to Confluence with Ley Creek
March 2009

92 North drainage to culvert area

93 Culvert at Mautz Road looking east

95 Culvert at Mautz Road looking east

Appendix C
Accutest Analytical Report

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

12/14/09

Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

0888808318, Thompson Road

Accutest Job Number: JA31689

Sampling Dates: 10/27/09 - 10/29/09

Report to:

Ensafe

tcantwell@ensafe.com

ATTN: Tina Cantwell

Total number of pages in report: **57**

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.

David N. Speis
VP Ops, Laboratory Director

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Table of Contents

Sections: 1 2 3 4 5

-1-

Sample Summary

United Technology Corporation

Job No: JA31689

ENSTNN: Carrier, Syracuse, NY
Project No: 0888808318, Thompson Road

Sample Number	Collected Date	Time By	Received	Matrix Code	Matrix Type	Client Sample ID
JA31689-1	10/27/09	12:45 SG	10/30/09	SO	Sediment	CARSEDCS012009DG
JA31689-2	10/27/09	13:30 SG	10/30/09	SO	Sediment	CARSEDCS022009DG
JA31689-3	10/27/09	14:00 SG	10/30/09	SO	Sediment	CARSEDCS032009DG
JA31689-4	10/27/09	14:30 SG	10/30/09	SO	Sediment	CARSEDCS042009DG
JA31689-5	10/27/09	14:50 SG	10/30/09	SO	Sediment	CARSEDCS052009DG
JA31689-6	10/27/09	16:30 SG	10/30/09	SO	Sediment	CARSEDCS062009UG
JA31689-7	10/27/09	17:00 SG	10/30/09	SO	Sediment	CARSEDCS072009UG
JA31689-8	10/27/09	17:15 SG	10/30/09	SO	Sediment	CARSEDCS082009UG
JA31689-9	10/27/09	17:30 SG	10/30/09	SO	Sediment	CARSEDCS092009UG
JA31689-10	10/27/09	17:45 SG	10/30/09	SO	Sediment	CARSEDCS102009UG
JA31689-11	10/27/09	18:00 SG	10/30/09	SO	Sediment	CARSEDCS112009UG
JA31689-12	10/27/09	00:00 SG	10/30/09	SO	Sediment	CARSEDCSFD2009UG
JA31689-13	10/27/09	00:00 SG	10/30/09	SO	Sediment	CARSEDCSMS/MSD2009UG

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

Sample Summary
(continued)

United Technology Corporation

Job No: JA31689

ENSTNN: Carrier, Syracuse, NY
Project No: 0888808318, Thompson Road

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA31689-14	10/29/09	08:20	SG	10/30/09	SO	Sediment	CARSEDCS122009UG
JA31689-15	10/29/09	08:40	SG	10/30/09	SO	Sediment	CARSEDCS132009UG
JA31689-16	10/29/09	09:00	SG	10/30/09	SO	Sediment	CARSEDCS142009UG
JA31689-17	10/29/09	09:15	SG	10/30/09	SO	Sediment	CARSEDCS152009UG
JA31689-18	10/29/09	09:50	SG	10/30/09	SO	Sediment	CARSEDCS162009UG
JA31689-19	10/29/09	10:15	SG	10/30/09	SO	Sediment	CARSEDCS172009UG

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

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	CARSEDCS012009DG		
Lab Sample ID:	JA31689-1	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	77.4
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86876.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	14	ug/kg	
11104-28-2	Aroclor 1221	ND	38	25	ug/kg	
11141-16-5	Aroclor 1232	ND	38	12	ug/kg	
53469-21-9	Aroclor 1242	ND	38	14	ug/kg	
12672-29-6	Aroclor 1248	ND	38	7.5	ug/kg	
11097-69-1	Aroclor 1254	197	38	9.6	ug/kg	
11096-82-5	Aroclor 1260	630	38	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		33-141%
877-09-8	Tetrachloro-m-xylene	73%		33-141%
2051-24-3	Decachlorobiphenyl	81%		32-154%
2051-24-3	Decachlorobiphenyl	94%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS012009DG		
Lab Sample ID:	JA31689-1	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	77.4
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	99.6			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	96.8			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	94.6			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	92.0			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	81.5			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	69.7			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	53.7			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	36.9			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	29.4			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	20			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	10			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	7.0			%	1	11/02/09	SH	ASTM D422-63
% Gravel	3.2			%	1	11/02/09	SH	ASTM D422-63
% Sand	67.4			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	29.4			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	77.4			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	14600	130	94	mg/kg	1	11/05/09 13:29	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CARSEDCS022009DG		
Lab Sample ID:	JA31689-2	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	72.6
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86877.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	14	ug/kg	
11104-28-2	Aroclor 1221	ND	40	26	ug/kg	
11141-16-5	Aroclor 1232	ND	40	13	ug/kg	
53469-21-9	Aroclor 1242	ND	40	14	ug/kg	
12672-29-6	Aroclor 1248	ND	40	7.9	ug/kg	
11097-69-1	Aroclor 1254	187	40	10	ug/kg	
11096-82-5	Aroclor 1260	233	40	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		33-141%
877-09-8	Tetrachloro-m-xylene	85%		33-141%
2051-24-3	Decachlorobiphenyl	88%		32-154%
2051-24-3	Decachlorobiphenyl	103%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS022009DG		
Lab Sample ID:	JA31689-2	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	72.6
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	94.2			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	84.7			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	74.7			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	60.6			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	57.8			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	45.6			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	32.2			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	21.5			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	12.7			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	10.1			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	8.0			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	5.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	3.0			%	1	11/02/09	SH	ASTM D422-63
% Gravel	25.3			%	1	11/02/09	SH	ASTM D422-63
% Sand	64.5			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	10.1			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	72.6			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	25200	140	100	mg/kg	1	11/05/09 13:42	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CARSEDCS032009DG		
Lab Sample ID:	JA31689-3	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	81.1
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86880.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	13	ug/kg	
11104-28-2	Aroclor 1221	ND	36	24	ug/kg	
11141-16-5	Aroclor 1232	ND	36	12	ug/kg	
53469-21-9	Aroclor 1242	ND	36	13	ug/kg	
12672-29-6	Aroclor 1248	ND	36	7.2	ug/kg	
11097-69-1	Aroclor 1254	213	36	9.1	ug/kg	
11096-82-5	Aroclor 1260	188	36	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		33-141%
877-09-8	Tetrachloro-m-xylene	87%		33-141%
2051-24-3	Decachlorobiphenyl	85%		32-154%
2051-24-3	Decachlorobiphenyl	89%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS032009DG		
Lab Sample ID:	JA31689-3	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	81.1
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	97.9			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	95.2			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	86.8			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	63.0			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	57.3			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	32.5			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	12.2			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	6.2			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	2.9			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	2.2			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	2.0			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	0.47			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	0.47			%	1	11/02/09	SH	ASTM D422-63
% Gravel	13.2			%	1	11/02/09	SH	ASTM D422-63
% Sand	84.6			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	2.2			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	81.1			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	3600	120	90	mg/kg	1	11/05/09 13:54	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result >= MDL but < RL

Report of Analysis

Client Sample ID:	CARSEDCS042009DG		
Lab Sample ID:	JA31689-4	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	75.5
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86881.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2	EF86922.D	5	11/06/09	VDT	11/02/09	OP40714	GEF3865

	Initial Weight	Final Volume
Run #1	17.1 g	10.0 ml
Run #2	17.1 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	14	ug/kg	
11104-28-2	Aroclor 1221	ND	39	26	ug/kg	
11141-16-5	Aroclor 1232	ND	39	12	ug/kg	
53469-21-9	Aroclor 1242	ND	39	14	ug/kg	
12672-29-6	Aroclor 1248	ND	39	7.7	ug/kg	
11097-69-1	Aroclor 1254	ND	39	9.8	ug/kg	
11096-82-5	Aroclor 1260	3300 [a]	190	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%	70%	33-141%
877-09-8	Tetrachloro-m-xylene	79%	72%	33-141%
2051-24-3	Decachlorobiphenyl	89%	89%	32-154%
2051-24-3	Decachlorobiphenyl	104%	120%	32-154%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS042009DG		
Lab Sample ID:	JA31689-4	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	75.5
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	93.0			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	87.8			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	73.1			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	68.5			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	54.8			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	37.1			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	21.4			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	11.4			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	8.3			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	7.0			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	4.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	2.0			%	1	11/02/09	SH	ASTM D422-63
% Gravel	12.2			%	1	11/02/09	SH	ASTM D422-63
% Sand	79.5			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	8.3			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	75.5			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	4770	130	96	mg/kg	1	11/05/09 14:02	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result >= MDL but < RL

Report of Analysis

Client Sample ID:	CARSEDCS052009DG		
Lab Sample ID:	JA31689-5	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	63.1
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86882.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	46	16	ug/kg	
11104-28-2	Aroclor 1221	ND	46	30	ug/kg	
11141-16-5	Aroclor 1232	ND	46	15	ug/kg	
53469-21-9	Aroclor 1242	ND	46	17	ug/kg	
12672-29-6	Aroclor 1248	ND	46	9.1	ug/kg	
11097-69-1	Aroclor 1254	657	46	12	ug/kg	
11096-82-5	Aroclor 1260	2180	46	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		33-141%
877-09-8	Tetrachloro-m-xylene	111%		33-141%
2051-24-3	Decachlorobiphenyl	104%		32-154%
2051-24-3	Decachlorobiphenyl	135%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS052009DG		
Lab Sample ID:	JA31689-5	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	63.1
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	95.9			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	88.3			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	76.7			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	74.4			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	61.8			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	50.1			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	36.0			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	19.2			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	12.8			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	8.0			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	4.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	2.5			%	1	11/02/09	SH	ASTM D422-63
% Gravel	11.7			%	1	11/02/09	SH	ASTM D422-63
% Sand	75.5			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	12.8			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	63.1			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon [a]	15000	160	120	mg/kg	1	11/05/09 14:23	SJG	LLOYD KAHN 1988

(a) Multiple injections indicate possible sample non-homogeneity.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS062009UG		
Lab Sample ID:	JA31689-6	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	67.3
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86883.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	43	15	ug/kg	
11104-28-2	Aroclor 1221	ND	43	28	ug/kg	
11141-16-5	Aroclor 1232	ND	43	14	ug/kg	
53469-21-9	Aroclor 1242	ND	43	15	ug/kg	
12672-29-6	Aroclor 1248	ND	43	8.5	ug/kg	
11097-69-1	Aroclor 1254	ND	43	11	ug/kg	
11096-82-5	Aroclor 1260	ND	43	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		33-141%
877-09-8	Tetrachloro-m-xylene	100%		33-141%
2051-24-3	Decachlorobiphenyl	96%		32-154%
2051-24-3	Decachlorobiphenyl	111%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS062009UG		
Lab Sample ID:	JA31689-6	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	67.3
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	86.5			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	65.2			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	47.3			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	45.1			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	34.9			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	27.8			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	22.5			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	17.1			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	14.3			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	11			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	6.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	3.0			%	1	11/02/09	SH	ASTM D422-63
% Gravel	34.8			%	1	11/02/09	SH	ASTM D422-63
% Sand	50.9			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	14.3			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	67.3			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	10900	150	110	mg/kg	1	11/05/09 14:31	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	CARSEDCS072009UG		
Lab Sample ID:	JA31689-7	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	62.5
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86884.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	47	17	ug/kg	
11104-28-2	Aroclor 1221	ND	47	31	ug/kg	
11141-16-5	Aroclor 1232	ND	47	15	ug/kg	
53469-21-9	Aroclor 1242	ND	47	17	ug/kg	
12672-29-6	Aroclor 1248	ND	47	9.3	ug/kg	
11097-69-1	Aroclor 1254	80.8	47	12	ug/kg	
11096-82-5	Aroclor 1260	ND	47	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		33-141%
877-09-8	Tetrachloro-m-xylene	98%		33-141%
2051-24-3	Decachlorobiphenyl	92%		32-154%
2051-24-3	Decachlorobiphenyl	105%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS072009UG		
Lab Sample ID:	JA31689-7	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	62.5
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Percent	62.5			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	10100	160	120	mg/kg	1	11/05/09 14:47	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS082009UG		
Lab Sample ID:	JA31689-8	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	61.7
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86885.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	47	17	ug/kg	
11104-28-2	Aroclor 1221	ND	47	31	ug/kg	
11141-16-5	Aroclor 1232	ND	47	15	ug/kg	
53469-21-9	Aroclor 1242	ND	47	17	ug/kg	
12672-29-6	Aroclor 1248	ND	47	9.4	ug/kg	
11097-69-1	Aroclor 1254	ND	47	12	ug/kg	
11096-82-5	Aroclor 1260	ND	47	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		33-141%
877-09-8	Tetrachloro-m-xylene	92%		33-141%
2051-24-3	Decachlorobiphenyl	96%		32-154%
2051-24-3	Decachlorobiphenyl	107%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS082009UG		
Lab Sample ID:	JA31689-8	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	61.7
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	99.5			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	98.9			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	97.7			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	97.1			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	96.0			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	94.3			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	90.7			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	69.0			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	43.4			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	28			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	9.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	3.1			%	1	11/02/09	SH	ASTM D422-63
% Gravel	1.1			%	1	11/02/09	SH	ASTM D422-63
% Sand	55.5			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	43.4			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	61.7			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	14300	160	120	mg/kg	1	11/05/09 14:58	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS092009UG		
Lab Sample ID:	JA31689-9	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	59.9
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86886.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	49	18	ug/kg	
11104-28-2	Aroclor 1221	ND	49	32	ug/kg	
11141-16-5	Aroclor 1232	ND	49	16	ug/kg	
53469-21-9	Aroclor 1242	ND	49	18	ug/kg	
12672-29-6	Aroclor 1248	ND	49	9.7	ug/kg	
11097-69-1	Aroclor 1254	343	49	12	ug/kg	
11096-82-5	Aroclor 1260	168	49	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		33-141%
877-09-8	Tetrachloro-m-xylene	78%		33-141%
2051-24-3	Decachlorobiphenyl	83%		32-154%
2051-24-3	Decachlorobiphenyl	91%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS092009UG		
Lab Sample ID:	JA31689-9	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	59.9
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Percent	59.9			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	25300	170	120	mg/kg	1	11/05/09 15:19	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS102009UG		
Lab Sample ID:	JA31689-10	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	63.6
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86887.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	46	16	ug/kg	
11104-28-2	Aroclor 1221	ND	46	30	ug/kg	
11141-16-5	Aroclor 1232	ND	46	15	ug/kg	
53469-21-9	Aroclor 1242	ND	46	16	ug/kg	
12672-29-6	Aroclor 1248	ND	46	9.1	ug/kg	
11097-69-1	Aroclor 1254	84.6	46	12	ug/kg	
11096-82-5	Aroclor 1260	53.3	46	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		33-141%
877-09-8	Tetrachloro-m-xylene	96%		33-141%
2051-24-3	Decachlorobiphenyl	93%		32-154%
2051-24-3	Decachlorobiphenyl	105%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS102009UG		
Lab Sample ID:	JA31689-10	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	63.6
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	97.5			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	97.2			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	96.2			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	95.9			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	95.2			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	94.0			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	91.5			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	58.2			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	32.1			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	16			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	7.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	3.1			%	1	11/02/09	SH	ASTM D422-63
% Gravel	2.8			%	1	11/02/09	SH	ASTM D422-63
% Sand	65.1			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	32.1			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	63.6			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	12100	160	110	mg/kg	1	11/05/09 15:28	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS112009UG		
Lab Sample ID:	JA31689-11	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	61.7
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86888.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	47	17	ug/kg	
11104-28-2	Aroclor 1221	ND	47	31	ug/kg	
11141-16-5	Aroclor 1232	ND	47	15	ug/kg	
53469-21-9	Aroclor 1242	ND	47	17	ug/kg	
12672-29-6	Aroclor 1248	ND	47	9.4	ug/kg	
11097-69-1	Aroclor 1254	ND	47	12	ug/kg	
11096-82-5	Aroclor 1260	51.4	47	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		33-141%
877-09-8	Tetrachloro-m-xylene	87%		33-141%
2051-24-3	Decachlorobiphenyl	91%		32-154%
2051-24-3	Decachlorobiphenyl	99%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS112009UG		
Lab Sample ID:	JA31689-11	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	61.7
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Percent	61.7			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	15700	160	120	mg/kg	1	11/05/09 15:40	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCSFD2009UG		
Lab Sample ID:	JA31689-12	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	69.6
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86889.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	42	15	ug/kg	
11104-28-2	Aroclor 1221	ND	42	28	ug/kg	
11141-16-5	Aroclor 1232	ND	42	14	ug/kg	
53469-21-9	Aroclor 1242	ND	42	15	ug/kg	
12672-29-6	Aroclor 1248	ND	42	8.3	ug/kg	
11097-69-1	Aroclor 1254	209	42	11	ug/kg	
11096-82-5	Aroclor 1260	487	42	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		33-141%
877-09-8	Tetrachloro-m-xylene	94%		33-141%
2051-24-3	Decachlorobiphenyl	97%		32-154%
2051-24-3	Decachlorobiphenyl	111%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCSFD2009UG		
Lab Sample ID:	JA31689-12	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	69.6
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Percent	69.6			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	12300	140	100	mg/kg	1	11/05/09 15:50	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCSMS/MSD2009UG		
Lab Sample ID:	JA31689-13	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	82.3
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86923.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	13	ug/kg	
11104-28-2	Aroclor 1221	ND	35	23	ug/kg	
11141-16-5	Aroclor 1232	ND	35	11	ug/kg	
53469-21-9	Aroclor 1242	ND	35	13	ug/kg	
12672-29-6	Aroclor 1248	ND	35	7.0	ug/kg	
11097-69-1	Aroclor 1254	84.2	35	8.9	ug/kg	
11096-82-5	Aroclor 1260	98.1	35	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		33-141%
877-09-8	Tetrachloro-m-xylene	98%		33-141%
2051-24-3	Decachlorobiphenyl	96%		32-154%
2051-24-3	Decachlorobiphenyl	99%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCSMS/MSD2009UG		
Lab Sample ID:	JA31689-13	Date Sampled:	10/27/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	82.3
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	93.0			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	66.1			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	58.9			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	26.9			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	8.0			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	2.9			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	1.3			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	0.97			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	2.0			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	1.2			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	1.0			%	1	11/02/09	SH	ASTM D422-63
% Gravel	7.0			%	1	11/02/09	SH	ASTM D422-63
% Sand	92.1			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	0.97			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	82.3			%	1	11/10/09	DD	SM18 2540G
Total Organic Carbon	3360	120	88	mg/kg	1	11/05/09 16:01	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS122009UG		
Lab Sample ID:	JA31689-14	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	70.7
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86924.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	42	15	ug/kg	
11104-28-2	Aroclor 1221	ND	42	28	ug/kg	
11141-16-5	Aroclor 1232	ND	42	13	ug/kg	
53469-21-9	Aroclor 1242	ND	42	15	ug/kg	
12672-29-6	Aroclor 1248	ND	42	8.3	ug/kg	
11097-69-1	Aroclor 1254	75.3	42	10	ug/kg	
11096-82-5	Aroclor 1260	61.0	42	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		33-141%
877-09-8	Tetrachloro-m-xylene	96%		33-141%
2051-24-3	Decachlorobiphenyl	92%		32-154%
2051-24-3	Decachlorobiphenyl	118%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS122009UG		
Lab Sample ID:	JA31689-14	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	70.7
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	99.5			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	98.3			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	97.9			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	96.2			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	93.2			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	79.9			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	39.8			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	20.3			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	10			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	48			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	2.9			%	1	11/02/09	SH	ASTM D422-63
% Gravel	0.53			%	1	11/02/09	SH	ASTM D422-63
% Sand	79.1			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	20.3			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	70.7			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	8060	140	100	mg/kg	1	11/05/09 16:19	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS132009UG		
Lab Sample ID:	JA31689-15	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	69.1
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86925.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	42	15	ug/kg	
11104-28-2	Aroclor 1221	ND	42	28	ug/kg	
11141-16-5	Aroclor 1232	ND	42	14	ug/kg	
53469-21-9	Aroclor 1242	ND	42	15	ug/kg	
12672-29-6	Aroclor 1248	ND	42	8.4	ug/kg	
11097-69-1	Aroclor 1254	64.9	42	11	ug/kg	
11096-82-5	Aroclor 1260	ND	42	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		33-141%
877-09-8	Tetrachloro-m-xylene	101%		33-141%
2051-24-3	Decachlorobiphenyl	91%		32-154%
2051-24-3	Decachlorobiphenyl	127%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS132009UG		
Lab Sample ID:	JA31689-15	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	69.1
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Percent	69.1			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	11900	140	110	mg/kg	1	11/05/09 16:35	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS142009UG		
Lab Sample ID:	JA31689-16	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	77.7
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86926.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	13	ug/kg	
11104-28-2	Aroclor 1221	ND	37	25	ug/kg	
11141-16-5	Aroclor 1232	ND	37	12	ug/kg	
53469-21-9	Aroclor 1242	ND	37	13	ug/kg	
12672-29-6	Aroclor 1248	ND	37	7.4	ug/kg	
11097-69-1	Aroclor 1254	48.5	37	9.4	ug/kg	
11096-82-5	Aroclor 1260	45.0	37	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		33-141%
877-09-8	Tetrachloro-m-xylene	92%		33-141%
2051-24-3	Decachlorobiphenyl	89%		32-154%
2051-24-3	Decachlorobiphenyl	108%		32-154%

ND = Not detected MDL - Method Detection Limit
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:	CARSEDCS142009UG		
Lab Sample ID:	JA31689-16	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	77.7
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	99.9			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	99.5			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	95.3			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	94.2			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	92.3			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	89.1			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	75.7			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	31.8			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	17.5			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	12			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	7.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	3.0			%	1	11/02/09	SH	ASTM D422-63
% Gravel	0.47			%	1	11/02/09	SH	ASTM D422-63
% Sand	82.0			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	17.5			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	77.7			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	10200	130	93	mg/kg	1	11/05/09 16:48	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS152009UG		
Lab Sample ID:	JA31689-17	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	45.0
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86927.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
Run #2							

	Initial Weight	Final Volume
Run #1	17.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	64	23	ug/kg	
11104-28-2	Aroclor 1221	ND	64	42	ug/kg	
11141-16-5	Aroclor 1232	ND	64	21	ug/kg	
53469-21-9	Aroclor 1242	ND	64	23	ug/kg	
12672-29-6	Aroclor 1248	ND	64	13	ug/kg	
11097-69-1	Aroclor 1254	116	64	16	ug/kg	
11096-82-5	Aroclor 1260	ND	64	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		33-141%
877-09-8	Tetrachloro-m-xylene	84%		33-141%
2051-24-3	Decachlorobiphenyl	81%		32-154%
2051-24-3	Decachlorobiphenyl	91%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS152009UG		
Lab Sample ID:	JA31689-17	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	45.0
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Percent	45			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	34400	220	160	mg/kg	1	11/05/09 17:05	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS162009UG		
Lab Sample ID:	JA31689-18	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	70.0
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86928.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	42	15	ug/kg	
11104-28-2	Aroclor 1221	ND	42	28	ug/kg	
11141-16-5	Aroclor 1232	ND	42	14	ug/kg	
53469-21-9	Aroclor 1242	ND	42	15	ug/kg	
12672-29-6	Aroclor 1248	ND	42	8.3	ug/kg	
11097-69-1	Aroclor 1254	86.9	42	11	ug/kg	
11096-82-5	Aroclor 1260	ND	42	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		33-141%
877-09-8	Tetrachloro-m-xylene	92%		33-141%
2051-24-3	Decachlorobiphenyl	88%		32-154%
2051-24-3	Decachlorobiphenyl	101%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS162009UG		
Lab Sample ID:	JA31689-18	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
		Percent Solids:	70.0
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Particle Size Analysis (Sieve and Hydrometer Testing)								
3 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
1.5 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.75 Inch Sieve	100			%	1	11/02/09	SH	ASTM D422-63
0.375 Inch Sieve	98.2			%	1	11/02/09	SH	ASTM D422-63
No.4 Sieve (4.75 mm)	88.5			%	1	11/02/09	SH	ASTM D422-63
No.8 Sieve (2.36 mm)	82.3			%	1	11/02/09	SH	ASTM D422-63
No.10 Sieve (2.00 mm)	80.6			%	1	11/02/09	SH	ASTM D422-63
No.16 Sieve (1.18 mm)	79.1			%	1	11/02/09	SH	ASTM D422-63
No.30 Sieve (0.60 mm)	76.8			%	1	11/02/09	SH	ASTM D422-63
No.50 Sieve (0.30 mm)	69.9			%	1	11/02/09	SH	ASTM D422-63
No.100 Sieve (0.15 mm)	41.3			%	1	11/02/09	SH	ASTM D422-63
No.200 Sieve (0.075 mm)	25.8			%	1	11/02/09	SH	ASTM D422-63
0.030 mm (Hydrometer)	16			%	1	11/02/09	SH	ASTM D422-63
0.005 mm (Hydrometer)	8.0			%	1	11/02/09	SH	ASTM D422-63
0.0015 mm (Hydrometer)	4.1			%	1	11/02/09	SH	ASTM D422-63
% Gravel	11.6			%	1	11/02/09	SH	ASTM D422-63
% Sand	62.7			%	1	11/02/09	SH	ASTM D422-63
% Silt, Clay, Colloids	25.8			%	1	11/02/09	SH	ASTM D422-63
Solids, Percent	70			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon [a]	10400	140	100	mg/kg	1	11/05/09 17:37	SJG	LLOYD KAHN 1988

(a) Multiple injections indicate possible sample non-homogeneity.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS172009UG		
Lab Sample ID:	JA31689-19	Date Sampled:	10/29/09
Matrix:	SO - Sediment	Date Received:	10/30/09
Method:	SW846 8082 SW846 3545	Percent Solids:	75.4
Project:	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86929.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	14	ug/kg	
11104-28-2	Aroclor 1221	ND	39	26	ug/kg	
11141-16-5	Aroclor 1232	ND	39	12	ug/kg	
53469-21-9	Aroclor 1242	ND	39	14	ug/kg	
12672-29-6	Aroclor 1248	ND	39	7.7	ug/kg	
11097-69-1	Aroclor 1254	ND	39	9.8	ug/kg	
11096-82-5	Aroclor 1260	ND	39	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		33-141%
877-09-8	Tetrachloro-m-xylene	92%		33-141%
2051-24-3	Decachlorobiphenyl	90%		32-154%
2051-24-3	Decachlorobiphenyl	90%		32-154%

ND = Not detected MDL - Method Detection Limit
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

Accutest LabLink@534499 13:07 14-Dec-2009

Report of Analysis

Client Sample ID:	CARSEDCS172009UG		
Lab Sample ID:	JA31689-19	**Date Sampled:**	10/29/09
Matrix:	SO - Sediment	**Date Received:**	10/30/09
		Percent Solids:	75.4
Project:	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Percent	75.4			%	1	11/09/09	DD	SM18 2540G
Total Organic Carbon	11300	130	96	mg/kg	1	11/05/09 18:13	SJG	LLOYD KAHN 1988

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

7955 3140 1330
8702 8485 9310

PAGE 1 OF 2 DN

SO

FED-EX Tracking # 7955 3140 1320 | Bottle Order Control #
Accutest Quote # | Accutest Job # JA31689

Client / Reporting Information

Company Name: ENSAFE
Street Address: 220 ATHENS WAY
City: NASHVILLE State: TN Zip: 37228
Project Contact: DAVID WYATT E-mail:
Phone #: 615-255-9300 Fax #:
Sampler(s) Name(s): SHANE GOODNIGHT Phone #:

Project Information

Project Name: SANDERS CRK SEDIMENT CARRIER THOMPSON ROAD
Street:
City: SYRACUSE State: NY
Project #: 0888808318
Client Purchase Order #:
Project Manager: MAY HEFLIN

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

PCB 8082 | TCLP | GRAINSIZE ANALYSIS

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	PCB 8082	TCLP	GRAINSIZE ANALYSIS	LAB USE ONLY
-1	CARSEDCS01 2009 DG		10/27/09	1245	SG	SED	3					3				X	X	X	WC1,
-2	CARSEDCS02 2009 DG			1330			3					3				X	X	X	WC50,
-3	CARSEDCS03 2009 DG			1400			3					3				X	X	X	UTC7
-4	CARSEDCS04 2009 DG			1430			3					3				X	X	X	
-5	CARSEDCS05 2009 DG			1450			3					3				X	X	X	
-6	CARSEDCS06 2009 UG			1630			3					3				X	X	X	
-7	CARSEDCS07 2009 UG			1700			2					2				X	X		
-8	CARSEDCS08 2009 UG			1715			3					3				X	X	X	
-9	CARSEDCS09 2009 UG			1730			2					2				X	X		
-10	CARSEDCS10 2009 UG			1745			3					3				X	X	X	
-11	CARSEDCS11 2009 UG			1800			2					2				X	X		
-12	CARSEDCSFD 2009 UG		10/27/09				2					2				X	X		

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [x] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Labtink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

LEVEL 2 QA/QC

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	10/29/09	1 FED EX # 8702 8485 9310	2 Fed Ex	10/30/09 1000	2
3		3	4		4
5		5	Custody Seal #	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp. 4.6c; 3.4c; 3.0c

ACCUTEST Laboratories

SO

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JA31689

Client / Reporting Information

Company Name: ENSAFE
Street Address: 220 ATHENS WAY
City / State / Zip: NASHVILLE TN 37228
Project Contact: DAVID WYATT | E-mail:
Phone #: 615-255-9300 | Fax #:
Sampler(s) Name(s): SHANE GOODNIGHT | Phone #:

Project Information

Project Name: CARRIER THOMPSON ROAD SANDERS CRK SEDIMENT
Street:
City: SYRACUSE | State: NY
Project #: 08888808318
Client Purchase Order #:
Project Manager: MAY HEFLIN

Billing Information (if different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

PCB 8082 | TOCLK | GRAINSIZE ANALYSIS

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
-13	CARSEDCS[illegible]	-13	10/27/09		SG	SED	3					X				
-14	CARSEDCS12 2009UG		10/29/09	8:20			3					X				
-15	CARSEDCS13 2009UG			8:40			2					X				
-16	CARSEDCS14 2009UG			9:00			3					X				
-17	CARSEDCS15 2009UG			9:15			2					X				
-18	CARSEDCS16 2009UG			9:50			3					X				
-19	CARSEDCS17 2009UG		10/29/09	10:15			2					X				

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [x] Std. 10 Business Days (by Contract only)
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Labilink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions: LEVEL 2 QA/QC

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	10/29/09	1 FEDEX# 8702 8485 9310	2 Fedex	10/30/09 1041	2
3		3	4		4
5		5	Custody Seal #:	Intact / Not Intact	Preserved where applicable:	On Ice: ✓	Cooler Temp.

A

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA31689 **Client:** ENSAFE **Immediate Client Services Action Required:** Yes

Date / Time Received: 10/30/2009 **Delivery Method:** FedEx **Client Service Action Required at Login:** No

Project: CARRIER THOMPSON ROAD SANDER **No. Coolers:** 3 **Airbill #'s:** 7955 3140 1330

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☐		☑	3. COC Present:	☑		☐
2. Custody Seals Intact:	☐		☑	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☑	
2. Trip Blank listed on COC:	☐	☑	
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☐		☑
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

-13 PLEASE CONFIRM WHAT SAMPLE THIS MS/MSD GOES WITH.

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

ACCUTEST

Sample Receipt Summary - Problem Resolution

Accutest Job Number: JA31689

CSR: Marie Meidhof **Response Date** 11/12/2009

Response: Cancel -13D and -13S.

3.1 3

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA31689: Chain of Custody
Page 4 of 4

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: JA31689
Account: UTC United Technology Corporation
Project: ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40714-MB1	EF86874.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863

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

JA31689-1, JA31689-2, JA31689-3, JA31689-4, JA31689-5, JA31689-6, JA31689-7, JA31689-8, JA31689-9, JA31689-10, JA31689-11, JA31689-12, JA31689-13, JA31689-14, JA31689-15, JA31689-16, JA31689-17, JA31689-18, JA31689-19

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	29	10	ug/kg	
11104-28-2	Aroclor 1221	ND	29	19	ug/kg	
11141-16-5	Aroclor 1232	ND	29	9.5	ug/kg	
53469-21-9	Aroclor 1242	ND	29	11	ug/kg	
12672-29-6	Aroclor 1248	ND	29	5.8	ug/kg	
11097-69-1	Aroclor 1254	ND	29	7.4	ug/kg	
11096-82-5	Aroclor 1260	ND	29	11	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	92%	33-141%
877-09-8	Tetrachloro-m-xylene	91%	33-141%
2051-24-3	Decachlorobiphenyl	114%	32-154%
2051-24-3	Decachlorobiphenyl	115%	32-154%

Blank Spike Summary

Job Number: JA31689
Account: UTC United Technology Corporation
Project: ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40714-BS1	EF86875.D	1	11/05/09	VDT	11/02/09	OP40714	GEF3863

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

JA31689-1, JA31689-2, JA31689-3, JA31689-4, JA31689-5, JA31689-6, JA31689-7, JA31689-8, JA31689-9, JA31689-10, JA31689-11, JA31689-12, JA31689-13, JA31689-14, JA31689-15, JA31689-16, JA31689-17, JA31689-18, JA31689-19

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	118	133	113	80-158
11104-28-2	Aroclor 1221		ND		70-130
11141-16-5	Aroclor 1232		ND		70-130
53469-21-9	Aroclor 1242		ND		70-130
12672-29-6	Aroclor 1248		ND		70-130
11097-69-1	Aroclor 1254		ND		70-130
11096-82-5	Aroclor 1260	118	128	109	70-145

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	99%	33-141%
877-09-8	Tetrachloro-m-xylene	99%	33-141%
2051-24-3	Decachlorobiphenyl	120%	32-154%
2051-24-3	Decachlorobiphenyl	122%	32-154%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA31689
Account: UTC United Technology Corporation
Project: ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40714-MS	EF86930.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865
OP40714-MSD	EF86931.D	1	11/07/09	VDT	11/02/09	OP40714	GEF3865
JA31689-13	EF86923.D	1	11/06/09	VDT	11/02/09	OP40714	GEF3865

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

JA31689-1, JA31689-2, JA31689-3, JA31689-4, JA31689-5, JA31689-6, JA31689-7, JA31689-8, JA31689-9, JA31689-10, JA31689-11, JA31689-12, JA31689-13, JA31689-14, JA31689-15, JA31689-16, JA31689-17, JA31689-18, JA31689-19

CAS No.	Compound	JA31689-13 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		141	192	136	197	139	3	43-173/42
11104-28-2	Aroclor 1221	ND			ND		ND		nc	70-130/30
11141-16-5	Aroclor 1232	ND			ND		ND		nc	70-130/30
53469-21-9	Aroclor 1242	ND			ND		ND		nc	70-130/30
12672-29-6	Aroclor 1248	ND			ND		ND		nc	70-130/30
11097-69-1	Aroclor 1254	84.2			110		122		10	70-130/24
11096-82-5	Aroclor 1260	98.1		141	288	134	279	128	3	34-164/41

CAS No.	Surrogate Recoveries	MS	MSD	JA31689-13	Limits
877-09-8	Tetrachloro-m-xylene	107%	108%	100%	33-141%
877-09-8	Tetrachloro-m-xylene	110%	111%	98%	33-141%
2051-24-3	Decachlorobiphenyl	98%	98%	96%	32-154%
2051-24-3	Decachlorobiphenyl	99%	98%	99%	32-154%

Semivolatile Surrogate Recovery Summary

Job Number: JA31689
Account: UTC United Technology Corporation
Project: ENSTNN: Carrier, Syracuse, NY

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]
JA31689-1	EF86876.D	77.0	73.0	81.0	94.0
JA31689-2	EF86877.D	97.0	85.0	88.0	103.0
JA31689-3	EF86880.D	91.0	87.0	85.0	89.0
JA31689-4	EF86922.D	70.0	72.0	89.0	120.0
JA31689-4	EF86881.D	92.0	79.0	89.0	104.0
JA31689-5	EF86882.D	105.0	111.0	104.0	135.0
JA31689-6	EF86883.D	98.0	100.0	96.0	111.0
JA31689-7	EF86884.D	97.0	98.0	92.0	105.0
JA31689-8	EF86885.D	95.0	92.0	96.0	107.0
JA31689-9	EF86886.D	80.0	78.0	83.0	91.0
JA31689-10	EF86887.D	97.0	96.0	93.0	105.0
JA31689-11	EF86888.D	89.0	87.0	91.0	99.0
JA31689-12	EF86889.D	96.0	94.0	97.0	111.0
JA31689-13	EF86923.D	100.0	98.0	96.0	99.0
JA31689-14	EF86924.D	96.0	96.0	92.0	118.0
JA31689-15	EF86925.D	98.0	101.0	91.0	127.0
JA31689-16	EF86926.D	92.0	92.0	89.0	108.0
JA31689-17	EF86927.D	84.0	84.0	81.0	91.0
JA31689-18	EF86928.D	91.0	92.0	88.0	101.0
JA31689-19	EF86929.D	92.0	92.0	90.0	90.0
OP40714-BS1	EF86875.D	99.0	99.0	120.0	122.0
OP40714-MB1	EF86874.D	92.0	91.0	114.0	115.0
OP40714-MS	EF86930.D	107.0	110.0	98.0	99.0
OP40714-MSD	EF86931.D	108.0	111.0	98.0	98.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	33-141%
S2 = Decachlorobiphenyl	32-154%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

General Chemistry

5

QC Data Summaries

Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JA31689
Account: UTC - United Technology Corporation
Project: ENSTNN: Carrier, Syracuse, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Total Organic Carbon	GP51442/GN32015	100	0.00	mg/kg	2000	1950	97.5	80-120%

Associated Samples:
Batch GP51442: JA31689-1, JA31689-10, JA31689-11, JA31689-12, JA31689-13, JA31689-14, JA31689-15, JA31689-16, JA31689-17, JA31689-18, JA31689-19, JA31689-2, JA31689-3, JA31689-4, JA31689-5, JA31689-6, JA31689-7, JA31689-8, JA31689-9
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JA31689
Account: UTC - United Technology Corporation
Project: ENSTNN: Carrier, Syracuse, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
% Gravel	GP51391/GN32206	JA31689-14	%	0.53	0.91	52.8	0-77%
% Sand	GP51391/GN32206	JA31689-14	%	79.1	79.2	0.1	0-31%
% Silt, Clay, Colloids	GP51391/GN32206	JA31689-14	%	20.3	19.9	2.0	0-36%
0.0015 mm (Hydrometer)	GP51391/GN32206	JA31689-14	%	2.9	2.9	0.0	0-61%
0.005 mm (Hydrometer)	GP51391/GN32206	JA31689-14	%	48	6.0	22.2	0-87%
0.030 mm (Hydrometer)	GP51391/GN32206	JA31689-14	%	10	12	18.2	0-50%
0.375 Inch Sieve	GP51391/GN32206	JA31689-14	%	100	100	0.0	0-27%
0.75 Inch Sieve	GP51391/GN32206	JA31689-14	%	100	100	0.0	0-21%
1.5 Inch Sieve	GP51391/GN32206	JA31689-14	%	100	100	0.0	0-20%
3 Inch Sieve	GP51391/GN32206	JA31689-14	%	100	100	0.0	0-20%
No.10 Sieve (2.00 mm)	GP51391/GN32206	JA31689-14	%	97.9	97.7	0.1	0-18%
No.100 Sieve (0.15 mm)	GP51391/GN32206	JA31689-14	%	39.8	37.5	6.0	0-32%
No.16 Sieve (1.18 mm)	GP51391/GN32206	JA31689-14	%	96.2	96.6	0.4	0-21%
No.200 Sieve (0.075 mm)	GP51391/GN32206	JA31689-14	%	20.3	19.9	2.3	0-27%
No.30 Sieve (0.60 mm)	GP51391/GN32206	JA31689-14	%	93.2	94.1	0.9	0-27%
No.4 Sieve (4.75 mm)	GP51391/GN32206	JA31689-14	%	99.5	99.1	0.4	0-17%
No.50 Sieve (0.30 mm)	GP51391/GN32206	JA31689-14	%	79.9	78.5	1.8	0-25%
No.8 Sieve (2.36 mm)	GP51391/GN32206	JA31689-14	%	98.3	98.0	1.3	0-18%
Total Organic Carbon	GP51442/GN32015	JA31689-1	mg/kg	14600	11100	27.2	0-32%

Associated Samples:
Batch GP51391: JA31689-1, JA31689-10, JA31689-13, JA31689-14, JA31689-16, JA31689-18, JA31689-2, JA31689-3, JA31689-4, JA31689-5, JA31689-6, JA31689-8
Batch GP51442: JA31689-1, JA31689-10, JA31689-11, JA31689-12, JA31689-13, JA31689-14, JA31689-15, JA31689-16, JA31689-17, JA31689-18, JA31689-19, JA31689-2, JA31689-3, JA31689-4, JA31689-5, JA31689-6, JA31689-7, JA31689-8, JA31689-9
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JA31689
Account: UTC - United Technology Corporation
Project: ENSTNN: Carrier, Syracuse, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Total Organic Carbon	GP51442/GN32015	JA31689-1	mg/kg	14600	16800	23200	51.3	51-132%

Associated Samples:
Batch GP51442: JA31689-1, JA31689-10, JA31689-11, JA31689-12, JA31689-13, JA31689-14, JA31689-15, JA31689-16, JA31689-17, JA31689-18, JA31689-19, JA31689-2, JA31689-3, JA31689-4, JA31689-5, JA31689-6, JA31689-7, JA31689-8, JA31689-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits