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December 23, 2009

Mr. Larry A. Rosenmann  
New York State Department of Environmental Conservation  
Bureau of Hazardous Waste & Radiation Management  
Division of Solid & Hazardous Materials  
625 Broadway  
Albany, New York 12233-7528

**Re: Carrier Corporation, Thompson Road Facility, Syracuse, New York  
Corrective Action Order — Index CO 7-20051118-4  
Potential PCB Source Investigation Report**

Dear Mr. Rosenmann:

Please find enclosed one hard copy of the *Potential PCB Source Report* for the referenced facility. The report presents data collected from site investigations (October through December 2009) in areas identified as potential PCB sources to storm water.

Please call me if you have any questions at (615) 255-9300.

Sincerely,

EnSafe Inc.

By: May Heflin, PE

Encl. Potential PCB Source Report

cc: Ms. MJ Peachey — NYSDEC Regional Engineer  
Mr. Tim Diguilio — NYSDEC Region 7, Syracuse  
Mr. James Gruppe — NYSDEC Region 7, Syracuse  
Ms. Sandy Lizlovs — NYSDEC Region 7, Syracuse  
Ms. Rebecca Quail — NYSDEC Bureau of Habitat, Albany  
Ms. Susan Edwards — NYSDEC Division of Environmental Remediation  
Mr. Dare Adelugba — NYSDEC Division of Water, Albany  
Mr. Samuel Ezekwo — USEPA Region 2  
Mr. William Penn — UTC  
Mr. Nelson Wong — Carrier Corporation

# **POTENTIAL PCB SOURCES INVESTIGATION REPORT**

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

**EnSafe Project Number  
0888808318**

**Revision No.: 0**

**Prepared for:**

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

**Prepared by:**



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December 2009

Prepared By:

  
May M. Heflin, PE

December 23, 2009  
Date

Reviewed By:

  
Thomas B. Green, Jr. - Associate Principal

December 23, 2009  
Date

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Appendix A	New York Leak Detection Summary of Findings
Appendix B	Analytical Summary Tables
Appendix C	Laboratory Analytical Reports
Appendix D	Potential PCB Source Report: Rooftop Runoff, September 30, 2009

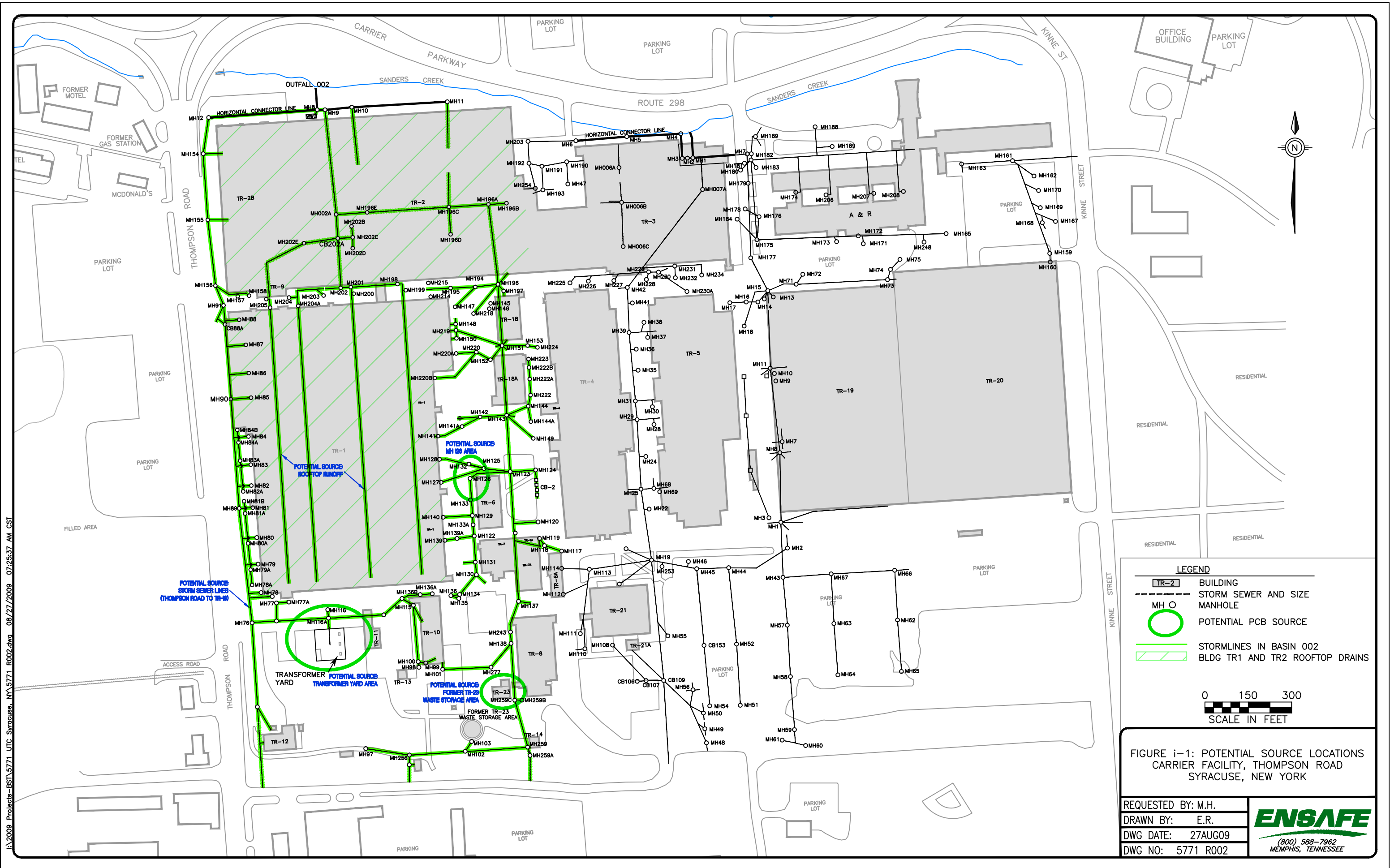
## EXECUTIVE SUMMARY

Carrier Corporation (Carrier), a wholly-owned subsidiary of United Technologies Corporation, is currently working through Corrective Action Order — Index CO 7-20051118-4 (order) dated February 13, 2006, with the New York State Department of Environmental Conservation (NYSDEC) to identify potential sources of poly-chlorinated biphenyls (PCBs) in storm water effluent at Outfall 002. Carrier prepared a *Potential PCB Source Work Plan, September 2009* and implemented the activities described therein in October and November 2009.

The work plan identified five potential PCB source areas in the 002 drainage basin which were the focus of the investigation: 1) Transformer Yard, 2) Thompson Road and TR-18 storm sewer lines, 3) Building TR-1 and TR-2 roof runoff, 4) the area near MH-126, and 5) the former TR-23 Waste Storage Area [WSA]. **Figure i-1 Potential PCB Source Locations** shows the location of each potential source area. A summary of the findings is listed below.

- Both storm sewer lines in the Outfall 002 drainage basin — in particular those lines in the Transformer Yard area — appear to serve as a continuing source of PCBs to storm water; though it is unlikely that the storm lines are the original source of contamination. Historically, PCBs may have been discharged within the area served by these storm lines, or contaminated sediments may have been washed into the storm line during rain events and accumulated over time.
- Surface water runoff samples collected from the Transformer Yard area contain PCBs and therefore the runoff may represent a continuing source of PCBs to storm water.
- Runoff from the central and southern sections of the Building TR-1 roof contains PCBs and therefore appears to represent a continuing source of PCBs to storm water.
- Runoff from portions of the central, western, and northern sections of the Building TR-2 roof contain PCBs, and therefore this roof appears to represent a continuing source of PCBs to storm water.
- Subsurface soils from MH-126 and TR-23 areas do not appear to represent a continuing source of PCBs to storm water.

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## **1.0 POTENTIAL SOURCE: TRANSFORMER YARD**

Based on a review of site operations and history, the Transformer Yard (Area of Concern D in Table 1 of the Order) was identified as a location of polychlorinated biphenyl (PCB) releases to the storm water system. Therefore, it was identified as a potential source of PCB contamination in storm water runoff in the work plan and was an area of focus during the October and November site investigation.

The conceptual site model (CSM) developed for this area evaluated two likely pathways for PCBs to enter the storm sewer system:

1. Subsurface lateral migration of contaminated storm water and sediments into storm lines via cracks and gaps in the storm line — this pathway was assessed by inspecting the storm lines in the Transformer Yard Area using a video camera. Prior to video inspection the lines were pressure washed using a high-powered jetter (3,000 to 4,000 pounds per square inch). Pressure washing was not in-and-of-itself a method used to assess a PCB migration pathway but was intended to better prepare the lines for inspection activities.

Video inspection was performed by New York Leak Detection (NYLD), Jamesville, New York. Unfortunately, much of the storm line was inaccessible due to blockages (debris and/or sediment accumulations) even after pressure washing. The sections of the storm line that were successfully inspected showed a moderate amount of deterioration, with some buildup of sediment and sludge in portions of the line. **Figure 1-1** shows the sections of storm lines that were inspected with associated findings summarized at each section. A copy of the NYLD summary of findings is included in **Appendix A**.

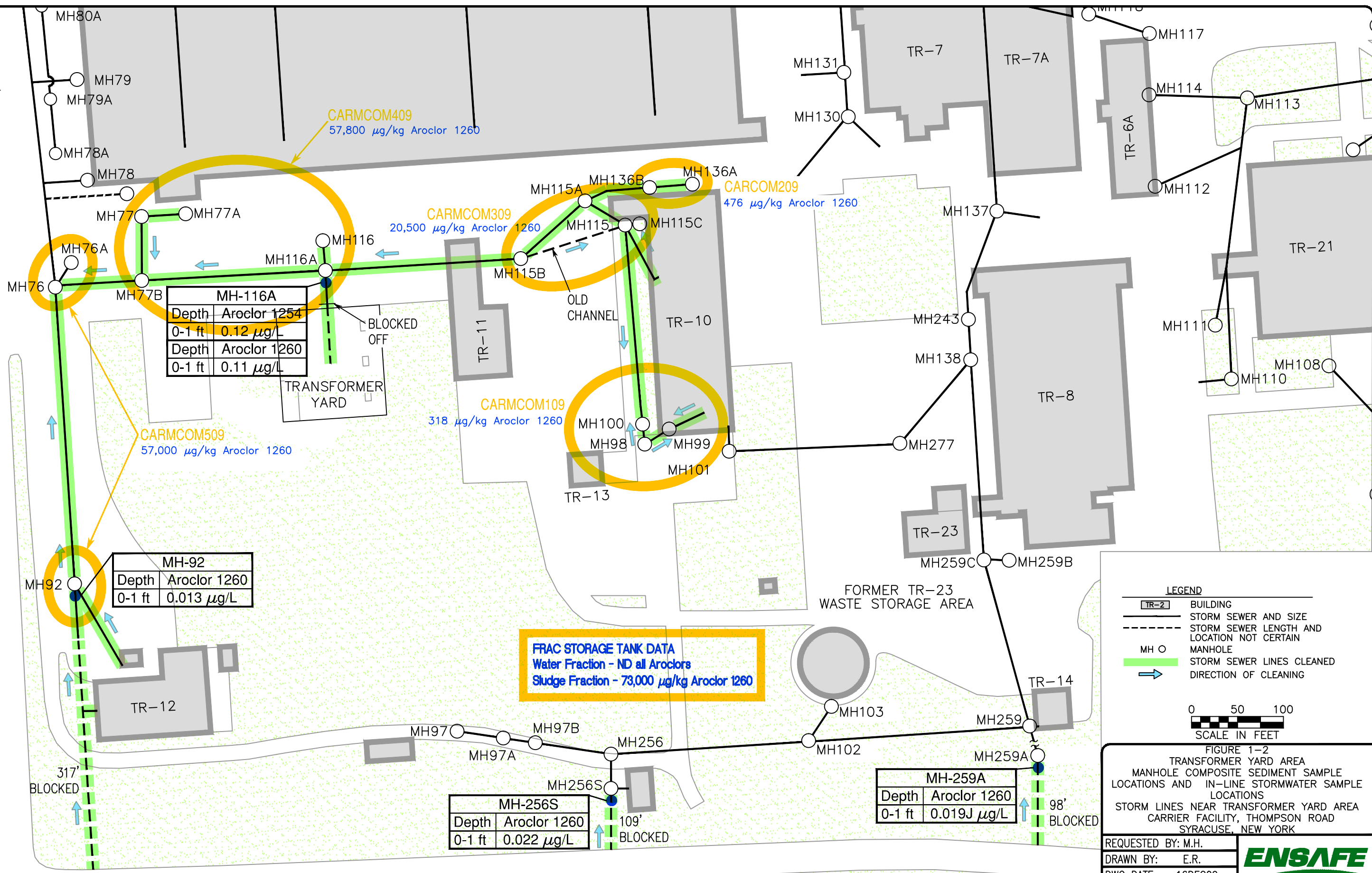
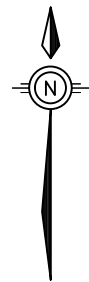
Prior to cleaning and for waste characterization purposes, composite sediment samples were obtained from the manholes in the lines that were to be pressure washed. Samples were submitted to Accutest Laboratories, Dayton, New Jersey (New York Certification 11791), for Total PCB analysis using U.S. Environmental Protection Agency (USEPA) Method 8082. Composite samples had up to 67.8 milligrams per kilogram (mg/kg) Aroclor 1260. **Figure 1-2** shows the locations of manholes from which sediment samples were collected and composited. While the video inspection did not capture images of sediments laterally migrating into the storm lines, the inspections and sampling did confirm the presence of accumulated sediments and sludge in the lines that appear to serve as a continuing source of PCBs to storm water. **Table 1-1** provides a data summary of composite samples obtained during the October storm line cleaning activities. It is unlikely that the storm lines are the original source of contamination. Analytical summary tables are provided in **Appendix B**. The Accutest analytical report for these data is included in **Appendix C**.





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THOMPSON ROAD



MH-116A	
Depth	Aroclor 1254
0-1 ft	0.12 $\mu\text{g/L}$
Depth	Aroclor 1260
0-1 ft	0.11 $\mu\text{g/L}$

MH-92	
Depth	Aroclor 1260
0-1 ft	0.013 $\mu\text{g/L}$

MH-256S	
Depth	Aroclor 1260
0-1 ft	0.022 $\mu\text{g/L}$

MH-259A	
Depth	Aroclor 1260
0-1 ft	0.019J $\mu\text{g/L}$

CARMCOM409  
57,800  $\mu\text{g/kg}$  Aroclor 1260

CARMCOM309  
20,500  $\mu\text{g/kg}$  Aroclor 1260

CARMCOM209  
476  $\mu\text{g/kg}$  Aroclor 1260

CARMCOM109  
318  $\mu\text{g/kg}$  Aroclor 1260

CARMCOM509  
57,000  $\mu\text{g/kg}$  Aroclor 1260

FRAC STORAGE TANK DATA  
Water Fraction - ND all Aroclors  
Sludge Fraction - 73,000  $\mu\text{g/kg}$  Aroclor 1260

**LEGEND**

- TR-2 BUILDING
- STORM SEWER AND SIZE
- STORM SEWER LENGTH AND LOCATION NOT CERTAIN
- MH O MANHOLE
- STORM SEWER LINES CLEANED
- DIRECTION OF CLEANING

0 50 100  
SCALE IN FEET

FIGURE 1-2  
TRANSFORMER YARD AREA  
MANHOLE COMPOSITE SEDIMENT SAMPLE  
LOCATIONS AND IN-LINE STORMWATER SAMPLE  
LOCATIONS  
STORM LINES NEAR TRANSFORMER YARD AREA  
CARRIER FACILITY, THOMPSON ROAD  
SYRACUSE, NEW YORK

REQUESTED BY: M.H.  
DRAWN BY: E.R.  
DWG DATE: 16DEC09  
DWG NO: 8318R008



<b>Table 1-1</b> <b>Potential Source Area: Transformer Yard</b> <b>Manhole Composite Sediment Samples Prior to Storm Line Cleaning</b>						
Manhole Locations	Sample ID	Sample Date	PCB Result (µg/kg)			
			Aroclor 1260	Aroclor 1254	Aroclor 1248	Aroclor 1242
MH-99, MH-98, MH-100	CARMCOM109	10-12-09	318	ND	ND	ND
MH136A, MH136B	CARMCOM209	10-12-09	476	ND	ND	ND
MH-115, MH-115A – MH-115B	CARMCOM309	10-13-09	20,500	ND	ND	ND
MH-116 & 116A, MH-77, 77A & 77B	CARMCOM409	10-13-09	67,800	ND	ND	ND
MH-76 & 76A, MH-92	CARMCOM509	10-14-09	57,100	ND	ND	ND
Frac Tank	Water Fraction	10-15-09	ND	ND	ND	ND
	Sludge Fraction	10-15-09	73,000	ND	ND	ND

**Notes:**

µg/kg = micrograms per kilogram

ND = not detected above the compound-specific MDL. An analytical summary table is provided in Appendix B.

J = indicates an estimated value

As indicated in **Figures 1-1 and 1-2** and also summarized in **Appendix A**, while the storm lines appear to originate offsite, they were found to be blocked near the Carrier southern property boundary. It is not clear if the blockage is intentional or a result of accumulations (bricks and/or other debris) in the line. Nevertheless, an in-line storm water sample was obtained from each of these three lines at the point where it enters Carrier property and prior to comingling with Carrier storm water at manholes MH-92, MH-256 and MH-259A, respectively. A storm water sample was also collected from the line that enters MH-116A from the direction of the Transformer Yard. The sample was obtained at the point where the pipe enters MH-116A, not in the manhole where storm water enters the manhole from other directions. Because this pipe enters the manhole at an elevation slightly less than the lateral line from the east, it is not possible to know with certainty that the runoff sample did not represent comingled storm water from both lines. A data summary is provided in **Table 1-2**. Analytical summary tables are provided in **Appendix B**. The analytical report for this data is included in **Appendix C**.

<b>Table 1-2</b> <b>Potential PCB Source: Transformer Yard Area</b> <b>Storm Water Runoff (in Manhole) Data Summary</b>				
Sample Location	Sample ID	Sample Date	PCB Result (µg/l)	
			Aroclor 1254	Aroclor 1260
MH-92	TR-12	12-09-09	ND	ND
MH-256	MH-256S	12-09-09	ND	ND
MH-259	MH-259A	12-09-09	ND	ND
MH-116A	MH-116A	12-09-09	0.12	0.11

**Notes:**

µg/l = micrograms per liter

ND = Aroclor was not detected above 0.065 µg/l or the result was assigned a U qualifier – analyzed for but not detected. An analytical summary table is provided in Appendix B.

J = indicates an estimated value

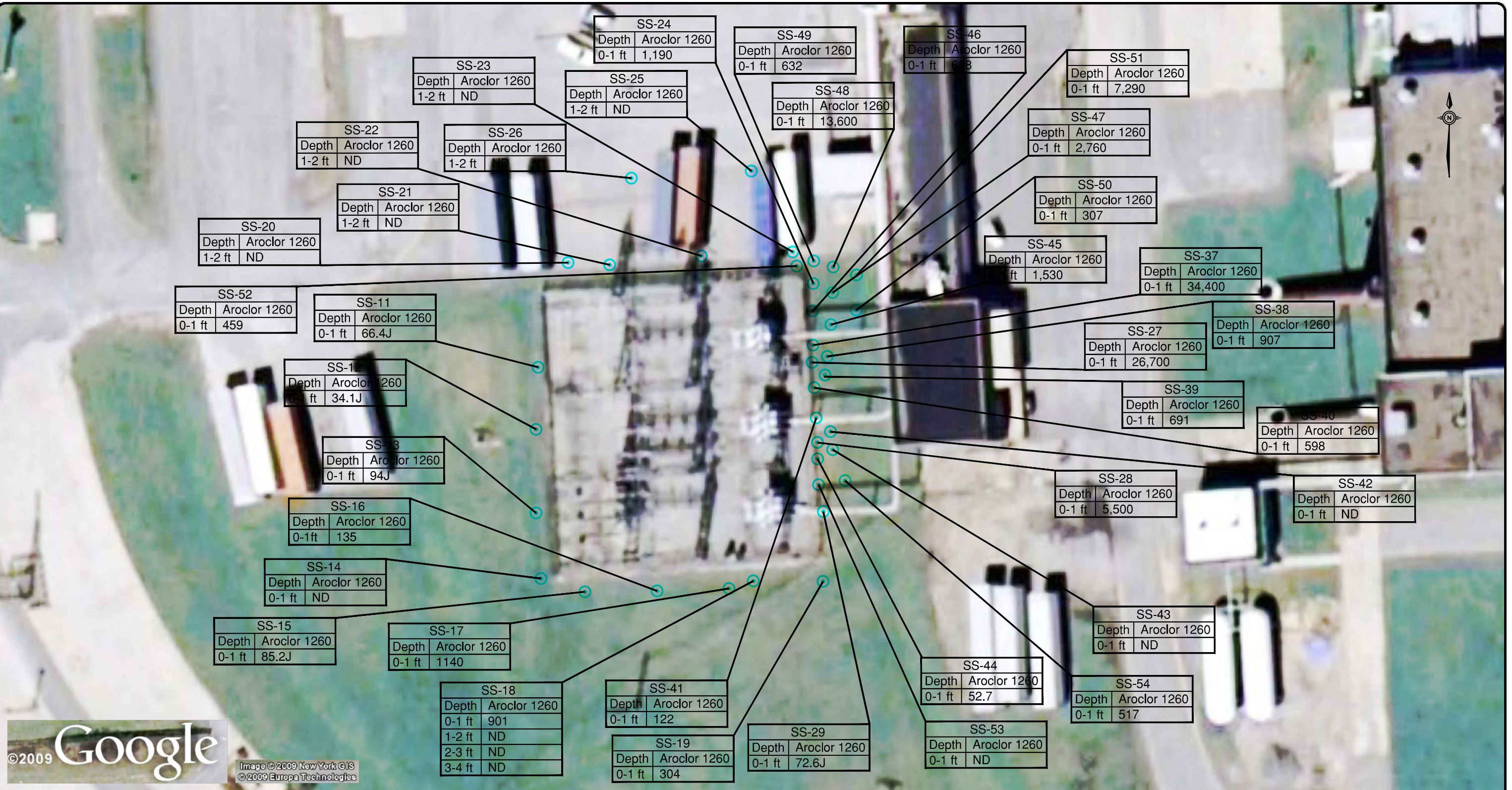
2. Surface migration into manholes and catch-basins via surface water runoff — The CSM for the Transformer Yard Area also hypothesized a potential pathway for PCB migration into the storm sewer system via surface water runoff: if surface soils are contaminated with PCBs, it is possible that PCB contaminated soils or sediments are being eroded by surface water runoff to the storm water system.

This concept was assessed first by collecting shallow subsurface soil samples around the Transformer Yard. Shallow hand-augered soil samples were obtained from 36 locations (SS-11 through SS-29, SS-37 through SS-54) surrounding the Transformer Yard fence at a 0- to 1-foot sample interval (**Figure 1-3**). Typically, the soil sample was obtained from the lower portion of the sample interval (6 to 12-inch section), which represented a section free of vegetative matter. In some locations (SS-20 through SS-23 and SS-25 and SS-26) along the northern side of the Transformer Yard, the sample interval was deeper (1 to 2 feet) so that interference from paving material (asphalt, gravel sub-base, etc.) could be avoided. At sample location SS-18, the sample interval was extended to 1 to 2 feet, 2 to 3 feet, and 3 to 4 feet because historic data indicated that PCBs may have been left near this location, but inside the Transformer Yard fence, at concentrations exceeding 50 mg/kg (see *Potential PCB Source Work Plan, September 2009* for more information on historic sampling and excavation activities in the Transformer Yard area). A second historic sampling location, also inside the fence, on the east side near SS-27 indicated that PCBs may have been left at concentrations exceeding 50 mg/kg; however, in this area, samples at greater depth were not obtained due to the dormant underground electrical lines that run from the Transformer Yard east toward Building TR-11. All samples were analyzed for Total PCBs using USEPA Method 8082. Sampling and decontamination procedures were included in Appendix A of the previously submitted *Potential Source Work Plan*.

The soil data indicate that PCBs are present at concentrations greater than the NYSDEC-recommended soil cleanup objective of 10 mg/kg for subsurface soils (*TAGM 4046, Table 3 — Organic Pesticides/Herbicides and PCBs*) in a small area (roughly 100 by 20 feet) on the east side of the Transformer Yard (**Figure 1-3**). However, it does not appear that storm water runoff from the well-vegetated area around the Transformer Yard provides the transport vehicle for PCB contaminated sediments to reach the storm lines, as noted below. A data summary is provided in **Table 1-3**. Analytical summary tables are provided in **Appendix B**. The analytical report for this data is included in **Appendix C**.



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#### LEGEND

- SOIL SAMPLE LOCATION (ALL RESULTS IN  $\mu\text{g}/\text{kg}$ ) - October and November 2009

SOIL SAMPLING  
LOCATIONS ARE  
APPROXIMATE.

0 20 40  
SCALE IN FEET

FIGURE 1-3  
TRANSFORMER YARD AREA  
SOIL SAMPLE LOCATIONS  
CARRIER FACILITY, THOMPSON ROAD  
SYRACUSE, NEW YORK

REQUESTED BY: M.H.  
DRAWN BY: E.R.  
DWG DATE: 18DEC09  
DWG NO: 8318R011

**ENSAFE**  
(800) 588-7962  
MEMPHIS, TENNESSEE



**Table 1-3**  
**Potential Source Area: Transformer Yard Area**  
**PCB Soil Sampling Data**

Sample Location	Sample ID		Sample Date	Sample Depth	Aroclor 1260 (µg/kg)
SS-11 — west side of fence	CARSSS1101	SS-11	10-14-09	0 – 1 feet	66.4 J
SS-12 — west side of fence	CARSSS1201	SS-12	10-14-09	0 – 1 feet	34.1 J
SS-13 — west side of fence	CARSSS1301	SS-13	10-14-09	0 – 1 feet	94.0 J
SS-14 — west side of fence	CARSSS1401	SS-14	10-14-09	0 – 1 feet	ND
SS-15 — south side of fence	CARSSS1501	SS-15	10-14-09	0 – 1 feet	85.2 J
SS-16 — south side of fence	CARSSS1601	SS-16	10-14-09	0 – 1 feet	135
SS-17 — south side of fence	CARSSS1701	SS-17	10-14-09	0 – 1 feet	1,140
SS-18 — south side of fence	CARSSS1801	SS-18	10-14-09	0 – 1 feet	901
	CARSSS1812		10-14-09	1 – 2 feet	ND
	CARSSS1823		10-14-09	2 – 3 feet	ND
	CARSSS1834		10-14-09	3 – 4 feet	ND
SS-19 — south side of fence	CARSSS1901	SS-19	10-14-09	0 – 1 feet	304
SS-20 — north side of fence	CARSSS2012	SS-20	10-15-09	1 – 2 feet	ND
SS-21 — north side of fence	CARSSS2112	SS-21	10-15-09	1 – 2 feet	ND
SS-22 — north side of fence	CARSSS2212	SS-22	10-15-09	1 – 2 feet	ND
SS-23 — north side of fence	CARSSS2312	SS-23	10-15-09	1 – 2 feet	ND
SS-24 — east side of fence	CARSSS2401	SS-24	10-15-09	0 – 1 feet	1,190
SS-25 — north side of fence	CARSSS2512	SS-25	10-15-09	1 – 2 feet	ND
SS-26 — north side of fence	CARSSS2612	SS-26	10-15-09	1 – 2 feet	ND
SS-27 — east side of fence	CARSSS2701	SS-27	10-15-09	0 – 1 feet	26,700
SS-28 — east side of fence	CARSSS2801	SS-28	10-15-09	0 – 1 feet	5,500
SS-29 — east side of fence	CARSSS2901	SS-29	10-15-09	0 – 1 feet	72.6 J
SS-37 — north of SS-27	CARSSS37	SS-37	10-29-09	0 – 1 feet	34,400
SS-38 — northeast of SS-27	CARSSS38	SS-38	10-29-09	0 – 1 feet	907
SS-39 — southeast of SS-27	CARSSS39	SS-39	10-29-09	0 – 1 feet	691
SS-40 — south of SS-27	CARSSS40	SS-40	10-29-09	0 – 1 feet	598
SS-41 — north of SS-28	CARSSS41	SS-41	10-29-09	0 – 1 feet	122
SS-42 — northeast of SS-28	CARSSS42	SS-42	10-29-09	0 – 1 feet	ND
SS-43 — southeast of SS-28	CARSSS43	SS-43	10-29-09	0 – 1 feet	ND
SS-44 — south of SS-28	CARSSS44	SS-44	10-29-09	0 – 1 feet	52.7
SS-45 — north of SS-37	CARSSS45-01	SS-45	11-24-09	0 – 1 feet	1,530
SS-46 — north of SS-37	CARSSS46-01	SS-46	11-24-09	0 – 1 feet	608
SS-47 — north of SS-37	CARSSS47-01	SS-47	11-24-09	0 – 1 feet	2,760
SS-48 — northeast of SS-37	CARSSS48-01	SS-48	11-24-09	0 – 1 feet	13,600
SS-49 — north of SS-24	CARSSS49-01	SS-49	11-24-09	0 – 1 feet	632
SS-50 — east of SS-45 and SS-47	CARSSS50-01	SS-50	11-24-09	0 – 1 feet	307
SS-51 — east of SS-47 and SS-48	CARSSS51-01	SS-51	11-24-09	0 – 1 feet	7,290
SS-52 — north of SS-47	CARSSS52-01	SS052	11-24-09	0 – 1 feet	459
SS-53 — south of SS-44	CARSSS53-01	SS-53	11-24-09	0 – 1 feet	ND
SS-54 — southeast of SS-44	CARSSS54-01	SS-54	11-24-09	0 – 1 feet	517

**Notes:**

µg/kg = micrograms per kilogram

ND = not detected above the compound-specific MDL. An analytical summary table is provided in Appendix B.

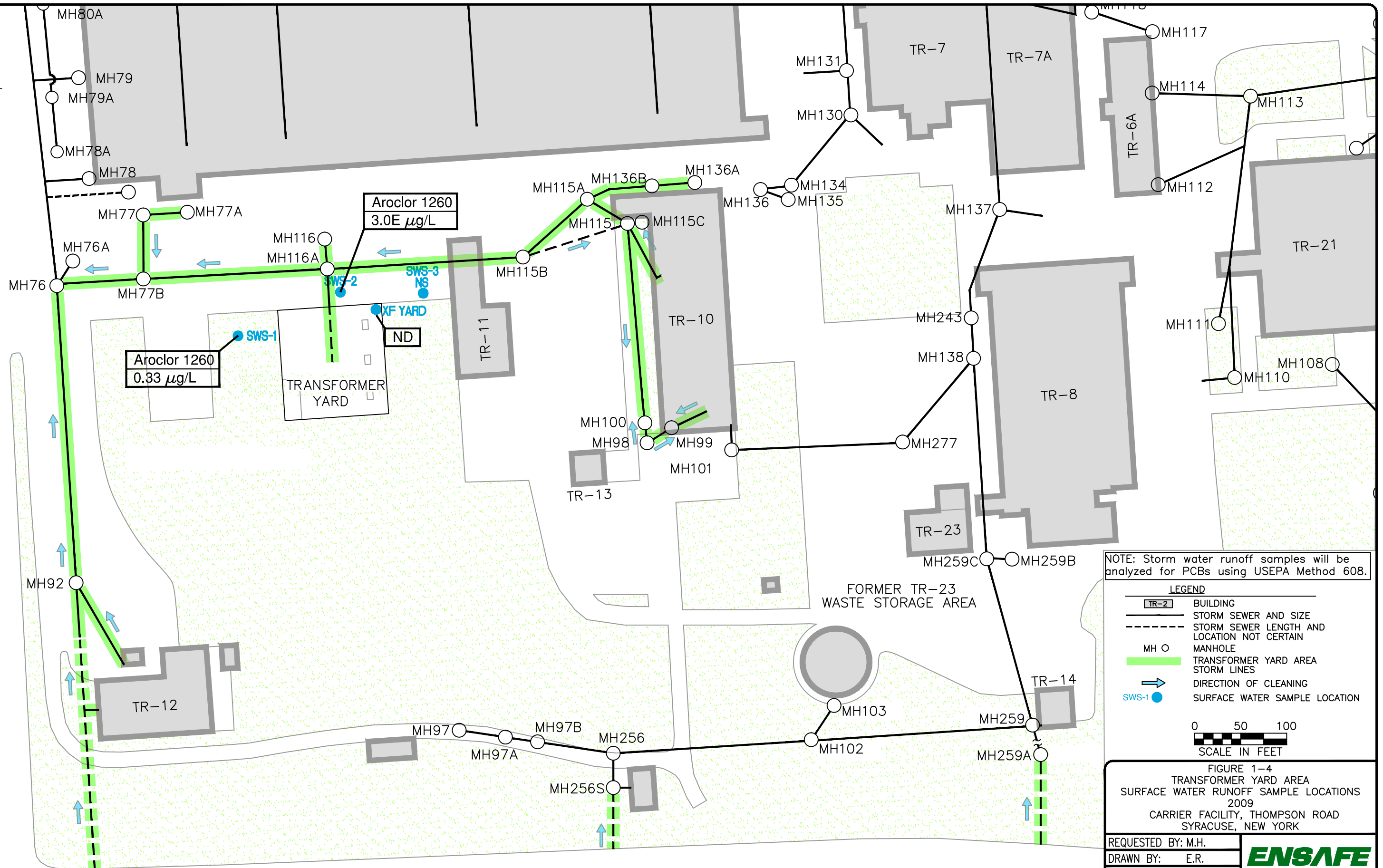


Surface water runoff sample(s) were then obtained from three locations flowing from and around the Transformer Yard (**Figure 1-4**) by using a filter sock to pond surface water runoff at rivulets and gullies formed by overland flow conditions. Once the water had ponded at the filter sock, the water was 'stirred' so that solids would become suspended prior to obtaining a sample. One surface water sample (sample identification: XF Yard) was obtained on November 20, 2009, inside the fenced area of the Transformer Yard on the northeast corner in a location that had a naturally occurring gulley channeling surface water runoff away from the area (**Figure 1-4**). This sample was submitted to TestAmerica Laboratories, Inc., (TestAmerica) Shelton, Connecticut (New York Certification 10602), for Total PCB analysis using USEPA Method 608. PCBs were not detected in this sample. Two additional samples were obtained on December 9, 2009, from locations outside the fenced Transformer Yard area on the west and north sides (SWS-1 and SWS-2, respectively). PCBs were detected in these samples at 0.33 µg/l and 3.0 µg/l, respectively. Carrier attempted to collect a third runoff sample from the east side of the Transformer Yard area; however, the rainfall event was not of sufficient intensity to generate storm water runoff from this very well vegetated area. **Table 1-4** summarizes these data. Analytical summary tables are provided in **Appendix B**. The analytical report for these data is included in **Appendix C**.

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THOMPSON ROAD



NOTE: Storm water runoff samples will be analyzed for PCBs using USEPA Method 608.

LEGEND

- TR-2 BUILDING
- STORM SEWER AND SIZE
- STORM SEWER LENGTH AND LOCATION NOT CERTAIN
- MH O MANHOLE
- TRANSFORMER YARD AREA
- STORM LINES
- DIRECTION OF CLEANING
- SURFACE WATER SAMPLE LOCATION



FIGURE 1-4  
TRANSFORMER YARD AREA  
SURFACE WATER RUNOFF SAMPLE LOCATIONS  
2009  
CARRIER FACILITY, THOMPSON ROAD  
SYRACUSE, NEW YORK

REQUESTED BY: M.H.  
DRAWN BY: E.R.  
DWG DATE: 18DEC09  
DWG NO: 8318R010





Table 1-4 Potential PCB Source: Transformer Yard Area Surface Water Runoff Data Summary			
Sample Location	Sample ID	Sample Date	Aroclor 1260 (µg/l)
Inside XF Yard Fence, northeast corner	XF Yard	11-20-09	ND
Outside XF Yard Fence, northwest side	SWS-1	12-09-09	0.33
Outside XF Yard Fence, north/northeast side	SWS-2	12-09-09	3.7
Outside XF Yard Fence, northeast side	NA	NA	NS

**Notes:**

µg/l = micrograms per liter

NA = not applicable

ND = Aroclor was not detected above 0.065 µg/l or the result was assigned a U qualifier – analyzed for but not detected.

An analytical summary table is provided in Appendix B.

NS = not sampled due to insufficient runoff

## **2.0 POTENTIAL SOURCE: TR-18 CENTRAL AND THOMPSON RD WEST STORM LINES**

Historic sediment sampling of storm water lines/man-holes indicated the presence of materials in the storm lines that may represent a continuing source of PCBs. Therefore, during the October 2009 investigation, sediments were sampled from select onsite manholes to investigate whether the storm lines represented a continuing source of PCBs to storm water. Manhole sediment sampling was not included in the work plan submitted to NYSDEC, but was later added at the request of Larry Rosenmann with NYSDEC. The manholes sampled were chosen by Mr. Rosenmann based on historic data in these areas.

Sediment samples were obtained from 15 manholes along the TR-18 and Thompson Road storm lines, not including the 5 composite samples collected as part of the pressure-washing activities. **Figure 2-1** shows the locations of manholes sampled from July 2001 through the most recent sampling event in October 2009. **Table 2-1** provides a summary of the November 2009 investigation data. Analytical summary tables are provided in **Appendix B**. The analytical report for these samples is provided in **Appendix C**.

Data indicate the presence of PCB-containing sediments in the storm lines that appear to represent a continuing source of PCBs to storm water, though it is unlikely that the storm lines are the original source of contamination. It is assumed that over the site's history, PCBs washed into the storm lines, including the laterals, during rain events, and contaminated sediments have accumulated over time.







**Table 2-1**  
**Potential Source Area: TR-18 and Thompson Road Storm Lines**  
**Manholes Sediment Sampling**

Manhole Location	Sample ID		Sample Date	PCB Result (µg/kg)			
				Aroclor 1260	Aroclor 1254	Aroclor 1248	Aroclor 1242
MH-98, MH-99, MH-100	CARMCOM109		10-12-09	318	ND	ND	ND
MH-136A, MH-136B	CARMCOM209		10-12-09	476	ND	ND	ND
MH-115, MH-115-A thru C	CARMCOM309		10-13-09	20,500	ND	ND	ND
MH-77, MH-77A & B, MH116 & 116A	CARMCOM409		10-13-09	67,800	ND	ND	ND
MH-76, MH-76A, MH-92	CARMCOM509		10-14-09	57,100	ND	ND	ND
MH-256 — MH along south-orig. line	CARMMH2569	MH-256	10-15-09	1,100	ND	ND	ND
MH-259 — MH along south-orig. line	CARMMH2599	MH-259	10-15-09	166	ND	ND	ND
MH-137 — just north of TR-23	CARMMH1379	MH-137	10-16-09	16,600	ND	ND	ND
MH-243 — just north of TR-23	CARMMH2439	MH-243	10-16-09	7,110	ND	ND	ND
MH-82 — west side of TR-1	CARMMH0829	MH-82	10-13-09	1,700	ND	ND	ND
MH-89 — west side of TR-1	CARMMH0899	MH-89	10-13-09	79,300	ND	ND	ND
MH-136 — 1 <sup>st</sup> MH on TR-6 side SS line	CARMMH1369	MH-136	10-15-09	756	ND	ND	ND
MH-135 — TR-6 side SS line	CARMMH1359	MH-135	10-15-09	167	ND	ND	ND
MH-134 — TR-6 side SS line	CARMMH1349	MH-134	10-15-09	3,160	ND	ND	ND
MH-131 — TR-6 side SS line	CARMMH1319	MH-131	10-15-09	196*	560	379*	ND
MH-130 — TR-6 side SS line	CARMMH1309	MH-130	10-15-09	842	787*	ND	ND
MH-122 — TR-6 side SS line	CARMMH1229	MH-122	10-15-09	68.3 J	ND	ND	ND
MH-129 — TR-6 side SS line	CARMMH1299	MH-129	10-15-09	554*	2,100*	ND	2,500
MH-126 — TR-6 side SS line	CARMMH1269	MH-126	10-15-09	2,360*	7,020	4,260*	ND
MH-143 — last MH on TR-6 side SS line	CARMMH1439	MH-143	10-16-09	7,860	17,300	ND	ND

**Notes:**

µg/kg = micrograms per kilogram

ND = Not detected above the compound-specific MDL. An analytical summary table is provided in Appendix B.

\* = estimated value due to the presence of other Aroclor pattern.

J = indicates an estimated value



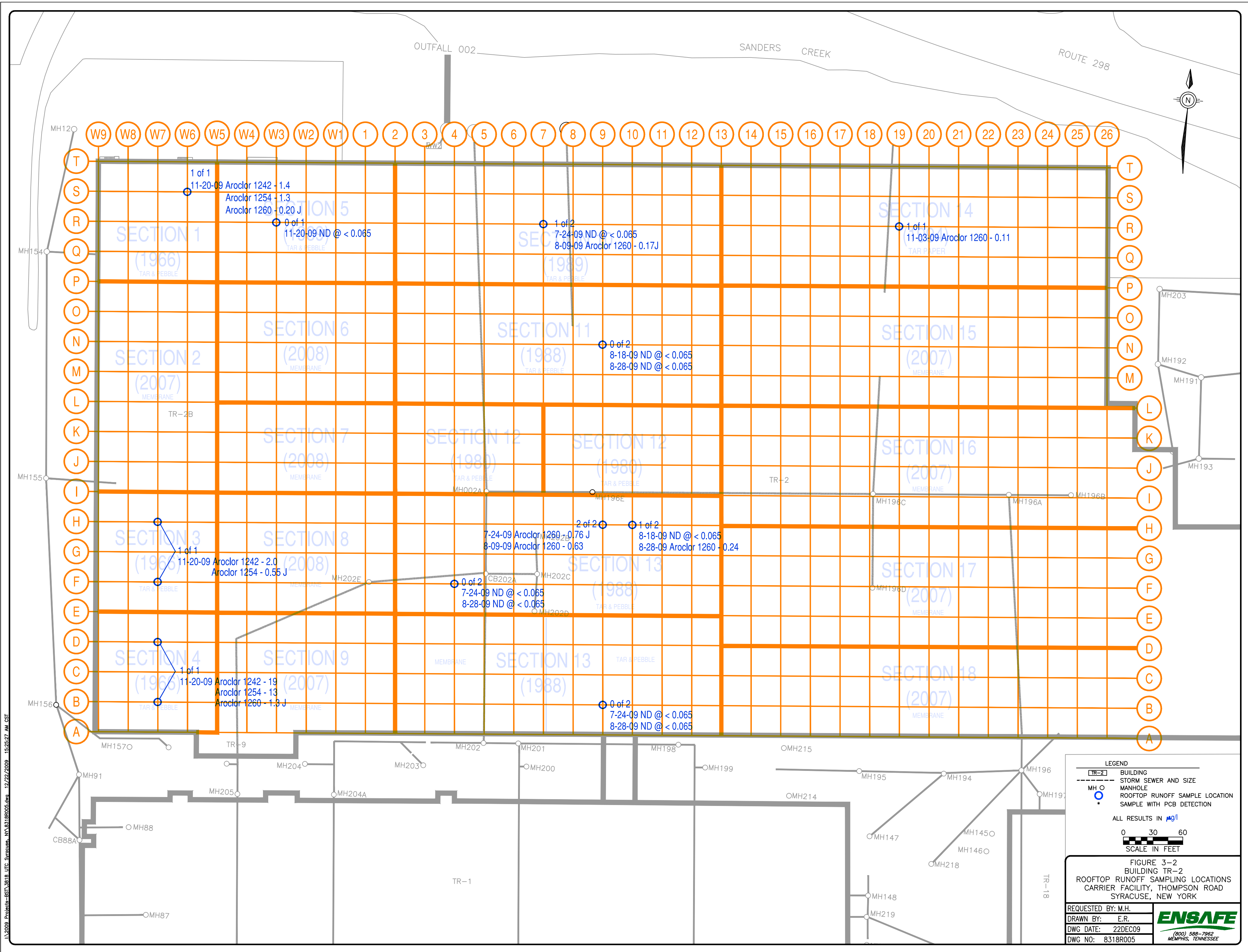
### 3.0 POTENTIAL SOURCE: ROOF RUNOFF

PCB-containing roofing and siding materials were historically marketed to industrial/manufacturing facilities worldwide. PCB concentrations have been found to range from less than 2 parts per million (ppm) to 30,000 ppm (*59 FR 62809*) in these materials. At NYSDECs request (in comments dated July 27, 2009), Carrier initiated the first phase of a sampling program to determine if roofing materials are a continuing source of PCBs in roof runoff. The sampling program began in July 2009 and was completed August 28, 2009. Subsequently, the *Potential PCB Sources Report: Rooftop Runoff* was submitted to NYSDEC on September 30, 2009, and is included as **Appendix C** to this document.

Based on the data collected during the initial phase of roof runoff sampling, Carrier implemented a second phase of sampling to better identify areas that potentially could be diverted as “clean” runoff. Nine additional roof leaders were sampled on Building TR-1 (**Figure 3-1**). Five additional roof runoff samples have been collected from roof leaders on TR-2 at the locations shown on **Figure 3-2**. Samples were obtained on November 3 and 20, 2009 and December 14, 2009, and submitted to TestAmerica for Total PCB analysis using USEPA Method 608. **Tables 3-1 and 3-2** summarize the data collected. Second phase analytical reports from TestAmerica are included in **Appendix D** as **Addendum A**.

Runoff from the central and southern sections of the Building TR-1 roof contain PCBs and therefore appear to contribute PCBs to storm water. Runoff from portions of the central, western, and northern sections of the Building TR-2 roof contain PCBs, and therefore this roof appears to contribute PCBs to storm water.







**Table 3-1**  
**Building TR-1 Rooftop Runoff Sample Locations**  
**Carrier Corporation, Syracuse, New York**  
**(all results in µg/l)**

Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	<b>B-12</b>	<b>B-12</b>	<b>B-12</b>	<b>B-12</b>	<b>B-12</b>
PCB-1248	NS	NS	NS	ND	NS
PCB-1254	NS	NS	NS	0.072	NS
PCB-1260	NS	NS	NS	0.12	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	<b>B-19</b>	<b>B-19</b>	<b>B-19</b>	<b>B-19</b>	<b>B-19</b>
PCB-1248	ND	ND	ND	ND	NS
PCB-1254	ND	ND	ND	ND	NS
PCB-1260	ND	0.071 J	ND	ND	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	<b>C-4</b>	<b>C-4</b>	<b>C-4</b>	<b>C-4</b>	<b>C-4</b>
PCB-1248	ND	ND	ND	ND	NS
PCB-1254	ND	ND	ND	ND	NS
PCB-1260	ND	ND	ND	ND	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	<b>E-23</b>	<b>E-23</b>	<b>E-23</b>	<b>E-23</b>	<b>E-23</b>
PCB-1248	ND	ND	ND	ND	NS
PCB-1254	ND	ND	ND	ND	NS
PCB-1260	ND	0.14 J	ND	ND	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	<b>G-6</b>	<b>G-6</b>	<b>G-6</b>	<b>G-6</b>	<b>G-6</b>
PCB-1248	ND	ND	ND	ND	NS
PCB-1254	ND	ND	ND	ND	NS
PCB-1260	ND	ND	ND	ND	NS



**Table 3-1**  
**Building TR-1 Rooftop Runoff Sample Locations**  
**Carrier Corporation, Syracuse, New York**  
**(all results in µg/l)**

Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	H-10	H-10	H-10	H-10	H-10
PCB-1248	ND	ND	ND	ND	NS
PCB-1254	ND	ND	ND	ND	NS
PCB-1260	ND	ND	0.11 J	ND	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	J-12	J-12	J-12	J-12	J-12
PCB-1248	ND	NS	NS	NS	NS
PCB-1254	ND	NS	NS	NS	NS
PCB-1260	ND	NS	NS	NS	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	J-19	J-19	J-19	J-19	J-19
PCB-1248	ND	ND	ND	ND	NS
PCB-1254	ND	ND	ND	ND	NS
PCB-1260	ND	0.14 J	ND	ND	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	K-4	K-4	K-4	K-4	K-4
PCB-1248	ND	NS	ND	NS	NS
PCB-1254	ND	NS	ND	NS	NS
PCB-1260	ND	NS	ND	NS	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	K-12	K-12	K-12	K-12	K-12
PCB-1248	NS	ND	0.25	ND	NS
PCB-1254	NS	0.42 J	0.25	ND	NS
PCB-1260	NS	1.4	0.13 J	0.26	NS



**Table 3-1**  
**Building TR-1 Rooftop Runoff Sample Locations**  
**Carrier Corporation, Syracuse, New York**  
**(all results in µg/l)**

Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	L-4	L-4	L-4	L-4	L-4
PCB-1248	NS	ND	NS	ND	NS
PCB-1254	NS	ND	NS	ND	NS
PCB-1260	NS	ND	NS	ND	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	B-10	B-10	B-10	B-10	B-10
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	0.42
PCB-1260	NS	NS	NS	NS	0.59
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	B-13	B-13	B-13	B-13	B-13
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	ND
PCB-1260	NS	NS	NS	NS	ND
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	C-10	C-10	C-10	C-10	C-10
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	ND
PCB-1260	NS	NS	NS	NS	ND
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	C-13	C-13	C-13	C-13	C-13
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	ND
PCB-1260	NS	NS	NS	NS	ND



**Table 3-1**  
**Building TR-1 Rooftop Runoff Sample Locations**  
**Carrier Corporation, Syracuse, New York**  
**(all results in µg/l)**

Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	F-13	F-13	F-13	F-13	F-13
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	ND
PCB-1260	NS	NS	NS	NS	0.11
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	J-10	J-10	J-10	J-10	J-10
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	ND
PCB-1260	NS	NS	NS	NS	ND
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	J-13	J-13	J-13	J-13	J-13
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	ND
PCB-1260	NS	NS	NS	NS	0.097
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	L-10	L-10	L-10	L-10	L-10
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	ND
PCB-1260	NS	NS	NS	NS	ND
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	14-Dec-09
	L-13	L-13	L-13	L-13	L-13
PCB-1248	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	0.79
PCB-1260	NS	NS	NS	NS	1.3

**Notes:**

µg/l = micrograms per liter





NS = not sampled

ND = Aroclor was not detected above 0.065 µg/l or the result was assigned a U qualifier – analyzed for but not detected.

An analytical summary table is provided in Appendix B.

J = indicates an estimated value



**Table 3-2**  
**Building TR-2 Roof Runoff Sample Locations**  
**Carrier Corporation, Syracuse, New York**  
**(all results in µg/l)**

Sample Date → Leader Sampled → Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	B-9	B-9	B-9	B-9	B-9	B-9
PCB-1248	ND	ND	NS	NS	NS	NS
PCB-1254	ND	ND	NS	NS	NS	NS
PCB-1260	ND	ND	NS	NS	NS	NS
Sample Date → Leader Sampled → Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	F-4	F-4	F-4	F-4	F-4	F-4
PCB-1248	NS	NS	ND	ND	NS	NS
PCB-1254	NS	NS	ND	ND	NS	NS
PCB-1260	NS	NS	ND	ND	NS	NS
Sample Date → Leader Sampled → Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	31-Aug-09	03-Nov-09	20-Nov-09
	H-9	H-9	H-9	H-9	H-9	H-9
PCB-1248	ND	ND	NS	NS	NS	NS
PCB-1254	ND	ND	NS	NS	NS	NS
PCB-1260	0.76 J	0.63	NS	NS	NS	NS
Sample Date → Leader Sampled → Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	H-10	H-10	H-10	H-10	H-10	H-10
PCB-1248	NS	NS	ND	ND	NS	NS
PCB-1254	NS	NS	ND	ND	NS	NS
PCB-1260	NS	NS	ND	0.24	NS	NS
Sample Date → Leader Sampled → Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	N-9	N-9	N-9	N-9	N-9	N-9
PCB-1248	NS	NS	ND	ND	NS	NS
PCB-1254	NS	NS	ND	ND	NS	NS
PCB-1260	NS	NS	ND	ND	NS	NS

**Table 3-2**  
**Building TR-2 Roof Runoff Sample Locations**  
**Carrier Corporation, Syracuse, New York**  
**(all results in µg/l)**

Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	R-7	R-7	R-7	R-7	R-7	R-7
PCB-1248	ND	ND	NS	NS	NS	NS
PCB-1254	ND	ND	NS	NS	NS	NS
PCB-1260	ND	0.17 J	NS	NS	NS	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	R-19	R-19	R-19	R-19	R-19	R-19
PCB-1248	NS	NS	NS	NS	ND	NS
PCB-1254	NS	NS	NS	NS	ND	NS
PCB-1260	NS	NS	NS	NS	0.11	NS
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	BD-W7	BD-W7	BD-W7	BD-W7	BD-W7	BD-W7
PCB-1242	NS	NS	NS	NS	NS	19
PCB-1248	NS	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	NS	13
PCB-1260	NS	NS	NS	NS	NS	1.3 J
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	FH-W7	FH-W7	FH-W7	FH-W7	FH-W7	FH-W7
PCB-1242	NS	NS	NS	NS	NS	2.0
PCB-1248	NS	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	NS	0.55 J
PCB-1260	NS	NS	NS	NS	NS	ND
Sample Date → Leader Sampled→ Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
	S-W6	S-W6	S-W6	S-W6	S-W6	S-W6
PCB-1242	NS	NS	NS	NS	NS	1.4
PCB-1248	NS	NS	NS	NS	NS	ND
PCB-1254	NS	NS	NS	NS	NS	1.3
PCB-1260	NS	NS	NS	NS	NS	0.20 J



**Table 3-2**  
**Building TR-2 Roof Runoff Sample Locations**  
**Carrier Corporation, Syracuse, New York**  
**(all results in µg/l)**

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09	03-Nov-09	20-Nov-09
Leader Sampled →	R-W3	R-W3	R-W3	R-W3	R-W3	R-W3
Aroclor ↓						
<b>PCB-1242</b>	NS	NS	NS	NS	NS	ND
<b>PCB-1248</b>	NS	NS	NS	NS	NS	ND
<b>PCB-1254</b>	NS	NS	NS	NS	NS	ND
<b>PCB-1260</b>	NS	NS	NS	NS	NS	ND

**Notes:**

µg/l = micrograms per liter

NS = not sampled

ND = Aroclor was not detected above 0.065 µg/l or the result was assigned a U qualifier – analyzed for but not detected.

An analytical summary table is provided in Appendix B.

J = indicates an estimated value

#### 4.0 POTENTIAL SOURCE: MANHOLE 126 AREA

As part of the work plan, a CSM was developed for the Manhole 126 Area as a potential historical source of PCBs in nearby storm lines due to the higher levels of PCBs found in the sediments of manholes in this area. Although there is no known historical use of PCBs in this area, it was possible that historical releases may have occurred here, which could explain the presence of Aroclor 1254 in nearby manholes (i.e., the potential for surface water runoff to carry PCB contaminants into the nearby storm lines).

To evaluate this concept, seven borings (SS-30 through SS-36) were advanced using direct-push technology (DPT) in the area shown on **Figure 4-1** for collection of shallow subsurface soil samples. Each sampled location was surveyed in the field using a GPS device. Borings were advanced to a maximum depth of 4 feet below paving materials (asphalt, gravel, etc.), with a soil sample collected at each 1-foot interval to a depth of 4 feet. No samples were collected from the 0- to 1-foot interval because it consisted of unsuitable material (i.e., paving materials). Similarly, a sample from the 1- to 2-foot interval was not always collected. Soil samples were submitted to Accutest Laboratories and were analyzed for Total PCBs using USEPA Method 8082.

The first suitable 1-foot sample interval was submitted to the laboratory, with the deeper samples placed on "hold" pending the results of the shallower samples. A summary of soil sample data is provided in **Table 4-1**. Analytical summary tables are provided in Appendix B. Based on these data (i.e., PCBs were not detected in soils above the NYSDEC recommended soil cleanup objective of 10 mg/kg), no additional testing of deeper soil samples was necessary. The Manhole 126 Area subsurface soils are not considered a continuing source of PCBs to storm water.

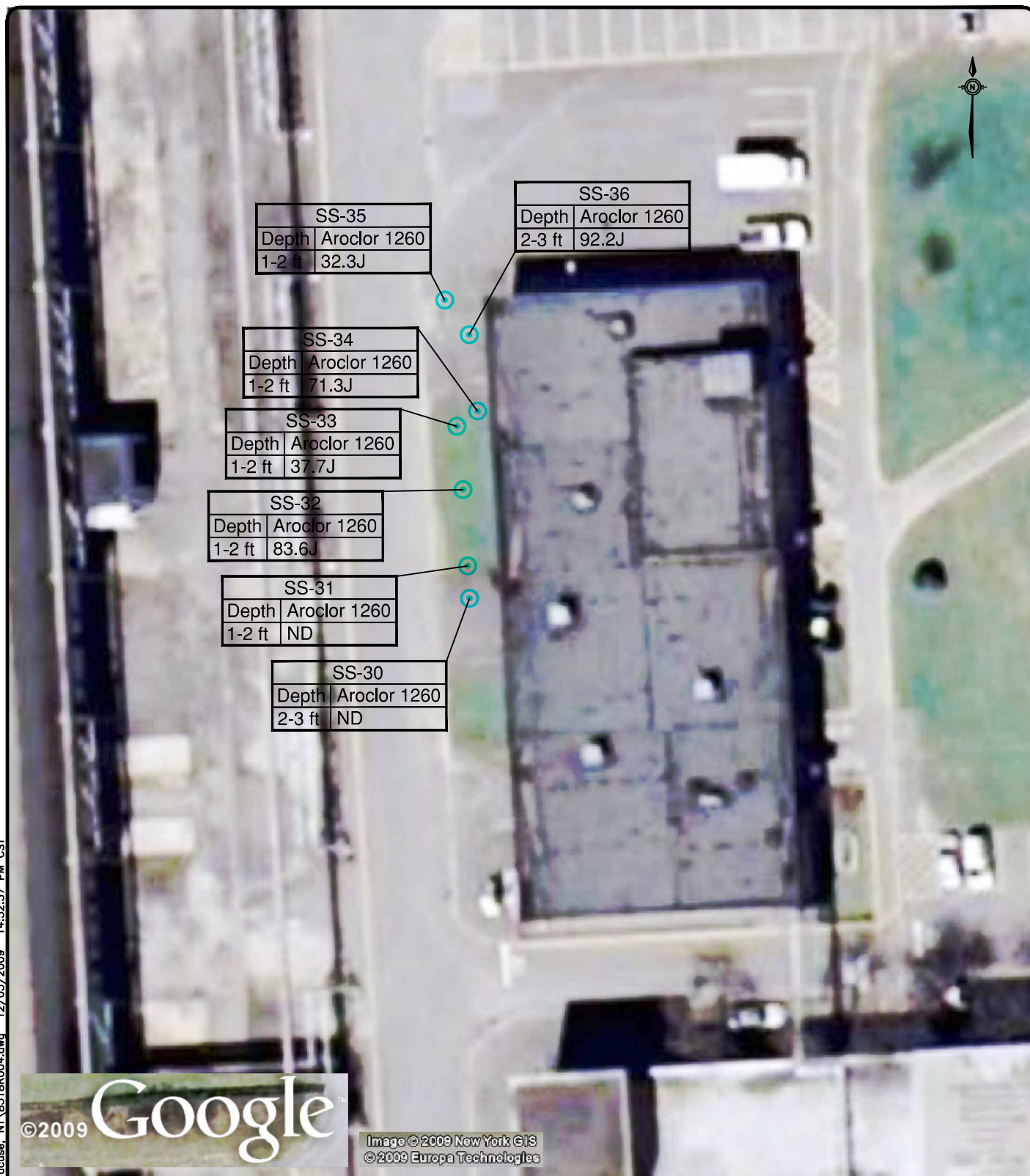
<b>Table 4-1</b> <b>Potential PCB Source: Manhole MH-126 Area</b> <b>PCB Soil Sample Data Summary</b>				
Sample Location	Sample ID	Sample Date	Sample Depth	Aroclor 1260 (µg/kg)
SS-30	CARSSS3023	10-15-09	2 – 3 feet	ND
SS-31	CARSSS3112	10-15-09	1 – 2 feet	ND
SS-32	CARSSS3212	10-15-09	1 – 2 feet	83.6 J
SS-33	CARSSS3312	10-15-09	1 – 2 feet	37.7 J
SS-34	CARSSS3412	10-15-09	1 – 2 feet	71.3 J
SS-35	CARSSS3512	10-15-09	1 – 2 feet	32.3 J
SS-36	CARSSS3623	10-15-09	2 – 3 feet	92.2 J

**Note:**

µg/kg = micrograms per kilogram

ND = not detected above the compound-specific MDL. An analytical summary table is provided in Appendix B.

J = indicates an estimated value



#### LEGEND

- SOIL SAMPLE LOCATION (ALL RESULTS IN  $\mu\text{g}/\text{kg}$ ) - OCTOBER 2009

0 20 40  
SCALE IN FEET

FIGURE 4-1  
MH-126 AREA  
SOIL SAMPLE LOCATIONS  
CARRIER FACILITY, THOMPSON ROAD  
SYRACUSE, NEW YORK

REQUESTED BY: M.H.

DRAWN BY: E.R.

DWG DATE: 03DEC09

DWG NO: 8318R004

**ENSAFÉ**  
(800) 588-7962  
MEMPHIS, TENNESSEE

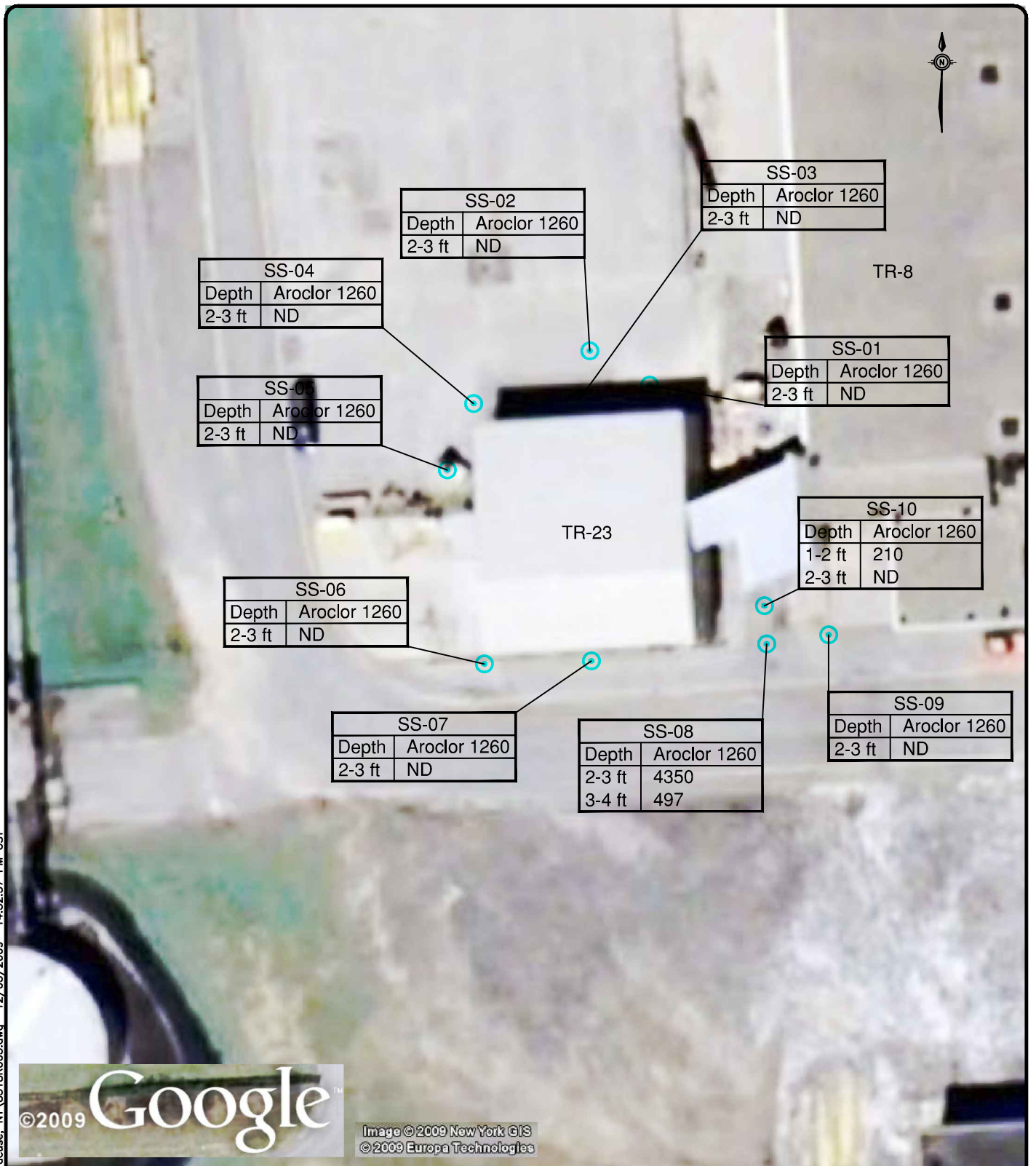
## **5.0 POTENTIAL SOURCE: BUILDING TR-23 FORMER WASTE STORAGE AREA (WSA)**

As part of the work plan, a CSM was developed for the Building TR-23 former WSA because the area was used to store waste materials. It is not known if PCB wastes were ever stored here. However, given the area's historical use as a WSA, it was considered possible that a past leak or spill occurred here, with the potential for surface water runoff to carry PCB contaminants into the nearby storm lines.

To evaluate this concept, 10 borings (SS-01 through SS-10) were advanced using a DPT rig in the area shown on **Figure 5-1** for collection of shallow subsurface soil samples. Each sampled location was surveyed in the field using a GPS device. Borings were advanced to a maximum depth of 4 feet below paving materials (asphalt, gravel, etc.), with a soil sample collected at each 1-foot interval to a depth of 4 feet. No samples were collected from the 0- to 1-foot interval because it consisted of unsuitable material (i.e., paving materials). Similarly, a sample from the 1- to 2-foot interval was not always collected. Soil samples were submitted to Accutest Laboratories and were analyzed for Total PCBs using USEPA Method 8082.

The first suitable 1-foot sample interval was submitted to the laboratory, with the deeper samples placed on "hold" pending the results of the shallower samples. A summary of soil sample data is provided in **Table 5-1**. Analytical summary tables are provided in **Appendix B**. As shown, PCBs were detected in the soil sample from the shallower interval at boring locations SS-08 and SS-10. Therefore, the laboratory was instructed to analyze the next sample interval for Total PCBs. Based on the results from the subsequent analysis, no additional testing was necessary. While PCBs are present in the subsurface soils at SS-08, the concentrations are less than the NYSDEC recommended soil cleanup objective of 10 mg/kg. Additionally, the WSA is not in operation and the area is paved, making subsurface soils an unlikely continuing source of PCBs to storm water.





#### LEGEND

● SOIL SAMPLE LOCATION (ALL RESULTS IN  $\mu\text{g}/\text{kg}$ ) - OCTOBER 2009

0 20 40  
SCALE IN FEET

FIGURE 5-1  
BUILDING TR-23 / FORMER WSA  
SOIL SAMPLE LOCATIONS  
CARRIER FACILITY, THOMPSON ROAD  
SYRACUSE, NEW YORK

REQUESTED BY: M.H.

DRAWN BY: E.R.

DWG DATE: 03DEC09

DWG NO: 8318R003

**ENSAFÉ**  
(800) 588-7962  
MEMPHIS, TENNESSEE



<b>Table 5-1</b> <b>Potential Source: Building TR-23 Former WSA</b> <b>PCB Subsurface Soil Sample Data Summary</b>				
<b>Sample Location</b>	<b>Sample ID</b>	<b>Sample Date</b>	<b>Sample Depth</b>	<b>Aroclor 1260 (µg/kg)</b>
SS-01	CARSSS0123	10-14-09	2 – 3 feet	ND
SS-02	CARSSS0212	10-14-09	1 – 2 feet	ND
SS-03	CARSSS0323	10-14-09	2 – 3 feet	ND
SS-04	CARSSS0423	10-14-09	2 – 3 feet	ND
SS-05	CARSSS0523	10-14-09	2 – 3 feet	ND
SS-06	CARSSS0623	10-14-09	2 – 3 feet	ND
SS-07	CARSSS0723	10-14-09	2 – 3 feet	ND
SS-08	CARSSS0823	10-14-09	2 – 3 feet	4,350
	CARSSS0834	10-14-09	3 – 4 feet	497
SS-09	CARSSS0923	10-14-09	2 – 3 feet	ND
SS-10	CARSSS1012	10-14-09	1 – 2 feet	210
	CARSSS1023	10-14-09	2 – 3 feet	ND

**Notes:**

µg/kg = micrograms per kilogram

ND = not detected above the compound-specific MDL. An analytical summary table for this data is provided Appendix B.

J = indicates an estimated value



## 6.0 GROUNDWATER SAMPLING

In the July 27, 2009, letter, NYSDEC requested that Carrier sample the groundwater monitoring well network for PCBs to identify potential sources across the site. Carrier does not think that additional groundwater sampling will be an effective means of determining potential onsite PCB sources for the following reasons:

- Groundwater samples collected from site wells from May 1994 to August 2000 were analyzed for PCBs. This historical data does not reveal an indication of a PCB source in groundwater.
- As presented in the *PCB Storm Water Quality Study* submitted to NYSDEC in November 2008, and the *Engineering Design Progress Report for Treatment of PCBs in Storm Water* submitted in July 2009, PCB detections have been found predominantly in unfiltered samples, with filtered samples (in most cases) showing a marked decrease in PCB concentration. The cause of the detectable level of PCBs in the discharge appears to be contaminated sediments that wash into the storm water sewer collection system, not due to a dissolved fraction.

However, to satisfy NYSDEC's request, Carrier will analyze groundwater samples collected from select shallow wells near the Thompson Road and TR-18 storm lines (MW-3S, MW-6, MW-9, MW-10, MW-19) for PCBs using USEPA Method 608 during the next site-wide groundwater monitoring event at the facility in June 2010. The monitoring schedule for site-wide sampling was presented in the NYSDEC-approved *Site-Wide Groundwater Monitoring Plan, Rev. 1, April 2009*.

## 7.0 CONCLUSIONS

As mentioned in the *Concept Plan 002, November 16, 2009*, based on an evaluation of data and subject to adjustment based on the effectiveness of near-term actions and changes in site usage, Carrier will consider a combination of the following additional mitigations in the mid-term (approximately April through September 2010, weather permitting). A corrective action work plan and monitoring program will be developed and submitted to NYSDEC (early Spring 2010). This work plan will fully detail Carrier's proposed source control actions as well as a detail a method (i.e., monitoring program) for evaluating the implemented actions.

### Potential Source: Transformer Yard

- Storm line cleaning and video inspection of the storm lines in the Transformer Yard Area in October/November 2009 appear to indicate the accumulated sediments and sludge in the lines as a continuing source of PCBs to storm water. Carrier proposes rehabilitation of the lines through some combination of point repairs and/or pipe lining. Prior to lining, rigorous debris removal and another round of pressure washing — this time using a higher-powered jetter — and video inspection would be performed. Debris removal and pressure-washing will remove as much of the contaminated material present in the lines as reasonably possible. Lining the pipes with a cured-in-place material (e.g., Insituform) will seal the pipes from further inward migration of sediments as well as effectively cap any remaining sediments in the storm line.
- Soil sampling data obtained during the October/November 2009 investigation indicate that PCBs are present in subsurface soils greater than 10 mg/kg in a small area on the east side of the Transformer Yard. The area is very well vegetated and it is not likely that surface water runoff would erode soils (runoff was not generated during the rainfall events when storm water was sampled in the Transformer Yard area). Additionally, there is no visual evidence of surface erosion in this area. It is unlikely that surface water runoff is a current PCB migration pathway to the storm lines. No further action on this side of the Transformer Yard is being considered at this time. Note: Soil excavation in the impacted area is not feasible due to the underground electrical lines that run from the Transformer Yard east toward Building TR-11.
- Surface runoff samples from west and north sides of the Transformer Yard area obtained as part of this investigation contain PCBs. Aroclor 1260 was detected in the runoff sample from the west side of the Transformer Yard (SWS-1) at 0.33 µg/l. This may indicate that PCB migration into the storm lines from this area is occurring to some extent. Further storm water runoff samples are proposed in this area, specifically nearer MH-116A, so that runoff patterns can be better understood.

### **Potential Source: Roof Runoff**

Data obtained during the roof runoff sampling program (July through November 2009) indicates storm water from some roof areas contains PCB at concentrations greater than 0.065 µg/L. This is true for the central section of the TR-1 roof, which covers approximately 4.1 acres, and much of the unlined portions of the TR-2 roof (west, central and portions of northern sections) covering about 5 acres. Based on this data, some portions of the building roofs may represent a continuing source of PCBs to storm water.

- Building TR-1: The central and southern portions of this roof could be re-roofed, covered with a membrane, or otherwise sealed, thus eliminating this area as a PCB source and also allowing for the possibility of diversion (described in more detail in the *Concept Plan 002, November 16, 2009*). No additional sampling is proposed.
- Building TR-2: The portions of this roof that appear to contain PCBs can be re-roofed, covered with a membrane, or sealed thus eliminating this area as a PCB source and also allowing for the possibility of diversion. No additional sampling is proposed.

### **Potential Source: Thompson Road and TR-18 Storm Lines**

- The Thompson Road storm line may represent a continuing source of PCBs to storm water based on sediment data obtained from manholes during the October/November 2009 investigation. Carrier proposes to pressure wash this line using a higher-powered jetter with follow-up video inspection. This source action will begin after source control actions in the Transformer Yard area are completed. Washing and video inspections will occur almost simultaneously so that sections of the storm line that may require a second or third pass of pressure-washing can be quickly identified. Pressure-washing will remove as much of the contaminated material present in the lines as reasonably practical. The video inspection will also show the condition of the storm lines. However, unlike in the vicinity of the Transformer Yard, deteriorating structural conditions along the Thompson Road line do not immediately necessitate repair or lining as a source control measure. This is because there is no suspected lateral migration of PCBs into the storm lines downgradient of MH-76 (i.e., the PCBs in the line are attributed entirely to migration of Transformer Yard storm line sediments).
- The TR-18 storm line may represent a continuing source of PCBs storm water based on historic sediment sampling in manholes along this line as well as the findings of the October/November 2009 investigation. Prior to implementing a source control action in the

storm line, Carrier will implement a manhole sediment sampling program that will include all the manholes along this line (excluding those that were recently sampled as part of the source investigation). Based on the results of the sampling, Carrier will determine if additional source investigations are needed (i.e., determine if PCBs appear just downgradient of a particular building or are more randomly distributed through the entire storm line). If a source is identified, a source control action for the newly identified area will be considered prior to source control actions in the storm line.

As with the Thompson Road line, Carrier proposes to pressure wash the TR-18 line using a higher-powered jetter with follow-up video inspection. The line will be cleaned subsequent to the manholes sediment sampling program mentioned above. Washing and video inspections will occur almost simultaneously so that sections of the storm line that may require a second or third pass of pressure-washing can be quickly identified. Pressure washing will remove as much of the contaminated material present in the lines as reasonably practical. The video inspection will also show the condition of the storm lines. If video inspection reveals deteriorating conditions in sections of the TR-18 line, the follow-up action will be based on whether the pre-source control sediment sampling identifies a source area for PCBs in the lines. As with the Thompson Road line, deteriorating structural conditions will not immediately necessitate repair or lining as a source control measure.

#### **Potential Source: MH-126 Area**

The MH-126 area does not appear to be a continuing source of PCBs to storm water based on data obtained as part of the October/November 2009 investigation. PCBs were not detected in any subsurface soil samples obtained in this area.

#### **Potential Source: Building TR-23 Former WSA**

The former WSA does not appear to be a continuing source of PCBs to storm water based on data obtained as part of the October/November 2009 investigation. Although there were two PCB detections in subsurface soils, the detections are both less than the NYSDEC cleanup objective of 10 mg/kg. The low concentrations in soils, combined with the fact that the former WSA is not in operation and the area is paved, makes subsurface soils an unlikely continuing source of PCBs to storm water.

**Appendix A**  
**New York Leak Detection Summary of Findings**



NEW YORK LEAK DETECTION, INC.  
P.O. Box 269, Jamesville, NY 13078

### Technician Summary

**Date:** 10/22/09

**Invoice Number:** 13115

**Technician:** Tony Mortenson

Ensafe Inc.  
5724 Summer Trees Drive  
Memphis, TN 38124  
Site: Carrier Corporation, Syracuse, NY  
Melanie Snyder 901-372-7962

### Description of Activities

NYLD technician Tony Mortenson performed video inspection services at Carrier Corporation in Syracuse, NY on 10/15/09 & 10/16/09.

Video inspection results captured and recorded. Two discs enclosed with the video logs.

Video #1 – 001258.ASF

MH 99 to containment drain - appr. 5', steel, some large debris, pipe intact

Video #2 – 004104.ASF

MH99 to MH98 - appr. 28', plastic, sag in middle of pipe holding water but pipe in good condition

Video #3 – 011738.ASF

MH100 to MH98 – appr. 35', clay tile/plastic, all of line in good condition, 27' of tile, 8' plastic

Video #4 – 012439.ASF

MH100 to MH115 – appr. 76', plastic/clay/plastic, transitions from plastic to clay, have some separation, pipe in good condition, no further camera advance at 76'

Video #5 – 014805.ASF

MH115 to MH100 – appr. 54', clay/plastic, pipe intact, no further camera advance at clay/plastic transition at 54'

\*Note: appr. 18' of pipe between MH115 & MH100 inaccessible

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# NYLD

NEW YORK LEAK DETECTION, INC.  
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Video #6 – 020548.ASF

MH115 to Bldg TR-10 – plastic, at 39' pipe turns right at a 22.5 degree angle, at 69' pipe turns left at a 90 degree bend, pipe terminates at vertical 90 degree elbow (possible roof drain) at appr. 70', pipe in good condition

Video #7 – 022256.ASF

MH115 to MH115C – appr. 12', clay, pipe in good condition

Video #8 – 023030.ASF

H115 to MH115A – appr. 46', plastic, pipe in good condition, some separation at 8', at 12' pipe turns left at 45 degree angle

Video #9 – 025303.ASF

MH136B to MH136A – appr. 44', plastic, pipe in good condition

Video #10 – 030241.ASF

MH136B to MH115A – appr. 38', plastic, at 14' pipe bends left at 45 degree angle, at MH115A pipe bends right at 45 degree angle, pipe in good condition

\*Note: lower channel heading east from MH115 toward Bldg. TR-10 is blocked 4' from manhole, zero visibility with camera in murky water

\*Note: Channel heading north from MH115 blocked at manhole with chunks of concrete, cannot penetrate with camera

\*Note: 3" pipe heading west from MH115A is perforated drain pipe, only 10' of penetration before camera ran into sediment, could not go through

Video #11 – 054241.ASF

MH115B heading ESE 25' perforated drain pipe, 25' to full debris blockage, pipe in good condition otherwise

\*Note: Shallow steel pipe heading west from MH115B – camera only goes 4' before stopped by debris

\*Note: MH115B heading SSE – perforated drain pipe 12' before debris stoppage

\*Note: MH116A both northward and southward lines are blocked off with brick within 4' of manhole

Video #12 – 064038.ASF

MY77 to MH – appr. 78', plastic, pipe in good condition, camera stopped at 78' due to debris

Video #13 – 064740.ASF

MH77 to MH77A – appr. 32', plastic, pipe in good condition

\*Note: Two roof drains from bldg to MH77

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Video #14 – 234033.ASF

MH115B to MH115 – appr. 41' up line to stoppage, pipe in fair condition, some separation in joints

Video #15 – 234826.ASF

MH115B to MH116A – large amount of debris 3' from manhole, camera would not pass

Video #16 – 000813.ASF

MH116A to MH115B – appr. 14' up line camera stopped, large amount of sludge in line

Video #17 – 002418.ASF

MH116A to MH77B – appr. 15' up line camera stopped, pieces of brick obstructing camera advance

Video #18 – 004031.ASF

MH77B to MH77 – appr. 77', plastic, pipe in good condition

Video #19 – 004547.ASF

MH77B to MH116A – camera stopped at 32' by sediment, also viewed chunks of brick in pipe

Video #20 – 005530.ASF

MH77B to MH76 – camera stopped at 21', piece of top of pipe missing at 9', heavy sediment along north side of pipe

Video #21 - 012535.ASF

MH76 to MH77B – stopped with sediment at 34', pipe from MH76A ties in this line 5' from MH76

Video #22 – 013816.ASF

MH76 to MH92 – stopped at 47' with debris

\*Note: visual inspection of 8' line running from MH76A to MH76, plastic line, good condition

Video #23 – 020120.ASF

MH92 toward bldg TR-12 – stopped at 66', good condition, plastic

Video #24 – 021049.ASF

MH92 to MH76 – stopped at 27' with sediment

Video #25 – 022547

MH92 southward – stopped at 40', large debris in pipe, stone

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Video #26 – 024852.ASF

MH256 southward – stopped at 48', pipe clear, hung up on joint separation

Video #27 – 031116.ASF

MH259 southward – stopped at 89', pipe separation at some joints







**Appendix B**  
**Analytical Summary Tables**

**Table B-1**  
**Potential Source Area: Transformer Yard**  
**Manhole Composite Sediment Sample Data**  
**All Analytical Results**

				Sample Location: MH-98, MH-99, MH-100 Composite	MH-136A and MH-136B Composite	MH-115, MH-115A and MH-115B Composite	MH-116, MH-116A, MH-77, MH-77A, MH-77B Composite	MH-76, MH-76A, MH-92 Composite
				Sample Identification: CARMCOM109	CARMCOM209	CARMCOM309	CARMCOM409	CARMCOM509
				Sample Date: 10/12/2009	10/12/2009	10/13/2009	10/13/2009	10/14/2009
				Matrix: Sediment	Sediment	Sediment	Sediment	Sediment
Method	Analyte	CAS No.	Units					
Solids	Solids	9999000-58-8	percent	<b>54.8</b>	<b>64.2</b>	<b>83.8</b>	<b>80</b>	<b>64.3</b>
SW8082	Aroclor-1016	12674-11-2	µg/kg	45 U	38 U	29 U	31 U	38 U
SW8082	Aroclor-1221	11104-28-2	µg/kg	12 U	9.8 U	7.6 U	8 U	9.9 U
SW8082	Aroclor-1232	11141-16-5	µg/kg	25 U	21 U	16 U	17 U	21 U
SW8082	Aroclor-1242	53469-21-9	µg/kg	15 U	13 U	10 U	11 U	13 U
SW8082	Aroclor-1248	12672-29-6	µg/kg	47 U	40 U	31 U	33 U	40 U
SW8082	Aroclor-1254	11097-69-1	µg/kg	20 U	17 U	13 U	14 U	17 U
SW8082	Aroclor-1260	11096-82-5	µg/kg	<b>318</b>	<b>476</b>	<b>20,500</b>	<b>67,800</b>	<b>57,100</b>

**Notes:**

µg/kg = micrograms per kilogram

U = undetected

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-2**  
**Potential Source Area: Transformer Yard Area**  
**PCB Soil Sampling Data**  
**All Analytical Results**

				<b>Sample Location:</b>	SS11	SS12	SS13	SS14	SS15	SS16	SS17	SS18
				<b>Sample Identification:</b>	CARSSS1101	CARSSS1201	CARSSS1301	CARSSS1401	CARSSS1501	CARSSS1601	CARSSS1701	CARSSS1801
				<b>Sample Date:</b>	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009
				<b>Matrix:</b>	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
<b>Method</b>	<b>Analyte</b>	<b>CAS No.</b>	<b>Units</b>									
Solids	Solids	9999000-58-8	percent	<b>87.5</b>	<b>85.7</b>	<b>67</b>	<b>78.2</b>	<b>85.6</b>	<b>78.3</b>	<b>74.5</b>	<b>79</b>	
SW8082	Aroclor-1016	12674-11-2	µg/kg	28 U	29 U	37 U	32 U	29 U	31 U	32 U	30 U	
SW8082	Aroclor-1221	11104-28-2	µg/kg	7.3 U	7.4 U	9.6 U	8.3 U	7.5 U	8.1 U	8.3 U	7.8 U	
SW8082	Aroclor-1232	11141-16-5	µg/kg	16 U	16 U	21 U	18 U	16 U	17 U	18 U	17 U	
SW8082	Aroclor-1242	53469-21-9	µg/kg	9.6 U	9.8 U	13 U	11 U	9.9 U	11 U	11 U	10 U	
SW8082	Aroclor-1248	12672-29-6	µg/kg	30 U	30 U	39 U	34 U	31 U	33 U	34 U	32 U	
SW8082	Aroclor-1254	11097-69-1	µg/kg	13 U	13 U	17 U	15 U	13 U	14 U	15 U	14 U	
SW8082	Aroclor-1260	11096-82-5	µg/kg	<b>66.4 J</b>	<b>34.1 J</b>	<b>94 J</b>	25 U	<b>85.2 J</b>	<b>135</b>	<b>1,140</b>	<b>901</b>	

				<b>Sample Location:</b>	SS18	SS18	SS18	SS19	SS20	SS21	SS22	SS23
				<b>Sample Identification:</b>	CARSSS1812	CARSSS1823	CARSSS1834	CARSSS1901	CARSSS2012	CARSSS2112	CARSSS2212	CARSSS2312
				<b>Sample Date:</b>	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/15/2009	10/15/2009	10/15/2009	10/15/2009
				<b>Matrix:</b>	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
<b>Method</b>	<b>Analyte</b>	<b>CAS No.</b>	<b>Units</b>									
Solids	Solids	9999000-58-8	percent	<b>85.3</b>	<b>81.3</b>	<b>82.8</b>	<b>80.3</b>	<b>86.9</b>	<b>97.4</b>	<b>81.3</b>	<b>86.8</b>	
SW8082	Aroclor-1016	12674-11-2	µg/kg	28 U	31 U	30 U	31 U	28 U	26 U	30 U	28 U	
SW8082	Aroclor-1221	11104-28-2	µg/kg	7.3 U	7.9 U	7.7 U	8 U	7.4 U	6.6 U	7.9 U	7.3 U	
SW8082	Aroclor-1232	11141-16-5	µg/kg	16 U	17 U	17 U	17 U	16 U	14 U	17 U	16 U	
SW8082	Aroclor-1242	53469-21-9	µg/kg	9.5 U	10 U	10 U	10 U	9.7 U	8.7 U	10 U	9.6 U	
SW8082	Aroclor-1248	12672-29-6	µg/kg	29 U	32 U	31 U	32 U	30 U	27 U	32 U	30 U	
SW8082	Aroclor-1254	11097-69-1	µg/kg	13 U	14 U	14 U	14 U	13 U	12 U	14 U	13 U	
SW8082	Aroclor-1260	11096-82-5	µg/kg	22 U	24 U	23 U	<b>304</b>	22 U	20 U	23 U	22 U	

**Table B-2 (Continued)**  
**Potential Source Area: Transformer Yard Area**  
**PCB Soil Sampling Data**  
**All Analytical Results**

				<b>Sample Location:</b>	SS24	SS25	SS26	SS27	SS28	SS29	SS37	SS38
				<b>Sample Identification:</b>	CARSSS2401	CARSSS2512	CARSSS2612	CARSSS2701	CARSSS2801	CARSSS2901	CARSSS37	CARSSS38
				<b>Sample Date:</b>	10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/28/2009	10/28/2009
				<b>Matrix:</b>	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
<b>Method</b>	<b>Analyte</b>	<b>CAS No.</b>	<b>Units</b>									
Solids	Solids	9999000-58-8	percent	<b>82.7</b>	<b>83</b>	<b>88.3</b>	<b>76.7</b>	<b>75.3</b>	<b>74.9</b>	<b>84.1</b>	<b>81.4</b>	
SW8082	Aroclor-1016	12674-11-2	µg/kg	30 U	30 U	28 U	32 U	33 U	33 U	12 U	13 U	
SW8082	Aroclor-1221	11104-28-2	µg/kg	7.8 U	7.7 U	7.3 U	8.4 U	8.4 U	8.6 U	23 U	24 U	
SW8082	Aroclor-1232	11141-16-5	µg/kg	17 U	17 U	16 U	18 U	18 U	18 U	11 U	12 U	
SW8082	Aroclor-1242	53469-21-9	µg/kg	10 U	10 U	9.6 U	11 U	11 U	11 U	13 U	13 U	
SW8082	Aroclor-1248	12672-29-6	µg/kg	32 U	31 U	30 U	34 U	34 U	35 U	6.9 U	7.1 U	
SW8082	Aroclor-1254	11097-69-1	µg/kg	14 U	14 U	13 U	15 U	15 U	15 U	8.8 U	9.1 U	
SW8082	Aroclor-1260	11096-82-5	µg/kg	<b>1,190</b>	23 U	22 U	<b>26,700</b>	<b>5,500</b>	<b>72.6 J</b>	<b>34,400</b>	<b>907</b>	

				<b>Sample Location:</b>	SS39	SS40	SS41	SS42	SS43	SS44	SS45	SS46
				<b>Sample Identification:</b>	CARSSS39	CARSSS40	CARSSS41	CARSSS42	CARSSS43	CARSSS44	CARSSS45-01	CARSSS46-01
				<b>Sample Date:</b>	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	10/28/2009	11/24/2009	11/24/2009
				<b>Matrix:</b>	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
<b>Method</b>	<b>Analyte</b>	<b>CAS No.</b>	<b>Units</b>									
Solids	Solids	9999000-58-8	percent	<b>72.5</b>	<b>73.5</b>	<b>77.2</b>	<b>77.6</b>	<b>75.7</b>	<b>72.9</b>	<b>81.9</b>	<b>80.3</b>	
SW8082	Aroclor-1016	12674-11-2	µg/kg	14 U	14 U	13 U	13 U	14 U	14 U	13 U	13 U	
SW8082	Aroclor-1221	11104-28-2	µg/kg	27 U	26 U	25 U	25 U	25 U	27 U	23 U	24 U	
SW8082	Aroclor-1232	11141-16-5	µg/kg	13 U	13 U	12 U	12 U	12 U	13 U	11 U	12 U	
SW8082	Aroclor-1242	53469-21-9	µg/kg	14 U	14 U	13 U	14 U	14 U	14 U	13 U	13 U	
SW8082	Aroclor-1248	12672-29-6	µg/kg	8 U	7.8 U	7.4 U	7.5 U	7.6 U	8 U	7 U	7.2 U	
SW8082	Aroclor-1254	11097-69-1	µg/kg	10 U	9.9 U	9.4 U	9.5 U	9.7 U	10 U	8.9 U	9.1 U	
SW8082	Aroclor-1260	11096-82-5	µg/kg	<b>691</b>	<b>598</b>	<b>122</b>	15 U	15 U	<b>52.7</b>	<b>1,530</b>	<b>608</b>	

**Table B-2 (Continued)**  
**Potential Source Area: Transformer Yard Area**  
**PCB Soil Sampling Data**  
**All Analytical Results**

				Sample Location:	SS47	SS48	SS49	SS50	SS51	SS52	SS53	SS54
				Sample Identification:	CARSSS47-01	CARSSS48-01	CARSSS49-01	CARSSS50-01	CARSSS51-01	CARSSS52-01	CARSSS53-01	CARSSS54-01
				Sample Date:	11/24/2009	11/24/2009	11/24/2009	11/24/2009	11/24/2009	11/24/2009	11/24/2009	11/24/2009
				Matrix:	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Analyte	CAS No.	Units									
Solids	Solids	9999000-58-8	percent	<b>82.5</b>	<b>81.7</b>	<b>81.4</b>	<b>82.1</b>	<b>84.6</b>	<b>83.5</b>	<b>94.7</b>	<b>79.3</b>	
SW8082	Aroclor-1016	12674-11-2	µg/kg	12 U	13 U	13 U	13 U	12 U	12 U	11 U	13 U	
SW8082	Aroclor-1221	11104-28-2	µg/kg	23 U	23 U	24 U	23 U	23 U	23 U	20 U	24 U	
SW8082	Aroclor-1232	11141-16-5	µg/kg	11 U	11 U	12 U	11 U	11 U	11 U	9.8 U	12 U	
SW8082	Aroclor-1242	53469-21-9	µg/kg	13 U	13 U	13 U	13 U	12 U	12 U	11 U	13 U	
SW8082	Aroclor-1248	12672-29-6	µg/kg	7 U	7 U	7.2 U	7 U	6.9 U	6.9 U	6.1 U	7.3 U	
SW8082	Aroclor-1254	11097-69-1	µg/kg	8.8 U	8.9 U	9.1 U	8.9 U	8.7 U	8.7 U	7.7 U	9.2 U	
SW8082	Aroclor-1260	11096-82-5	µg/kg	<b>2,760</b>	<b>13,600</b>	<b>632</b>	<b>307</b>	<b>7,290</b>	<b>459</b>	12 U	<b>517</b>	

**Notes:**

µg/kg = micrograms per kilogram

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-4**  
**Potential PCB Source: Transformer Yard Area**  
**Surface Water Runoff Data Summary**  
**All Analytical Results**

				Sample Location:	SWS	SWS-1	SWS-2
				Sample Identification:	XF YARD 112009	SWS-1 120909	SWS-2 120909
				Sample Date:	11/20/2009	12/09/2009	12/09/2009
				Matrix:	WS	WS	WS
Method	Analyte	CAS No.	Units				
E608	Aroclor-1016	12674-11-2	µg/L		0.016 U	0.019 U	0.16 U
E608	Aroclor-1221	11104-28-2	µg/L		0.016 U	0.019 U	0.16 U
E608	Aroclor-1232	11141-16-5	µg/L		0.016 U	0.019 U	0.16 U
E608	Aroclor-1242	53469-21-9	µg/L		0.016 U	0.019 U	0.16 U
E608	Aroclor-1248	12672-29-6	µg/L		0.016 U	0.019 U	0.16 U
E608	Aroclor-1254	11097-69-1	µg/L		0.016 U	0.019 U	0.16 U
E608	Aroclor-1260	11096-82-5	µg/L		0.011 U	<b>0.33</b>	<b>3.7</b>

**Notes:**

µg/L = micrograms per liter

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)



**Table B-4**  
**Potential Source Area: TR-18 and Thompson Road Storm Lines**  
**Manhole Sediment Samples**  
**All Analytical Results**

				Sample Location: MH-98, MH-99, MH-100 Comp Sample Identification: CARMCOM109 Sample Date: 10/12/2009 Matrix: Sediment	MH-136A and MH-136B Comp CARMCOM209 10/12/2009 Sediment	MH-115, MH-115A and MH-115B Comp CARMCOM309 10/13/2009 Sediment	MH-116, MH-116A, MH-77, MH-77A, MH-77B Comp CARMCOM409 10/13/2009 Sediment	MH-76, MH-76A, MH-92 Comp CARMCOM509 10/14/2009 Sediment	MH-122 CARMMH1229 10/15/2009 Sediment
Method	Analyte	CAS No.	Units						
Solids	Solids	9999000-58-8	percent	<b>54.8</b>	<b>64.2</b>	<b>83.8</b>	<b>80</b>	<b>64.3</b>	<b>80.8</b>
SW8082	Aroclor-1016	12674-11-2	µg/kg	45 U	38 U	29 U	31 U	38 U	30 U
SW8082	Aroclor-1221	11104-28-2	µg/kg	12 U	9.8 U	7.6 U	8 U	9.9 U	7.9 U
SW8082	Aroclor-1232	11141-16-5	µg/kg	25 U	21 U	16 U	17 U	21 U	17 U
SW8082	Aroclor-1242	53469-21-9	µg/kg	15 U	13 U	10 U	11 U	13 U	10 U
SW8082	Aroclor-1248	12672-29-6	µg/kg	47 U	40 U	31 U	33 U	40 U	32 U
SW8082	Aroclor-1254	11097-69-1	µg/kg	20 U	17 U	13 U	14 U	17 U	14 U
SW8082	Aroclor-1260	11096-82-5	µg/kg	<b>318</b>	<b>476</b>	<b>20,500</b>	<b>67,800</b>	<b>57,100</b>	<b>68.3 J</b>

				Sample Location: MH-126 Sample Identification: CARMMH1269 Sample Date: 10/15/2009 Matrix: Sediment	MH-129 CARMMH1299 10/15/2009 Sediment	MH-130 CARMMH1309 10/15/2009 Sediment	MH-131 CARMMH1319 10/15/2009 Sediment	MH-134 CARMMH1349 10/15/2009 Sediment	MH-135 CARMMH1359 10/15/2009 Sediment
Method	Analyte	CAS No.	Units						
Solids	Solids	9999000-58-8	percent	<b>77.7</b>	<b>79.1</b>	<b>56.7</b>	<b>77.7</b>	<b>55.2</b>	<b>77</b>
SW8082	Aroclor-1016	12674-11-2	µg/kg	31 U	30 U	43 U	32 U	44 U	32 U
SW8082	Aroclor-1221	11104-28-2	µg/kg	8.1 U	7.9 U	11 U	8.2 U	11 U	8.3 U
SW8082	Aroclor-1232	11141-16-5	µg/kg	17 U	17 U	24 U	18 U	25 U	18 U
SW8082	Aroclor-1242	53469-21-9	µg/kg	11 U	<b>2,500</b>	15 U	11 U	15 U	11 U
SW8082	Aroclor-1248	12672-29-6	µg/kg	<b>4,260</b>	32 U	45 U	<b>379</b>	47 U	34 U
SW8082	Aroclor-1254	11097-69-1	µg/kg	<b>7,020</b>	<b>2100</b>	<b>787</b>	<b>560</b>	20 U	15 U
SW8082	Aroclor-1260	11096-82-5	µg/kg	<b>2,360</b>	<b>554</b>	<b>842</b>	<b>196</b>	<b>3,160</b>	<b>167</b>

**Table B-4 (Continued)**  
**Potential Source Area: TR-18 and Thompson Road Storm Lines**  
**Manhole Sediment Samples**  
**All Analytical Results**

				Sample Location:	MH-136	MH-137	MH-143	MH-243	MH-256	MH-259
				Sample Identification:	CARMMH1369	CARMMH1379	CARMMH1439	CARMMH2439	CARMMH2569	CARMMH2599
				Sample Date:	10/15/2009	10/16/2009	10/16/2009	10/16/2009	10/15/2009	10/15/2009
				Matrix:	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Method	Analyte	CAS No.	Units							
Solids	Solids	9999000-58-8	percent		<b>72.8</b>	<b>86.9</b>	<b>88.8</b>	<b>77.3</b>	<b>57.2</b>	<b>73.5</b>
SW8082	Aroclor-1016	12674-11-2	µg/kg		34 U	28 U	27 U	32 U	43 U	33 U
SW8082	Aroclor-1221	11104-28-2	µg/kg		8.8 U	7.1 U	7.1 U	8.3 U	11 U	8.6 U
SW8082	Aroclor-1232	11141-16-5	µg/kg		19 U	15 U	15 U	18 U	24 U	18 U
SW8082	Aroclor-1242	53469-21-9	µg/kg		12 U	9.4 U	9.3 U	11 U	15 U	11 U
SW8082	Aroclor-1248	12672-29-6	µg/kg		36 U	29 U	29 U	34 U	45 U	35 U
SW8082	Aroclor-1254	11097-69-1	µg/kg		16 U	13 U	<b>17,300</b>	15 U	20 U	15 U
SW8082	Aroclor-1260	11096-82-5	µg/kg		<b>756</b>	<b>16,600</b>	<b>7,860</b>	<b>7,110</b>	<b>1,100</b>	<b>166</b>

				Sample Location:	MH-82	MH-89
				Sample Identification:	CARMMH0829	CARMMH0899
				Sample Date:	10/13/2009	10/13/2009
				Matrix:	Sediment	Sediment
Method	Analyte	CAS No.	Units			
Solids	Solids	9999000-58-8	percent		<b>70.2</b>	<b>79.9</b>
SW8082	Aroclor-1016	12674-11-2	µg/kg		35 U	31 U
SW8082	Aroclor-1221	11104-28-2	µg/kg		9.1 U	8 U
SW8082	Aroclor-1232	11141-16-5	µg/kg		20 U	17 U
SW8082	Aroclor-1242	53469-21-9	µg/kg		12 U	10 U
SW8082	Aroclor-1248	12672-29-6	µg/kg		37 U	32 U
SW8082	Aroclor-1254	11097-69-1	µg/kg		16 U	14 U
SW8082	Aroclor-1260	11096-82-5	µg/kg		<b>1,700</b>	<b>79,300</b>

**Notes:**

µg/kg = micrograms per kilogram

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-5**  
**Building TR-2 Roof Runoff Sample Data**  
**All Analytical Results**

				Sample Location:	TR2 B-9	TR2 B-9	TR2 F-4	TR2 F-4	TR2 H-9
				Sample Identification:	TR2 LEADER B-9	TR2-B9	TR2 F-4	TR2 F-4	TR2 LEADER H-9
				Sample Date:	7/24/2009	8/9/2009	8/18/2009	8/28/2009	7/24/2009
				Matrix:	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L		0.015 U	0.015 U	0.015 U	0.015 U	0.38 U
E608	Aroclor-1221	11104-28-2	µg/L		0.015 U	0.015 U	0.015 U	0.015 U	0.38 U
E608	Aroclor-1232	11141-16-5	µg/L		0.015 U	0.015 U	0.015 U	0.015 U	0.38 U
E608	Aroclor-1242	53469-21-9	µg/L		0.015 U	0.015 U	0.015 U	0.015 U	0.38 U
E608	Aroclor-1248	12672-29-6	µg/L		0.015 U	0.015 U	0.015 U	0.015 U	0.38 U
E608	Aroclor-1254	11097-69-1	µg/L		0.015 U	0.015 U	0.015 U	<b>0.043 J</b>	0.38 U
E608	Aroclor-1260	11096-82-5	µg/L		<b>0.028 J</b>	<b>0.019 J</b>	0.011 U	<b>0.039 J</b>	<b>0.76 J</b>

				Sample Location:	TR2 H-9	TR2 H-10	TR2 H-10	TR2 N-9	TR2 N-9
				Sample Identification:	TR2-H9	TR2 H-10	TR2 H-10	TR2 N-9	TR2 N-9
				Sample Date:	8/9/2009	8/18/2009	8/28/2009	8/18/2009	8/28/2009
				Matrix:	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L		0.19 U	0.015 U	0.03 U	0.015 U	0.016 U
E608	Aroclor-1221	11104-28-2	µg/L		0.19 U	0.015 U	0.03 U	0.015 U	0.016 U
E608	Aroclor-1232	11141-16-5	µg/L		0.19 U	0.015 U	0.03 U	0.015 U	0.016 U
E608	Aroclor-1242	53469-21-9	µg/L		0.19 U	0.015 U	0.03 U	0.015 U	0.016 U
E608	Aroclor-1248	12672-29-6	µg/L		0.19 U	0.015 U	0.03 U	0.015 U	0.016 U
E608	Aroclor-1254	11097-69-1	µg/L		0.19 U	0.015 U	0.03 U	0.015 U	0.016 U
E608	Aroclor-1260	11096-82-5	µg/L		<b>0.63</b>	0.011 U	<b>0.24</b>	0.011 U	<b>0.026 J</b>

**Table B-5 (Continued)**  
**Building TR-2 Roof Runoff Sample Locations**  
**All Analytical Results**

<b>Sample Location:</b> <b>Sample Identification:</b> <b>Sample Date:</b> <b>Matrix:</b>				TR2 R-7	TR2 R-7	TR2 R-19	TR2 R-W3	TR2 W-6S
				TR2 LEADER R-7	TR2-R7 080909	TR2 LEADER R-19	TR2-RW3	TR2-W6S
				7/24/2009	8/9/2009	11/3/2009	11/20/2009	11/20/2009
				Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units					
E608	Aroclor-1016	12674-11-2	µg/L	0.015 U	0.15 U	0.015 U	0.075 U	0.15 U
E608	Aroclor-1221	11104-28-2	µg/L	0.015 U	0.15 U	0.015 U	0.075 U	0.15 U
E608	Aroclor-1232	11141-16-5	µg/L	0.015 U	0.15 U	0.015 U	0.075 U	0.15 U
E608	Aroclor-1242	53469-21-9	µg/L	0.015 U	0.15 U	0.015 U	0.075 U	<b>1.4</b>
E608	Aroclor-1248	12672-29-6	µg/L	0.015 U	0.15 U	0.015 U	0.075 U	0.15 U
E608	Aroclor-1254	11097-69-1	µg/L	0.015 U	0.15 U	0.015 U	0.075 U	<b>1.3</b>
E608	Aroclor-1260	11096-82-5	µg/L	<b>0.019 J</b>	<b>0.17 J</b>	<b>0.11</b>	0.055 U	<b>0.2 J</b>

<b>Sample Location:</b> <b>Sample Identification:</b> <b>Sample Date:</b> <b>Matrix:</b>				TR2 W7B/W7D COMP	TR2 W7F/W7H COMP
				TR2-W7B/W7D Composite	TR2-W7F/W7H Composite
				11/20/2009	11/20/2009
				Water	Water
Method	Analyte	CAS No.	Units		
E608	Aroclor-1016	12674-11-2	µg/L	0.79 U	0.39 U
E608	Aroclor-1221	11104-28-2	µg/L	0.79 U	0.39 U
E608	Aroclor-1232	11141-16-5	µg/L	0.79 U	0.39 U
E608	Aroclor-1242	53469-21-9	µg/L	<b>19</b>	<b>2</b>
E608	Aroclor-1248	12672-29-6	µg/L	0.79 U	0.39 U
E608	Aroclor-1254	11097-69-1	µg/L	<b>13</b>	0.55 J
E608	Aroclor-1260	11096-82-5	µg/L	<b>1.3 J</b>	0.28 U

**Notes:**

µg/L = micrograms per liter

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-6**  
**Potential PCB Source: Manhole MH-126 Area**  
**PCB Soil Sampling Data**  
**All Analytical Results**

Method	Analyte	CAS No.	Units	Sample Location:	SS30	SS31	SS32	SS33	SS34	SS35	SS36
				Sample Identification:	CARSSS3023	CARSSS3112	CARSSS3212	CARSSS3312	CARSSS3412	CARSSS3512	CARSSS3623
				Sample Date:	10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/15/2009
				Matrix:	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Solids	Solids	9999000-58-8	percent		<b>85</b>	<b>82.9</b>	<b>85.1</b>	<b>85.7</b>	<b>90.2</b>	<b>86.7</b>	<b>95.4</b>
SW8082	Aroclor-1016	12674-11-2	µg/kg		29 U	30 U	29 U	29 U	27 U	29 U	26 U
SW8082	Aroclor-1221	11104-28-2	µg/kg		7.5 U	7.7 U	7.5 U	7.5 U	7.1 U	7.4 U	6.7 U
SW8082	Aroclor-1232	11141-16-5	µg/kg		16 U	16 U	16 U	16 U	15 U	16 U	14 U
SW8082	Aroclor-1242	53469-21-9	µg/kg		9.9 U	10 U	9.9 U	9.8 U	9.4 U	9.8 U	8.8 U
SW8082	Aroclor-1248	12672-29-6	µg/kg		31 U	31 U	30 U	30 U	29 U	30 U	27 U
SW8082	Aroclor-1254	11097-69-1	µg/kg		13 U	13 U	13 U	13 U	13 U	13 U	12 U
SW8082	Aroclor-1260	11096-82-5	µg/kg		22 U	23 U	<b>83.6 J</b>	<b>37.7 J</b>	<b>71.3 J</b>	<b>32.3 J</b>	<b>92.2 J</b>

**Notes:**

µg/kg = micrograms per kilogram

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-7**  
**Potential Source Area: Building TR-23 Former WSA**  
**PCB Subsurface Soil Sample Data**  
**All Analytical Results**

				<b>Sample Location:</b>	SS01	SS02	SS03	SS04	SS05	SS06
				<b>Sample Identification:</b>	CARSSS0123	CARSSS0212	CARSSS0323	CARSSS0423	CARSSS0523	CARSSS0623
				<b>Sample Date:</b>	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009
				<b>Matrix:</b>	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
<b>Method</b>	<b>Analyte</b>	<b>CAS No.</b>	<b>Units</b>							
Solids	Solids	9999000-58-8	percent	<b>86</b>	<b>86.2</b>	<b>80.3</b>	<b>84.3</b>	<b>85.4</b>	<b>86.3</b>	
SW8082	Aroclor-1016	12674-11-2	µg/kg	28 U	28 U	30 U	29 U	29 U	28 U	
SW8082	Aroclor-1221	11104-28-2	µg/kg	7.3 U	7.2 U	7.8 U	7.6 U	7.6 U	7.4 U	
SW8082	Aroclor-1232	11141-16-5	µg/kg	16 U	16 U	17 U	16 U	16 U	16 U	
SW8082	Aroclor-1242	53469-21-9	µg/kg	9.6 U	9.5 U	10 U	10 U	10 U	9.7 U	
SW8082	Aroclor-1248	12672-29-6	µg/kg	30 U	29 U	32 U	31 U	31 U	30 U	
SW8082	Aroclor-1254	11097-69-1	µg/kg	13 U	13 U	14 U	13 U	13 U	13 U	
SW8082	Aroclor-1260	11096-82-5	µg/kg	22 U	22 U	23 U	23 U	23 U	22 U	

				<b>Sample Location:</b>	SS07	SS08	SS08	SS09	SS10	SS10
				<b>Sample Identification:</b>	CARSSS0723	CARSSS0823	CARSSS0834	CARSSS0923	CARSSS1012	CARSSS1023
				<b>Sample Date:</b>	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009
				<b>Matrix:</b>	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
<b>Method</b>	<b>Analyte</b>	<b>CAS No.</b>	<b>Units</b>							
Solids	Solids	9999000-58-8	percent	<b>86.9</b>	<b>84.5</b>	<b>82.8</b>	<b>85.7</b>	<b>86.2</b>	<b>85.5</b>	
SW8082	Aroclor-1016	12674-11-2	µg/kg	28 U	29 U	29 U	29 U	28 U	29 U	
SW8082	Aroclor-1221	11104-28-2	µg/kg	7.3 U	7.4 U	7.6 U	7.5 U	7.2 U	7.5 U	
SW8082	Aroclor-1232	11141-16-5	µg/kg	16 U	16 U	16 U	16 U	16 U	16 U	
SW8082	Aroclor-1242	53469-21-9	µg/kg	9.6 U	9.7 U	10 U	9.9 U	9.5 U	9.9 U	
SW8082	Aroclor-1248	12672-29-6	µg/kg	30 U	30 U	31 U	31 U	29 U	31 U	
SW8082	Aroclor-1254	11097-69-1	µg/kg	13 U	13 U	13 U	13 U	13 U	13 U	
SW8082	Aroclor-1260	11096-82-5	µg/kg	22 U	<b>4,350</b>	<b>497</b>	22 U	<b>210</b>	22 U	

**Notes:**

µg/kg = micrograms per kilogram

U = undetected

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-8**  
**Building TR-1 Roof Runoff Sample Data**  
**All Analytical Results**

				<b>Sample Location:</b>	TR-1 B-10	TR1 B-12	TR-1 B-13	TR1 B-19	TR1 B-19
				<b>Sample Identification:</b>	TR-1 B-10 121409	TR1 B-12 082809	TR-1 B-13 121409	TR1 LEADER B-19 072409	TR1 B-19 081809
				<b>Sample Date:</b>	12/14/2009	8/28/2009	12/14/2009	7/24/2009	8/18/2009
				<b>Matrix:</b>	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L	0.079 U	0.016 U	0.016 U	0.015 U	0.015 U	
E608	Aroclor-1221	11104-28-2	µg/L	0.079 U	0.016 U	0.016 U	0.015 U	0.015 U	
E608	Aroclor-1232	11141-16-5	µg/L	0.079 U	0.016 U	0.016 U	0.015 U	0.015 U	
E608	Aroclor-1242	53469-21-9	µg/L	0.079 U	0.016 U	0.016 U	0.015 U	0.015 U	
E608	Aroclor-1248	12672-29-6	µg/L	0.079 U	0.016 U	0.016 U	0.015 U	0.015 U	
E608	Aroclor-1254	11097-69-1	µg/L	<b>0.42</b>	<b>0.072</b>	0.016 U	0.015 U	0.015 U	
E608	Aroclor-1260	11096-82-5	µg/L	<b>0.59</b>	<b>0.12</b>	<b>0.014 J</b>	0.011 U	0.011 U	

				<b>Sample Location:</b>	TR1 B-19	TR1 B-19	TR-1 C-10	TR-1 C-13	TR1 C-4
				<b>Sample Identification:</b>	TR1 B-19 082809	TR1-B19 080909	TR-1 C-10 121409	TR-1 C-13 121409	TR1 LEADER C-4 072409
				<b>Sample Date:</b>	8/28/2009	8/9/2009	12/14/2009	12/14/2009	7/24/2009
				<b>Matrix:</b>	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L	0.016 U	0.08 U	0.015 U	0.015 U	0.015 U	
E608	Aroclor-1221	11104-28-2	µg/L	0.016 U	0.08 U	0.015 U	0.015 U	0.015 U	
E608	Aroclor-1232	11141-16-5	µg/L	0.016 U	0.08 U	0.015 U	0.015 U	0.015 U	
E608	Aroclor-1242	53469-21-9	µg/L	0.016 U	0.08 U	0.015 U	0.015 U	0.015 U	
E608	Aroclor-1248	12672-29-6	µg/L	0.016 U	0.08 U	0.015 U	0.015 U	0.015 U	
E608	Aroclor-1254	11097-69-1	µg/L	0.016 U	0.08 U	0.015 U	0.015 U	0.015 U	<b>0.047 J</b>
E608	Aroclor-1260	11096-82-5	µg/L	0.011 U	<b>0.071 J</b>	0.011 U	0.011 U	0.011 U	<b>0.021 J</b>

**Notes:**

µg/L = micrograms per liter

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)



**Table B-8**  
**Building TR-1 Roof Runoff Sample Locations**  
**All Analytical Results**

				Sample Location:	TR1 C-4	TR1 C-4	TR1 C-4	TR1 E-23	TR1 E-23
				Sample Identification:	TR1 C-4 081809	TR1 C-4 082809	TR1-C4 080909	TR1 LEADER E-23 072409	TR1 E-23 081809
				Sample Date:	8/18/2009	8/28/2009	8/9/2009	7/24/2009	8/18/2009
				Matrix:	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L	0.017 U	0.016 U	0.016 U	0.015 U	0.079 U	
E608	Aroclor-1221	11104-28-2	µg/L	0.017 U	0.016 U	0.016 U	0.015 U	0.079 U	
E608	Aroclor-1232	11141-16-5	µg/L	0.017 U	0.016 U	0.016 U	0.015 U	0.079 U	
E608	Aroclor-1242	53469-21-9	µg/L	0.017 U	0.016 U	0.016 U	0.015 U	0.079 U	
E608	Aroclor-1248	12672-29-6	µg/L	0.017 U	0.016 U	0.016 U	0.015 U	0.079 U	
E608	Aroclor-1254	11097-69-1	µg/L	<b>0.045 J</b>	0.016 U	<b>0.036 J</b>	0.015 U	0.079 U	
E608	Aroclor-1260	11096-82-5	µg/L	<b>0.045 J</b>	<b>0.021 J</b>	<b>0.037 J</b>	0.011 U	0.058 U	

				Sample Location:	TR1 E-23	TR1 E-23	TR-1 F-13	TR1 G-6	TR1 G-6
				Sample Identification:	TR1 E-23 082809	TR1-E23 080909	TR-1 F-13 121409	TR1 LEADER G-6 072409	TR1 G-6 081809
				Sample Date:	8/28/2009	8/9/2009	12/14/2009	7/24/2009	8/18/2009
				Matrix:	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L	0.015 U	0.08 U	0.015 U	0.015 U	0.016 U	
E608	Aroclor-1221	11104-28-2	µg/L	0.015 U	0.08 U	0.015 U	0.015 U	0.016 U	
E608	Aroclor-1232	11141-16-5	µg/L	0.015 U	0.08 U	0.015 U	0.015 U	0.016 U	
E608	Aroclor-1242	53469-21-9	µg/L	0.015 U	0.08 U	0.015 U	0.015 U	0.016 U	
E608	Aroclor-1248	12672-29-6	µg/L	0.015 U	0.08 U	0.015 U	0.015 U	0.016 U	
E608	Aroclor-1254	11097-69-1	µg/L	0.015 U	0.08 U	<b>0.037 J</b>	0.015 U	0.016 U	
E608	Aroclor-1260	11096-82-5	µg/L	<b>0.03 J</b>	<b>0.14 J</b>	<b>0.11</b>	0.011 U	<b>0.012 J</b>	

**Notes:**

µg/L = micrograms per liter

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-8**  
**Building TR-1 Roof Runoff Sample Locations**  
**All Analytical Results**

				Sample Location:	TR1 G-6	TR1 G-6	TR1 H-10	TR1 H-10	TR1 H-10
				Sample Identification:	TR1 G-6 082809	TR1-G6 080909	TR1 LEADER H-10 072409	TR1 H-10 081809	TR1 H-10 082809
				Sample Date:	8/28/2009	8/9/2009	7/24/2009	8/18/2009	8/28/2009
				Matrix:	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L	0.016 U	0.016 U	0.015 U	0.15 U	0.017 U	
E608	Aroclor-1221	11104-28-2	µg/L	0.016 U	0.016 U	0.015 U	0.15 U	0.017 U	
E608	Aroclor-1232	11141-16-5	µg/L	0.016 U	0.016 U	0.015 U	0.15 U	0.017 U	
E608	Aroclor-1242	53469-21-9	µg/L	0.016 U	0.016 U	0.015 U	0.15 U	0.017 U	
E608	Aroclor-1248	12672-29-6	µg/L	0.016 U	0.016 U	0.015 U	0.15 U	0.017 U	
E608	Aroclor-1254	11097-69-1	µg/L	0.016 U	0.016 U	0.015 U	0.15 U	0.017 U	
E608	Aroclor-1260	11096-82-5	µg/L	<b>0.013 J</b>	<b>0.015 J</b>	0.011 U	<b>0.11 J</b>	0.012 U	

				Sample Location:	TR1 H-10	TR-1 J-10	TR1 J-12	TR-1 J-13	TR1 J-19
				Sample Identification:	TR1-H10 080909	TR-1 J-10 121409	TR1 LEADER J-12 072409	TR-1 J-13 121409	TR1 LEADER J-19 072409
				Sample Date:	8/9/2009	12/14/2009	7/24/2009	12/14/2009	7/24/2009
				Matrix:	Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units						
E608	Aroclor-1016	12674-11-2	µg/L	0.016 U	0.015 U	0.015 U	0.017 U	0.015 U	
E608	Aroclor-1221	11104-28-2	µg/L	0.016 U	0.015 U	0.015 U	0.017 U	0.015 U	
E608	Aroclor-1232	11141-16-5	µg/L	0.016 U	0.015 U	0.015 U	0.017 U	0.015 U	
E608	Aroclor-1242	53469-21-9	µg/L	0.016 U	0.015 U	0.015 U	0.017 U	0.015 U	
E608	Aroclor-1248	12672-29-6	µg/L	0.016 U	0.015 U	0.015 U	0.017 U	0.015 U	
E608	Aroclor-1254	11097-69-1	µg/L	0.016 U	0.015 U	0.015 U	<b>0.049 J</b>	0.015 U	
E608	Aroclor-1260	11096-82-5	µg/L	<b>0.042 J</b>	<b>0.023 J</b>	0.011 U	<b>0.097</b>	0.011 U	

**Notes:**

µg/L = micrograms per liter

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-8**  
**Building TR-1 Roof Runoff Sample Locations**  
**All Analytical Results**

Sample Location:				TR1 J-19	TR1 J-19	TR1 J-19	TR1 K-12	TR1 K-12
Sample Identification:				TR1 J-19 081809	TR1 J-19 082809	TR1-J19 080909	TR1 K-12 081809	TR1 K-12 082809
Sample Date:				8/18/2009	8/28/2009	8/9/2009	8/18/2009	8/28/2009
Matrix:				Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units					
E608	Aroclor-1016	12674-11-2	µg/L	0.016 U	0.016 U	0.081 U	0.075 U	0.016 U
E608	Aroclor-1221	11104-28-2	µg/L	0.016 U	0.016 U	0.081 U	0.075 U	0.016 U
E608	Aroclor-1232	11141-16-5	µg/L	0.016 U	0.016 U	0.081 U	0.075 U	0.016 U
E608	Aroclor-1242	53469-21-9	µg/L	0.016 U	0.016 U	0.081 U	0.075 U	0.016 U
E608	Aroclor-1248	12672-29-6	µg/L	0.016 U	0.016 U	0.081 U	0.075 U	0.016 U
E608	Aroclor-1254	11097-69-1	µg/L	0.016 U	0.016 U	0.081 U	0.075 U	0.016 U
E608	Aroclor-1260	11096-82-5	µg/L	<b>0.015 J</b>	<b>0.024 J</b>	<b>0.14 J</b>	<b>0.13 J</b>	<b>0.26</b>

Sample Location:				TR1 K-12	TR1 K-4	TR1 K-4	TR-1 L-10	TR-1 L-13
Sample Identification:				TR1-K12 080909	TR1 LEADER K-4 072409	TR1 K-4 081809	TR-1 L-10 121409	TR-1 L-13 121409
Sample Date:				8/9/2009	7/24/2009	8/18/2009	12/14/2009	12/14/2009
Matrix:				Water	Water	Water	Water	Water
Method	Analyte	CAS No.	Units					
E608	Aroclor-1016	12674-11-2	µg/L	0.2 U	0.015 U	0.018 U	0.015 U	0.15 U
E608	Aroclor-1221	11104-28-2	µg/L	0.2 U	0.015 U	0.018 U	0.015 U	0.15 U
E608	Aroclor-1232	11141-16-5	µg/L	0.2 U	0.015 U	0.018 U	0.015 U	0.15 U
E608	Aroclor-1242	53469-21-9	µg/L	0.2 U	0.015 U	0.018 U	0.015 U	0.15 U
E608	Aroclor-1248	12672-29-6	µg/L	0.2 U	0.015 U	0.018 U	0.015 U	0.15 U
E608	Aroclor-1254	11097-69-1	µg/L	<b>0.42 J</b>	0.015 U	0.018 U	0.015 U	<b>0.79</b>
E608	Aroclor-1260	11096-82-5	µg/L	<b>1.4</b>	0.011 U	0.013 U	<b>0.013 J</b>	<b>1.3</b>

**Notes:**

µg/L = micrograms per liter  
U = undetected  
J = estimated value  
**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-8**  
**Building TR-1 Roof Runoff Sample Locations**  
**All Analytical Results**

				<b>Sample Location:</b>	TR1 L-4	TR1 L-4
				<b>Sample Identification:</b>	TR1 L-4 082809	TR1-L4 080909
				<b>Sample Date:</b>	8/28/2009	8/9/2009
				<b>Matrix:</b>	Water	Water
<b>Method</b>	<b>Analyte</b>	<b>CAS No.</b>	<b>Units</b>			
E608	Aroclor-1016	12674-11-2	µg/L	0.016 U	0.015 U	
E608	Aroclor-1221	11104-28-2	µg/L	0.016 U	0.015 U	
E608	Aroclor-1232	11141-16-5	µg/L	0.016 U	0.015 U	
E608	Aroclor-1242	53469-21-9	µg/L	0.016 U	0.015 U	
E608	Aroclor-1248	12672-29-6	µg/L	0.016 U	0.015 U	
E608	Aroclor-1254	11097-69-1	µg/L	0.016 U	0.015 U	
E608	Aroclor-1260	11096-82-5	µg/L	0.012 U	0.011 U	

**Notes:**

µg/L = micrograms per liter

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

**Table B-9**  
**Transformer Yard In-Line Manhole Storm Water Samples**  
**All Analytical Results**

Method	Analyte	CAS No.	Matrix: Units	Sample Location:	MH-116A	MH-256S	MH-259A	MH-92
				Sample Identification:	MH-116A 120909	MH-256S 120909	MH-259A 120909	MH-TR-12 120909
				Sample Date:	12/9/2009	12/9/2009	12/9/2009	12/9/2009
					WS	WS	WS	WS
E608	Aroclor-1016	12674-11-2	µg/L		0.016 U	0.016 U	0.016 U	0.016 U
E608	Aroclor-1221	11104-28-2	µg/L		0.016 U	0.016 U	0.016 U	0.016 U
E608	Aroclor-1232	11141-16-5	µg/L		0.016 U	0.016 U	0.016 U	0.016 U
E608	Aroclor-1242	53469-21-9	µg/L		0.016 U	0.016 U	0.016 U	0.016 U
E608	Aroclor-1248	12672-29-6	µg/L		0.016 U	0.016 U	0.016 U	0.016 U
E608	Aroclor-1254	11097-69-1	µg/L		<b>0.12</b>	0.016 U	0.016 U	0.016 U
E608	Aroclor-1260	11096-82-5	µg/L		<b>0.11</b>	<b>0.022 J</b>	<b>0.019 J</b>	<b>0.013 J</b>

*Notes:*

µg/L = micrograms per liter

U = undetected

J = estimated value

**bold** = detected value

Undetected values are reported down to the method detection limit (MDL)

## **Appendix C**

### **Laboratory Analytical Reports**

- **Accutest Transformer Yard Composite MH Sediment Sample Data and Waste Characterization Data (Sludge and Wash Water)**
- **Accutest Transformer Yard Surface Soil Sample Data**
- **Accutest Storm Line Manhole Sediment Sample Data**
- **Accutest MH-126 Area Surface Soil Sample Data**
- **Accutest Building TR-23 Former WSA Surface Soil Sample Data**
- **Test America Transformer Yard Areas Surface Water and In-Line Storm Water Samples**



10/27/09

## Technical Report for

ENSAFE

Carrier-Thompson-PCB Investigation

0888808318

Accutest Job Number: M86582

Sampling Dates: 10/12/09 - 10/16/09

Report to:

ENSAFE

mheflin@ensafe.com

ATTN: May Heflin

Total number of pages in report: 26



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

Reza Fand  
Lab Director

Client Service contact: Diane Komar 508-481-6200

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

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Test results relate only to samples analyzed.



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## Sample Summary

ENSAFE

Job No: M86582

Carrier-Thompson-PCB Investigation  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M86582-1	10/12/09	13:48 JK	10/17/09	SO	Sediment	CARMCOM109
M86582-2	10/12/09	17:03 JK	10/17/09	SO	Sediment	CARMCOM209
M86582-3	10/13/09	15:08 JK	10/17/09	SO	Sediment	CARMCOM309
M86582-4	10/13/09	17:07 JK	10/17/09	SO	Sediment	CARMCOM409
M86582-5	10/14/09	15:10 JK	10/17/09	SO	Sediment	CARMCOM509
M86582-6	10/15/09	12:20 JK	10/17/09	SO	Sediment	CARMMH2569
M86582-7	10/15/09	17:35 JK	10/17/09	SO	Sediment	CARMMH2599
M86582-8	10/16/09	08:10 JK	10/17/09	SO	Sediment	CARMMH1439
M86582-9	10/16/09	08:24 JK	10/17/09	SO	Sediment	CARMMH1379
M86582-10	10/16/09	08:36 JK	10/17/09	SO	Sediment	CARMMH2439
M86582-11	10/16/09	13:03 JK	10/17/09	AQ	Field Blank Water	CARF101609

---

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



## Sample Results

## Report of Analysis

## Report of Analysis

<b>Client Sample ID:</b>	CARMCOM109		
<b>Lab Sample ID:</b>	M86582-1	<b>Date Sampled:</b>	10/12/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	54.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54686.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	180	45	ug/kg	
11104-28-2	Aroclor 1221	ND	180	12	ug/kg	
11141-16-5	Aroclor 1232	ND	180	25	ug/kg	
53469-21-9	Aroclor 1242	ND	180	15	ug/kg	
12672-29-6	Aroclor 1248	ND	180	47	ug/kg	
11097-69-1	Aroclor 1254	ND	180	20	ug/kg	
11096-82-5	Aroclor 1260	318	180	34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	82%		30-150%
2051-24-3	Decachlorobiphenyl	81%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%

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

<b>Client Sample ID:</b>	CARMCOM209		
<b>Lab Sample ID:</b>	M86582-2	<b>Date Sampled:</b>	10/12/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	64.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54687.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	150	38	ug/kg	
11104-28-2	Aroclor 1221	ND	150	9.8	ug/kg	
11141-16-5	Aroclor 1232	ND	150	21	ug/kg	
53469-21-9	Aroclor 1242	ND	150	13	ug/kg	
12672-29-6	Aroclor 1248	ND	150	40	ug/kg	
11097-69-1	Aroclor 1254	ND	150	17	ug/kg	
11096-82-5	Aroclor 1260	476	150	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		30-150%
877-09-8	Tetrachloro-m-xylene	89%		30-150%
2051-24-3	Decachlorobiphenyl	89%		30-150%
2051-24-3	Decachlorobiphenyl	80%		30-150%

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

<b>Client Sample ID:</b>	CARMCOM309		
<b>Lab Sample ID:</b>	M86582-3	<b>Date Sampled:</b>	10/13/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	83.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54688.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2	BB27785.D	100	10/22/09	CZ	10/20/09	OP19747	GBB1147

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	29	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.6	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	20500 <sup>a</sup>	12000	2300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	87%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	87%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	133%	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARMCOM409		
<b>Lab Sample ID:</b>	M86582-4	<b>Date Sampled:</b>	10/13/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	80.0
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54689.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2	BB27786.D	200	10/23/09	CZ	10/20/09	OP19747	GBB1147

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	31	ug/kg	
11104-28-2	Aroclor 1221	ND	120	8.0	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	11	ug/kg	
12672-29-6	Aroclor 1248	ND	120	33	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	67800 <sup>a</sup>	25000	4800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	83%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	129%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	180% <sup>c</sup>	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

ND = Not detected 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

<b>Client Sample ID:</b>	CARMCOM509	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86582-5	<b>Date Received:</b>	10/17/09
<b>Matrix:</b>	SO - Sediment	<b>Percent Solids:</b>	64.3
<b>Method:</b>	SW846 8082 SW846 3545		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54690.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2	BB27787.D	100	10/23/09	CZ	10/20/09	OP19747	GBB1147

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	150	38	ug/kg	
11104-28-2	Aroclor 1221	ND	150	9.9	ug/kg	
11141-16-5	Aroclor 1232	ND	150	21	ug/kg	
53469-21-9	Aroclor 1242	ND	150	13	ug/kg	
12672-29-6	Aroclor 1248	ND	150	40	ug/kg	
11097-69-1	Aroclor 1254	ND	150	17	ug/kg	
11096-82-5	Aroclor 1260	57100 <sup>a</sup>	15000	2900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	83%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	92%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	128%	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARMMH2569		
<b>Lab Sample ID:</b>	M86582-6	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	57.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54691.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	170	43	ug/kg	
11104-28-2	Aroclor 1221	ND	170	11	ug/kg	
11141-16-5	Aroclor 1232	ND	170	24	ug/kg	
53469-21-9	Aroclor 1242	ND	170	15	ug/kg	
12672-29-6	Aroclor 1248	ND	170	45	ug/kg	
11097-69-1	Aroclor 1254	ND	170	20	ug/kg	
11096-82-5	Aroclor 1260	1100	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		30-150%
877-09-8	Tetrachloro-m-xylene	89%		30-150%
2051-24-3	Decachlorobiphenyl	95%		30-150%
2051-24-3	Decachlorobiphenyl	140%		30-150%

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

<b>Client Sample ID:</b>	CARMMH2599		
<b>Lab Sample ID:</b>	M86582-7	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	73.5
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54692.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	33	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.6	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	35	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	166	130	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		30-150%
877-09-8	Tetrachloro-m-xylene	85%		30-150%
2051-24-3	Decachlorobiphenyl	95%		30-150%
2051-24-3	Decachlorobiphenyl	93%		30-150%

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

<b>Client Sample ID:</b>	CARMMH1439		
<b>Lab Sample ID:</b>	M86582-8	<b>Date Sampled:</b>	10/16/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	88.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54693.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2	BB27788.D	50	10/23/09	CZ	10/20/09	OP19747	GBB1147

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	27	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.1	ug/kg	
11141-16-5	Aroclor 1232	ND	110	15	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.3	ug/kg	
12672-29-6	Aroclor 1248	ND	110	29	ug/kg	
11097-69-1	Aroclor 1254	17300 <sup>a</sup>	5400	620	ug/kg	
11096-82-5	Aroclor 1260 <sup>b</sup>	7860 <sup>a</sup>	5400	1100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%	0% <sup>c</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	89%	0% <sup>c</sup>	30-150%
2051-24-3	Decachlorobiphenyl	93%	0% <sup>c</sup>	30-150%
2051-24-3	Decachlorobiphenyl	94%	0% <sup>c</sup>	30-150%

(a) Result is from Run# 2

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

(c) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARMMH1379		
<b>Lab Sample ID:</b>	M86582-9	<b>Date Sampled:</b>	10/16/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	86.9
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54694.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2	BB27789.D	100	10/23/09	CZ	10/20/09	OP19747	GBB1147

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2	15.8 g	10.0 ml

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.1	ug/kg	
11141-16-5	Aroclor 1232	ND	110	15	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.4	ug/kg	
12672-29-6	Aroclor 1248	ND	110	29	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	16600 <sup>a</sup>	11000	2100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	103%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	90%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	95%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	82%	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARMMH2439		
<b>Lab Sample ID:</b>	M86582-10	<b>Date Sampled:</b>	10/16/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	77.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ54695.D	1	10/22/09	CZ	10/20/09	OP19747	GYZ2335
Run #2	BB27790.D	20	10/23/09	CZ	10/20/09	OP19747	GBB1147

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	32	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.3	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	34	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	7110 <sup>a</sup>	2500	490	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	90%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	96%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	81%	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARF101609		
<b>Lab Sample ID:</b>	M86582-11	<b>Date Sampled:</b>	10/16/09
<b>Matrix:</b>	AQ - Field Blank Water	<b>Date Received:</b>	10/17/09
<b>Method:</b>	SW846 8082 SW846 3510C	<b>Percent Solids:</b>	n/a
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70944.D	1	10/22/09	SL	10/22/09	OP19763	GEF3257
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.076	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.18	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.20	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.24	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.12	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.16	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		30-150%
877-09-8	Tetrachloro-m-xylene	101%		30-150%
2051-24-3	Decachlorobiphenyl	41%		30-150%
2051-24-3	Decachlorobiphenyl	33%		30-150%

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



## Misc. Forms

### Custody Documents and Other Forms

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Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (NY)
- Chain of Custody

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

FedEx Tracking # <b>863351501501</b>		Bottle Order Control # <b>M86582</b>	
Accutest Order # <b>M86582</b>		Requested Analysis (see TEST CODE sheet)	
Client / Reporting Information		Project Information	
Company Name <b>ENDA</b>		Project Name <b>Carrier Thompson Red PCB Source Investigation</b>	
Street Address <b>220 Athens Way</b>		Street <b>Syracuse NY</b>	
City State Zip <b>Nashville TN 37228</b>		Billing Information (if different from Report to) Company Name <b>Syracuse NY</b>	
Project Contact <b>David Wyatt</b>		Project # <b>0888608318</b>	
Phone # <b>615-255-4300</b>		Client Purchase Order #	
Samples (Name(s)) <b>David Kykendall</b>		Project Manager <b>May Hefflin</b>	
Field ID / Point of Collection <b>TAT</b>		Collection <b>7 day</b>	
Date <b>10/12/09</b>		Time <b>1348</b>	
Sampled by <b>JK SED</b>		Matrix <b>1</b>	
# of bottles <b>1</b>		Number of preserved bottles	
HCl <b>1</b>		NaOH <b>1</b>	
HNO3 <b>1</b>		H2SO4 <b>1</b>	
DI Water <b>1</b>		NONE <b>1</b>	
MECH <b>1</b>		ENCORE <b>1</b>	
LAB USE ONLY		Comments / Special Instructions <b>Level 2 QA/QC</b> <b>10/16/09</b>	

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	DI Water	NONE	MECH	ENCORE
1	CARMCOM209	10/12/09	1348	JK SED	1	1								
2	CARMCOM309	10/13/09	1723			1								
3	CARMCOM309	10/13/09	1508			1								
4	CARMCOM409	10/13/09	1727			1								
5	CARMCOM509	10/14/09	1510			1								
6	CARMMH2564	10/15/09	1220			1								
7	CARMMH2549	10/15/09	1735			1								
8	CARMMH1434	10/16/09	0310			1								
9	CARMMH1379	10/16/09	0324			1								
10	CARMMH2439	10/16/09	0536	SED	1	1								
11	CARF101609	10/16/09	1303	JK FB	2	2								

M86582: Chain of Custody

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## GC Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

Page 1 of 1

**Job Number:** M86582

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19747-MB	YZ54676.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335

The QC reported here applies to the following samples:

Method: SW846 8082

M86582-1, M86582-2, M86582-3, M86582-4, M86582-5, M86582-6, M86582-7, M86582-8, M86582-9, M86582-10

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	98	25	ug/kg	
11104-28-2	Aroclor 1221	ND	98	6.4	ug/kg	
11141-16-5	Aroclor 1232	ND	98	14	ug/kg	
53469-21-9	Aroclor 1242	ND	98	8.4	ug/kg	
12672-29-6	Aroclor 1248	ND	98	26	ug/kg	
11097-69-1	Aroclor 1254	ND	98	11	ug/kg	
11096-82-5	Aroclor 1260	ND	98	19	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	105% 30-150%
877-09-8	Tetrachloro-m-xylene	92% 30-150%
2051-24-3	Decachlorobiphenyl	94% 30-150%
2051-24-3	Decachlorobiphenyl	82% 30-150%

## Method Blank Summary

Page 1 of 1

**Job Number:** M86582

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19763-MB	EF70937.D	1	10/22/09	SL	10/22/09	OP19763	GEF3257

The QC reported here applies to the following samples:

Method: SW846 8082

M86582-11

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.076	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.18	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.20	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.24	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.12	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.16	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	94% 30-150%
877-09-8	Tetrachloro-m-xylene	90% 30-150%
2051-24-3	Decachlorobiphenyl	45% 30-150%
2051-24-3	Decachlorobiphenyl	39% 30-150%

Blank Spike Summary

Job Number: M86582  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19763-BS	EF70938.D	1	10/22/09	SL	10/22/09	OP19763	GEF3257

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

M86582-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.1	105	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.1	105	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	101%	30-150%
877-09-8	Tetrachloro-m-xylene	95%	30-150%
2051-24-3	Decachlorobiphenyl	53%	30-150%
2051-24-3	Decachlorobiphenyl	46%	30-150%

## Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86582

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19747-BS	YZ54677.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335
OP19747-BSD	YZ54678.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335

The QC reported here applies to the following samples:

Method: SW846 8082

M86582-1, M86582-2, M86582-3, M86582-4, M86582-5, M86582-6, M86582-7, M86582-8, M86582-9, M86582-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	261	258	99	188	72	31* a	40-140/30
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/30
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/30
11096-82-5	Aroclor 1260	261	262	100	187	72	33* a	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	108%	72%	30-150%
877-09-8	Tetrachloro-m-xylene	96%	65%	30-150%
2051-24-3	Decachlorobiphenyl	101%	74%	30-150%
2051-24-3	Decachlorobiphenyl	84%	61%	30-150%

(a) Target recovery satisfactory.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M86582  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19747-MS	YZ54679.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335
OP19747-MSD	YZ54680.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335
M86576-3	YZ54681.D	1	10/21/09	CZ	10/20/09	OP19747	GYZ2335

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

M86582-1, M86582-2, M86582-3, M86582-4, M86582-5, M86582-6, M86582-7, M86582-8, M86582-9, M86582-10

CAS No.	Compound	M86576-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		271	263	97	275	102	4	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		271	338	125	363	134	7	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86576-3	Limits
877-09-8	Tetrachloro-m-xylene	102%	107%	104%	30-150%
877-09-8	Tetrachloro-m-xylene	91%	95%	90%	30-150%
2051-24-3	Decachlorobiphenyl	100%	103%	101%	30-150%
2051-24-3	Decachlorobiphenyl	84%	86%	84%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M86582  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19763-MS	EF70939.D	1	10/22/09	SL	10/22/09	OP19763	GEF3257
OP19763-MSD	EF70940.D	1	10/22/09	SL	10/22/09	OP19763	GEF3257
M86649-1	EF70943.D	1	10/22/09	SL	10/22/09	OP19763	GEF3257

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

M86582-11

CAS No.	Compound	M86649-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	4		3.7	93	4.7	118	24	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	4		2.7	68	3.8	95	34	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86649-1	Limits
877-09-8	Tetrachloro-m-xylene	89%	119%	96%	30-150%
877-09-8	Tetrachloro-m-xylene	85%	113%	90%	30-150%
2051-24-3	Decachlorobiphenyl	48%	62%	47%	30-150%
2051-24-3	Decachlorobiphenyl	40%	54%	38%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M86582  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Method: SW846 8082	Matrix: AQ
--------------------	------------

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
M86582-11	EF70944.D	109.0	101.0	41.0	33.0
OP19763-BS	EF70938.D	101.0	95.0	53.0	46.0
OP19763-MB	EF70937.D	94.0	90.0	45.0	39.0
OP19763-MS	EF70939.D	89.0	85.0	48.0	40.0
OP19763-MSD	EF70940.D	119.0	113.0	62.0	54.0

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

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

4.5.1  
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# Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M86582

Account: ENSTNM ENSAFE

Project: Carrier-Thompson-PCB Investigation

Method: SW846 8082

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
M86582-1	YZ54686.D	91.0	82.0	81.0	83.0
M86582-2	YZ54687.D	99.0	89.0	89.0	80.0
M86582-3	BB27785.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86582-3	YZ54688.D	91.0	87.0	87.0	133.0
M86582-4	BB27786.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86582-4	YZ54689.D	95.0	83.0	129.0	180.0* <sup>d</sup>
M86582-5	BB27787.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86582-5	YZ54690.D	89.0	83.0	92.0	128.0
M86582-6	YZ54691.D	99.0	89.0	95.0	140.0
M86582-7	YZ54692.D	96.0	85.0	95.0	93.0
M86582-8	BB27788.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86582-8	YZ54693.D	99.0	89.0	93.0	94.0
M86582-9	BB27789.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86582-9	YZ54694.D	103.0	90.0	95.0	82.0
M86582-10	BB27790.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86582-10	YZ54695.D	100.0	90.0	96.0	81.0
OP19747-BS	YZ54677.D	108.0	96.0	101.0	84.0
OP19747-BSD	YZ54678.D	72.0	65.0	74.0	61.0
OP19747-MB	YZ54676.D	105.0	92.0	94.0	82.0
OP19747-MS	YZ54679.D	102.0	91.0	100.0	84.0
OP19747-MSD	YZ54680.D	107.0	95.0	103.0	86.0

## Surrogate Compounds

## Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to dilution.

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



10/28/09

## Technical Report for

**ENSAFE**

**Carrier-Thompson-PCB Investigation**

**0888808318**

**Accutest Job Number: M86522**

**Sampling Date: 10/14/09**

**Report to:**

**ENSAFE**

**mheflin@ensafe.com**

**ATTN: May Heflin**

**Total number of pages in report: 86**



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

*Reza Pand*  
**Reza Pand**  
**Lab Director**

**Client Service contact: Diane Komar 508-481-6200**

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

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## Sample Summary

ENSAFE

Job No: M86522

Carrier-Thompson-PCB Investigation  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M86522-1	10/14/09	09:07 WG	10/15/09	SO	Soil	CARSSS0123
M86522-2	10/14/09	09:16 WG	10/15/09	SO	Soil	CARSSS0212
M86522-3	10/14/09	09:31 WG	10/15/09	SO	Soil	CARSSS0323
M86522-4	10/14/09	09:41 WG	10/15/09	SO	Soil	CARSSS0423
M86522-5	10/14/09	10:03 WG	10/15/09	SO	Soil	CARSSS0523
M86522-6	10/14/09	10:21 WG	10/15/09	SO	Soil	CARSSS0623
M86522-7	10/14/09	10:31 WG	10/15/09	SO	Soil	CARSSS0723
M86522-8	10/14/09	10:45 WG	10/15/09	SO	Soil	CARSSS0823
M86522-9	10/14/09	10:56 WG	10/15/09	SO	Soil	CARSSS0923
M86522-10	10/14/09	11:10 WG	10/15/09	SO	Soil	CARSSS1012
M86522-10A	10/14/09	11:10 WG	10/15/09	SO	Soil	CARSSS1012
M86522-11	10/14/09	17:58 WG	10/15/09	AQ	Field Blank Soil	CARF101409
M86522-12	10/14/09	18:02 WG	10/15/09	SO	Trip Blank Methanol	CART101409

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

## Sample Summary

(continued)

ENSAFE

Job No: M86522

Carrier-Thompson-PCB Investigation  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M86522-12A	10/14/09	18:02 WG	10/15/09	SO	Trip Blank Soil	CART101409
M86522-13	10/14/09	18:11 WG	10/15/09	AQ	Field Blank Water	CARFVOC409
M86522-22	10/14/09	10:47 WG	10/15/09	SO	Soil	CARSSS0834
M86522-25	10/14/09	11:12 WG	10/15/09	SO	Soil	CARSSS1023
M86522-26	10/14/09	16:45 WG	10/15/09	SO	Soil	CARSSS1101
M86522-27	10/14/09	16:35 WG	10/15/09	SO	Soil	CARSSS1201
M86522-28	10/14/09	16:35 WG	10/15/09	SO	Soil	CARSSS1301
M86522-29	10/14/09	16:23 WG	10/15/09	SO	Soil	CARSSS1401
M86522-30	10/14/09	16:16 WG	10/15/09	SO	Soil	CARSSS1501
M86522-31	10/14/09	16:10 WG	10/15/09	SO	Soil	CARSSS1601
M86522-32	10/14/09	16:03 WG	10/15/09	SO	Soil	CARSSS1701
M86522-33	10/14/09	15:38 WG	10/15/09	SO	Soil	CARSSS1801
M86522-34	10/14/09	15:40 WG	10/15/09	SO	Soil	CARSSS1812

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



Sample Summary  
(continued)

ENSAFE

Job No: M86522

Carrier-Thompson-PCB Investigation  
Project No: 0888808318

Sample Number	Collected		Matrix Code Type	Received	Client Sample ID
	Date	Time By			
M86522-35	10/14/09	15:42 WG	10/15/09 SO	Soil	CARSSS1823
M86522-36	10/14/09	15:44 WG	10/15/09 SO	Soil	CARSSS1834
M86522-37	10/14/09	15:57 WG	10/15/09 SO	Soil	CARSSS1901

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



## Sample Results

## Report of Analysis



## Report of Analysis

<b>Client Sample ID:</b>	CARSSS0123		
<b>Lab Sample ID:</b>	M86522-1	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	86.0
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70773.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.3	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.6	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		30-150%
877-09-8	Tetrachloro-m-xylene	106%		30-150%
2051-24-3	Decachlorobiphenyl	110%		30-150%
2051-24-3	Decachlorobiphenyl	110%		30-150%

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

<b>Client Sample ID:</b>	CARSSS0212	
<b>Lab Sample ID:</b>	M86522-2	<b>Date Sampled:</b> 10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 86.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70774.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.2	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.5	ug/kg	
12672-29-6	Aroclor 1248	ND	110	29	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	98%		30-150%
2051-24-3	Decachlorobiphenyl	102%		30-150%
2051-24-3	Decachlorobiphenyl	102%		30-150%

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

<b>Client Sample ID:</b>	CARSSS0323		
<b>Lab Sample ID:</b>	M86522-3	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	80.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70775.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.8	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	ND	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	93%		30-150%
2051-24-3	Decachlorobiphenyl	100%		30-150%
2051-24-3	Decachlorobiphenyl	102%		30-150%

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

<b>Client Sample ID:</b>	CARSSS0423		
<b>Lab Sample ID:</b>	M86522-4	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	84.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70776.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	29	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.6	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	ND	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		30-150%
877-09-8	Tetrachloro-m-xylene	102%		30-150%
2051-24-3	Decachlorobiphenyl	105%		30-150%
2051-24-3	Decachlorobiphenyl	107%		30-150%

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

<b>Client Sample ID:</b>	CARSSS0523		
<b>Lab Sample ID:</b>	M86522-5	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.4
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70778.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	29	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.6	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	ND	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	99%		30-150%
2051-24-3	Decachlorobiphenyl	102%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

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

<b>Client Sample ID:</b>	CARSSS0623	
<b>Lab Sample ID:</b>	M86522-6	<b>Date Sampled:</b> 10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 86.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70779.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.4	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.7	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		30-150%
877-09-8	Tetrachloro-m-xylene	102%		30-150%
2051-24-3	Decachlorobiphenyl	103%		30-150%
2051-24-3	Decachlorobiphenyl	107%		30-150%

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

<b>Client Sample ID:</b>	CARSSS0723	
<b>Lab Sample ID:</b>	M86522-7	<b>Date Sampled:</b> 10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 86.9
<b>Project:</b>	Carrier-Thompson-PCB Investigation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70780.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.3	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.6	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		30-150%
877-09-8	Tetrachloro-m-xylene	100%		30-150%
2051-24-3	Decachlorobiphenyl	100%		30-150%
2051-24-3	Decachlorobiphenyl	103%		30-150%

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: CARSSS0823

Lab Sample ID: M86522-8

Date Sampled: 10/14/09

Matrix: SO - Soil

Date Received: 10/15/09

Method: SW846 8082 SW846 3545

Percent Solids: 84.5

Project: Carrier-Thompson-PCB Investigation

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70781.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2	EF70796.D	10	10/16/09	SL	10/15/09	OP19712	GEF3252

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	29	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.4	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.7	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	4350 <sup>a</sup>	1100	220	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%	115%	30-150%
877-09-8	Tetrachloro-m-xylene	87%	114%	30-150%
2051-24-3	Decachlorobiphenyl	80%	131%	30-150%
2051-24-3	Decachlorobiphenyl	101%	129%	30-150%

(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

<b>Client Sample ID:</b>	CARSSS0923		
<b>Lab Sample ID:</b>	M86522-9	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70782.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	29	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.5	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.9	ug/kg	
12672-29-6	Aroclor 1248	ND	110	31	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	103%		30-150%
2051-24-3	Decachlorobiphenyl	105%		30-150%
2051-24-3	Decachlorobiphenyl	111%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1012		
<b>Lab Sample ID:</b>	M86522-10	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	86.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70783.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.2	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.5	ug/kg	
12672-29-6	Aroclor 1248	ND	110	29	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260 <sup>a</sup>	210	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		30-150%
877-09-8	Tetrachloro-m-xylene	81%		30-150%
2051-24-3	Decachlorobiphenyl	81%		30-150%
2051-24-3	Decachlorobiphenyl	100%		30-150%

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

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

<b>Client Sample ID:</b>	CARSSS1012	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-10A	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	86.2
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	R10648.D	1	10/21/09	AT	n/a	n/a	MSR404
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.04 g	10.0 ml	200 ul
Run #2			

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	260	68	ug/kg	
71-43-2	Benzene	ND	26	25	ug/kg	
75-27-4	Bromodichloromethane	ND	100	11	ug/kg	
75-25-2	Bromoform	ND	100	45	ug/kg	
74-83-9	Bromomethane	ND	100	17	ug/kg	
78-93-3	2-Butanone (MEK)	ND	260	84	ug/kg	
75-15-0	Carbon disulfide	ND	260	22	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	19	ug/kg	
108-90-7	Chlorobenzene	ND	100	36	ug/kg	
75-00-3	Chloroethane	ND	260	42	ug/kg	
67-66-3	Chloroform	ND	100	16	ug/kg	
74-87-3	Chloromethane	ND	260	46	ug/kg	
110-82-7	Cyclohexane	ND	260	16	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	260	170	ug/kg	
124-48-1	Dibromochloromethane	ND	100	6.7	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	10	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	19	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	15	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	28	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	14	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	15	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	30	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	37	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	13	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	9.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	7.9	ug/kg	
100-41-4	Ethylbenzene	37.3	100	8.4	ug/kg	J
76-13-1	Freon 113	ND	260	48	ug/kg	
591-78-6	2-Hexanone	ND	260	23	ug/kg	
98-82-8	Isopropylbenzene	53.5	260	7.7	ug/kg	J

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

<b>Client Sample ID:</b>	CARSSS1012	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-10A	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	86.2
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	137	260	57	ug/kg	J
108-87-2	Methylcyclohexane	203	260	13	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	100	13	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	260	52	ug/kg	
75-09-2	Methylene chloride	ND	100	23	ug/kg	
100-42-5	Styrene	ND	260	41	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	11	ug/kg	
127-18-4	Tetrachloroethene	ND	100	8.5	ug/kg	
108-88-3	Toluene	26.1	260	14	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	260	38	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	17	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	9.8	ug/kg	
79-01-6	Trichloroethene	ND	100	18	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	28	ug/kg	
75-01-4	Vinyl chloride	ND	100	31	ug/kg	
1330-20-7	Xylene (total)	117	100	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%		70-130%
2037-26-5	Toluene-D8	74%		70-130%
460-00-4	4-Bromofluorobenzene	82%		70-130%

(a) Elevated RL due to dilution required for matrix interference.

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

<b>Client Sample ID:</b>	CARF101409		
<b>Lab Sample ID:</b>	M86522-11	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	AQ - Field Blank Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3510C	<b>Percent Solids:</b>	n/a
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB27720.D	1	10/16/09	CZ	10/16/09	OP19716	GBB1144
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.076	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.18	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.20	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.24	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.12	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.16	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	113%		30-150%
877-09-8	Tetrachloro-m-xylene	115%		30-150%
2051-24-3	Decachlorobiphenyl	60%		30-150%
2051-24-3	Decachlorobiphenyl	57%		30-150%

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

<b>Client Sample ID:</b>	CART101409	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-12	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	SO - Trip Blank Methanol	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R10644.D	1	10/21/09	AT	n/a	n/a	MSR404
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	200 ul
Run #2			

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	33	ug/kg	
71-43-2	Benzene	ND	13	12	ug/kg	
75-27-4	Bromodichloromethane	ND	50	5.1	ug/kg	
75-25-2	Bromoform	ND	50	22	ug/kg	
74-83-9	Bromomethane	ND	50	8.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	130	40	ug/kg	
75-15-0	Carbon disulfide	ND	130	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	50	8.9	ug/kg	
108-90-7	Chlorobenzene	ND	50	17	ug/kg	
75-00-3	Chloroethane	ND	130	20	ug/kg	
67-66-3	Chloroform	ND	50	7.6	ug/kg	
74-87-3	Chloromethane	ND	130	22	ug/kg	
110-82-7	Cyclohexane	ND	130	7.7	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	130	81	ug/kg	
124-48-1	Dibromochloromethane	ND	50	3.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	50	4.8	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	50	9.3	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	50	7.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	50	13	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	50	6.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	50	7.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	50	6.4	ug/kg	
75-35-4	1,1-Dichloroethene	ND	50	19	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	50	15	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	50	18	ug/kg	
78-87-5	1,2-Dichloropropane	ND	50	6.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	50	4.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	50	3.8	ug/kg	
100-41-4	Ethylbenzene	ND	50	4.0	ug/kg	
76-13-1	Freon 113	ND	130	23	ug/kg	
591-78-6	2-Hexanone	ND	130	11	ug/kg	
98-82-8	Isopropylbenzene	ND	130	3.7	ug/kg	

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

<b>Client Sample ID:</b>	CART101409	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-12	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	SO - Trip Blank Methanol	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	130	28	ug/kg	
108-87-2	Methylcyclohexane	ND	130	6.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	6.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	130	25	ug/kg	
75-09-2	Methylene chloride	ND	50	11	ug/kg	
100-42-5	Styrene	ND	130	20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	5.3	ug/kg	
127-18-4	Tetrachloroethene	ND	50	4.1	ug/kg	
108-88-3	Toluene	ND	130	6.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	130	18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	50	8.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	50	4.7	ug/kg	
79-01-6	Trichloroethene	ND	50	8.5	ug/kg	
75-69-4	Trichlorofluoromethane	ND	50	13	ug/kg	
75-01-4	Vinyl chloride	ND	50	15	ug/kg	
1330-20-7	Xylene (total)	ND	50	6.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%
2037-26-5	Toluene-D8	87%		70-130%
460-00-4	4-Bromofluorobenzene	94%		70-130%

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

<b>Client Sample ID:</b>	CART101409	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-12A	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	SO - Trip Blank Soil	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L36070.D	1	10/21/09	AMY	n/a	n/a	MSL1181
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	1.3	ug/kg	
71-43-2	Benzene	ND	0.50	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.20	ug/kg	
75-25-2	Bromoform	ND	2.0	0.87	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	5.0	1.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.42	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.36	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.68	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.81	ug/kg	
67-66-3	Chloroform	ND	2.0	0.30	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.88	ug/kg	
110-82-7	Cyclohexane	ND	5.0	0.31	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	3.3	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.13	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	0.19	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.29	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.25	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.78	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.58	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.71	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.16	ug/kg	
76-13-1	Freon 113	2.6	5.0	0.92	ug/kg	J
591-78-6	2-Hexanone	ND	5.0	0.44	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.15	ug/kg	

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

<b>Client Sample ID:</b>	CART101409	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-12A	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	SO - Trip Blank Soil	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.1	ug/kg	
108-87-2	Methylcyclohexane	ND	5.0	0.24	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.24	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.44	ug/kg	
100-42-5	Styrene	ND	5.0	0.79	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.21	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.16	ug/kg	
108-88-3	Toluene	ND	5.0	0.26	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.73	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.32	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.19	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.34	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.53	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.60	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	94%		70-130%

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

<b>Client Sample ID:</b>	CARFVOC409	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-13	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	AQ - Field Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N37436.D	1	10/22/09	WC	n/a	n/a	MSN1401
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.2	ug/l	
71-43-2	Benzene	ND	0.50	0.22	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.80	ug/l	
75-25-2	Bromoform	ND	1.0	0.37	ug/l	
74-83-9	Bromomethane	ND	2.0	0.78	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	0.93	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.47	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.26	ug/l	
75-00-3	Chloroethane	ND	2.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	2.0	0.45	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.22	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.89	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.31	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.36	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.44	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.52	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.43	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.32	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.32	ug/l	
76-13-1	Freon 113	ND	5.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.71	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.42	ug/l	

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

<b>Client Sample ID:</b>	CARFVOC409	<b>Date Sampled:</b>	10/14/09
<b>Lab Sample ID:</b>	M86522-13	<b>Date Received:</b>	10/15/09
<b>Matrix:</b>	AQ - Field Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

## VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	0.37	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.26	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.32	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.4	ug/l	
100-42-5	Styrene	ND	5.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.52	ug/l	
108-88-3	Toluene	ND	1.0	0.31	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.41	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.49	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.38	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%

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

<b>Client Sample ID:</b>	CARSSS0834		
<b>Lab Sample ID:</b>	M86522-22	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	82.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70973.D	1	10/23/09	SL	10/21/09	OP19757	GEF3258
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	29	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.6	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	497	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		30-150%
877-09-8	Tetrachloro-m-xylene	106%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1023		
<b>Lab Sample ID:</b>	M86522-25	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.5
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70974.D	1	10/23/09	SL	10/21/09	OP19757	GEF3258
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	29	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.5	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	9.9	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	ND	120	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		30-150%
877-09-8	Tetrachloro-m-xylene	97%		30-150%
2051-24-3	Decachlorobiphenyl	106%		30-150%
2051-24-3	Decachlorobiphenyl	112%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1101		
<b>Lab Sample ID:</b>	M86522-26	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	87.5
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70827.D	1	10/18/09	SL	10/16/09	OP19719	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.3	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.6	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	66.4	110	22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	45%		30-150%
877-09-8	Tetrachloro-m-xylene	40%		30-150%
2051-24-3	Decachlorobiphenyl	46%		30-150%
2051-24-3	Decachlorobiphenyl	41%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1201		
<b>Lab Sample ID:</b>	M86522-27	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70828.D	1	10/18/09	SL	10/16/09	OP19719	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	29	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.4	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.8	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	34.1	110	22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	131%		30-150%
877-09-8	Tetrachloro-m-xylene	125%		30-150%
2051-24-3	Decachlorobiphenyl	119%		30-150%
2051-24-3	Decachlorobiphenyl	153% <sup>a</sup>		30-150%

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

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

<b>Client Sample ID:</b>	CARSSS1301		
<b>Lab Sample ID:</b>	M86522-28	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	67.0
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70829.D	1	10/18/09	SL	10/16/09	OP19719	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	150	37	ug/kg	
11104-28-2	Aroclor 1221	ND	150	9.6	ug/kg	
11141-16-5	Aroclor 1232	ND	150	21	ug/kg	
53469-21-9	Aroclor 1242	ND	150	13	ug/kg	
12672-29-6	Aroclor 1248	ND	150	39	ug/kg	
11097-69-1	Aroclor 1254	ND	150	17	ug/kg	
11096-82-5	Aroclor 1260	94.0	150	29	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	138%		30-150%
877-09-8	Tetrachloro-m-xylene	132%		30-150%
2051-24-3	Decachlorobiphenyl	130%		30-150%
2051-24-3	Decachlorobiphenyl	122%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1401		
<b>Lab Sample ID:</b>	M86522-29	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	78.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70784.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	32	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.3	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	34	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	ND	130	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		30-150%
877-09-8	Tetrachloro-m-xylene	98%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	95%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1501		
<b>Lab Sample ID:</b>	M86522-30	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.6
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70824.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	29	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.5	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	9.9	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	85.2	120	22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	114%		30-150%
877-09-8	Tetrachloro-m-xylene	106%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1601		
<b>Lab Sample ID:</b>	M86522-31	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	78.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70786.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	31	ug/kg	
11104-28-2	Aroclor 1221	ND	120	8.1	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	11	ug/kg	
12672-29-6	Aroclor 1248	ND	120	33	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	135	120	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	99%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1701		
<b>Lab Sample ID:</b>	M86522-32	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	74.5
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70787.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2	EF70798.D	2	10/16/09	SL	10/15/09	OP19712	GEF3252

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2	15.7 g	10.0 ml

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	32	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.3	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	34	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	1140 <sup>a</sup>	260	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%	102%	30-150%
877-09-8	Tetrachloro-m-xylene	100%	103%	30-150%
2051-24-3	Decachlorobiphenyl	94%	109%	30-150%
2051-24-3	Decachlorobiphenyl	100%	111%	30-150%

(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

<b>Client Sample ID:</b>	CARSSS1801		
<b>Lab Sample ID:</b>	M86522-33	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	79.0
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB27717.D	1	10/16/09	CZ	10/15/09	OP19712	GBB1144
Run #2	BB27726.D	2	10/16/09	CZ	10/15/09	OP19712	GBB1144

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2	15.8 g	10.0 ml

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.8	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	901 <sup>a</sup>	240	47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%	96%	30-150%
877-09-8	Tetrachloro-m-xylene	103%	100%	30-150%
2051-24-3	Decachlorobiphenyl	120%	123%	30-150%
2051-24-3	Decachlorobiphenyl	116%	120%	30-150%

(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

<b>Client Sample ID:</b>	CARSSS1812		
<b>Lab Sample ID:</b>	M86522-34	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB27718.D	1	10/16/09	CZ	10/15/09	OP19712	GBB1144
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.3	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.5	ug/kg	
12672-29-6	Aroclor 1248	ND	110	29	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		30-150%
877-09-8	Tetrachloro-m-xylene	92%		30-150%
2051-24-3	Decachlorobiphenyl	103%		30-150%
2051-24-3	Decachlorobiphenyl	109%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1823		
<b>Lab Sample ID:</b>	M86522-35	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	81.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70830.D	1	10/18/09	SL	10/16/09	OP19719	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	31	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.9	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	ND	120	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	116%		30-150%
877-09-8	Tetrachloro-m-xylene	110%		30-150%
2051-24-3	Decachlorobiphenyl	113%		30-150%
2051-24-3	Decachlorobiphenyl	102%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1834		
<b>Lab Sample ID:</b>	M86522-36	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	82.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70831.D	1	10/18/09	SL	10/16/09	OP19719	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.7	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	ND	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	123%		30-150%
877-09-8	Tetrachloro-m-xylene	117%		30-150%
2051-24-3	Decachlorobiphenyl	121%		30-150%
2051-24-3	Decachlorobiphenyl	108%		30-150%

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

<b>Client Sample ID:</b>	CARSSS1901		
<b>Lab Sample ID:</b>	M86522-37	<b>Date Sampled:</b>	10/14/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/15/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	80.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70789.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	31	ug/kg	
11104-28-2	Aroclor 1221	ND	120	8.0	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	304	120	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	107%		30-150%
877-09-8	Tetrachloro-m-xylene	110%		30-150%
2051-24-3	Decachlorobiphenyl	109%		30-150%
2051-24-3	Decachlorobiphenyl	111%		30-150%

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



## Misc. Forms

### Custody Documents and Other Forms

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Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (NY)
- Chain of Custody

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

FED-EX Tracking # <b>812524537765</b>	Bottle Order Control # <b>M86522</b>
Accutest Order #	Accutest Job #
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
RW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
LAB USE ONLY	

Client / Reporting Information		Project Information	
Company Name <b>Ensafe</b>		Project Name <b>Carrie - Thompson Rd - PCB Source Investigation</b>	
Street Address <b>220 Athens Way</b>		Street	
City <b>Washington TN</b>	State <b>37228</b>	City <b>Dayton</b>	State <b>NY</b>
Project Contact <b>David Wyatt</b>	Phone # <b>615-255-9300</b>	Project # <b>0383808318</b>	Client Purchase Order #
Sampler(s) Name(s) <b>Jay &amp; Kay Kendall / Wes</b>		Project Manager <b>May H. Elin</b>	
Field ID / Point of Collection <b>TAT</b>		Collection	
Accutest Sample #	Field ID / Point of Collection	Date	Time
-1	CARSS50123	10/14/09	0707
-2	CARSS50212	24hr	0716
-3	CARSS50323	24hr	0731
-4	CARSS50423	24hr	0741
-5	CARSS50523	24hr	1023
-6	CARSS50623	24hr	1021
-7	CARSS50723	24hr	1031
-8	CARSS50823	24hr	1045
-9	CARSS50923	24hr	1056
-10	CARSS51012	24hr	1110
-11	CARE101409	24hr	1753
-12	CART101409	24hr	1802
Turnaround Time (Business days)			
<input type="checkbox"/> Std. 15 Business Days <input type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> 1 Day EMERGENCY			
Approved By (Accutest PM) / Date:			
<b>RUSH!</b>			
Data Deliverable Information			
<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDO Format <input checked="" type="checkbox"/> Other: UTC			
Comments / Special Instructions			
Level 2 QA/QC			
15L, F6BB,			
1066, 16FF, 4K6			
16FF			
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished By: 1 <b>Field</b>	Date Time: 10/14/09/1854	Received By: 1 <b>FedEx</b>	Date Time: 9:15
Relinquished By: 3	Date Time:	Received By: 3	Date Time:
Relinquished By: 5	Date Time:	Received By: 5	Date Time:
Custody Seal #	<input type="checkbox"/> Intact	Preserved where applicable	<input type="checkbox"/> On
	<input type="checkbox"/> Not intact		<input type="checkbox"/> Cooler Temp.
			2.7, 2.1, 2.4

M86522: Chain of Custody

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2235 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3499/3480  
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FED-Ex Tracking #		Bottle Order Control #	
Accutest Quote #		Accutest Job #	
		M86522	
Requested Analysis ( see TEST CODE sheet)			
Matrix Codes			
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SI - 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			
LAB USE ONLY			

Client / Reporting Information		Project Information	
Company Name <b>EnvSafe</b>		Project Name <b>Carrier Thompson Rd - PCB Sore Investigation</b>	
Street Address <b>220 Athens Way</b>		Street <b>Spacuse</b>	
City <b>Nashville TN</b>	State <b>37223</b>	City <b>Spacuse</b>	State <b>NY</b>
Project Contact <b>David Light</b>		Project # <b>0858308318</b>	
Phone # <b>615-255-9300</b>	Fax #	Client Purchase Order #	City <b>Spacuse</b>
Sampler(s) Name(s) <b>Jason Kuykendall / 445</b>		Project Manager <b>TAT</b>	
Field ID / Point of Collection		Collection	
Accutest Sample #	Field ID / Point of Collection	Date	Time
25	CAR5551023	10/14/09	1112
26	CAR5551101	48hr	1645
27	CAR5551201	48hr	1635
28	CAR5551301	48hr	1630
29	CAR5551401	24hr	1623
30	CAR5551501	24hr	1616
31	CAR5551601	24hr	1610
32	CAR5551701	24hr	1603
33	CAR5551801	24hr	1538
34	CAR5551812	24hr	1540
35	CAR5551823	48hr	1542
36	CAR5551834	48hr	1544
Turnaround Time ( Business days)		Data Deliverable Information	
<input type="checkbox"/> Std. 15 Business Days <input type="checkbox"/> Std. 10 Business Days ( by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY		<input type="checkbox"/> Commercial "A" ( Level 1) <input type="checkbox"/> Commercial "B" ( Level 2) <input type="checkbox"/> FULLT1 ( Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other UTC	
Emergency & Rush T/A data available VIA Lablink		Comments / Special Instructions <b>Level 2 QA/QC</b>	
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by: <b>1</b>	Date Time: <b>10/14/09 1:354</b>	Received By: <b>1 FedEx</b>	Date Time: <b>10/15/09 9:15</b>
Relinquished by: <b>3</b>	Date Time:	Received By: <b>3</b>	Date Time:
Relinquished by: <b>5</b>	Date Time:	Received By: <b>5</b>	Date Time:
Custody Seal #		<input type="checkbox"/> Intact <input type="checkbox"/> Not intact	
Preserved where applicable		<input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp. <b>2.2, 2.4</b>	

M86522: Chain of Custody

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2235 Route 130, Dayton, NJ 08810  
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## M86522: Chain of Custody

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## M86522: Chain of Custody

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## GC/MS Volatiles

### QC Data Summaries

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Includes the following where applicable:

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



## Method Blank Summary

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Job Number: M86522

Account: ENSTNM ENSAFE

Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL1181-MB	L36069.D	1	10/21/09	AMY	n/a	n/a	MSL1181

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12A

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	1.3	ug/kg	
71-43-2	Benzene	ND	0.50	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.20	ug/kg	
75-25-2	Bromoform	ND	2.0	0.87	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.33	ug/kg	
78-93-3	2-Butanone (MEK)	ND	5.0	1.6	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.42	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.36	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.68	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.81	ug/kg	
67-66-3	Chloroform	ND	2.0	0.30	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.88	ug/kg	
110-82-7	Cyclohexane	ND	5.0	0.31	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	3.3	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.13	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	0.19	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.28	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.27	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.29	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.25	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.78	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.58	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.71	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.15	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.16	ug/kg	
76-13-1	Freon 113	ND	5.0	0.92	ug/kg	
591-78-6	2-Hexanone	ND	5.0	0.44	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.15	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.1	ug/kg	
108-87-2	Methylcyclohexane	ND	5.0	0.24	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.24	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/kg	

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL1181-MB	L36069.D	1	10/21/09	AMY	n/a	n/a	MSL1181

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12A

CAS No.	Compound	Result	RL	MDL	Units	Q
75-09-2	Methylene chloride	ND	2.0	0.44	ug/kg	
100-42-5	Styrene	ND	5.0	0.79	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.21	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.16	ug/kg	
108-88-3	Toluene	ND	5.0	0.26	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.73	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.32	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.19	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.34	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.53	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.60	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.27	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	112% 70-130%
2037-26-5	Toluene-D8	99% 70-130%
460-00-4	4-Bromofluorobenzene	92% 70-130%

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR404-MB	R10637.D	1	10/21/09	AT	n/a	n/a	MSR404

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12, M86522-10A

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	65	ug/kg	
71-43-2	Benzene	ND	25	24	ug/kg	
75-27-4	Bromodichloromethane	ND	100	10	ug/kg	
75-25-2	Bromoform	ND	100	44	ug/kg	
74-83-9	Bromomethane	ND	100	17	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	81	ug/kg	
75-15-0	Carbon disulfide	ND	250	21	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	18	ug/kg	
108-90-7	Chlorobenzene	ND	100	34	ug/kg	
75-00-3	Chloroethane	ND	250	40	ug/kg	
67-66-3	Chloroform	ND	100	15	ug/kg	
74-87-3	Chloromethane	ND	250	44	ug/kg	
110-82-7	Cyclohexane	ND	250	15	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	160	ug/kg	
124-48-1	Dibromochloromethane	ND	100	6.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	9.7	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	19	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	14	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	27	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	13	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	15	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	13	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	39	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	29	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	35	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	13	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	9.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	7.6	ug/kg	
100-41-4	Ethylbenzene	ND	100	8.1	ug/kg	
76-13-1	Freon 113	ND	250	46	ug/kg	
591-78-6	2-Hexanone	ND	250	22	ug/kg	
98-82-8	Isopropylbenzene	ND	250	7.4	ug/kg	
79-20-9	Methyl Acetate	ND	250	55	ug/kg	
108-87-2	Methylcyclohexane	ND	250	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	50	ug/kg	

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR404-MB	R10637.D	1	10/21/09	AT	n/a	n/a	MSR404

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12, M86522-10A

CAS No.	Compound	Result	RL	MDL	Units	Q
75-09-2	Methylene chloride	ND	100	22	ug/kg	
100-42-5	Styrene	ND	250	39	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	11	ug/kg	
127-18-4	Tetrachloroethene	ND	100	8.2	ug/kg	
108-88-3	Toluene	ND	250	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	36	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	16	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	9.4	ug/kg	
79-01-6	Trichloroethene	ND	100	17	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	27	ug/kg	
75-01-4	Vinyl chloride	ND	100	30	ug/kg	
1330-20-7	Xylene (total)	ND	100	13	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 70-130%
2037-26-5	Toluene-D8	95% 70-130%
460-00-4	4-Bromofluorobenzene	102% 70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

## Method Blank Summary

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Job Number: M86522

Account: ENSTNM ENSAFE

Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1401-MB	N37430.D	1	10/22/09	WC	n/a	n/a	MSN1401

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-13

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.2	ug/l	
71-43-2	Benzene	ND	0.50	0.22	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.80	ug/l	
75-25-2	Bromoform	ND	1.0	0.37	ug/l	
74-83-9	Bromomethane	ND	2.0	0.78	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	0.93	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.47	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.26	ug/l	
75-00-3	Chloroethane	ND	2.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
74-87-3	Chloromethane	ND	2.0	0.45	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.22	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.89	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.31	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.36	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.44	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.23	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.52	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.43	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.32	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.32	ug/l	
76-13-1	Freon 113	ND	5.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.71	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.42	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.37	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	1.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.26	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.32	ug/l	

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1401-MB	N37430.D	1	10/22/09	WC	n/a	n/a	MSN1401

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-13

CAS No.	Compound	Result	RL	MDL	Units	Q
75-09-2	Methylene chloride	ND	2.0	1.4	ug/l	
100-42-5	Styrene	ND	5.0	0.24	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.52	ug/l	
108-88-3	Toluene	ND	1.0	0.31	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.41	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.49	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.29	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.38	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	94% 70-130%
2037-26-5	Toluene-D8	89% 70-130%
460-00-4	4-Bromofluorobenzene	90% 70-130%

## Blank Spike/Blank Spike Duplicate Summary

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Job Number: M86522

Account: ENSTNM ENSAFE

Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL1181-BS	L36066.D	1	10/21/09	AMY	n/a	n/a	MSL1181
MSL1181-BSD	L36067.D	1	10/21/09	AMY	n/a	n/a	MSL1181

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	56.8	114	67.3	135* a	17	70-130/25
71-43-2	Benzene	50	52.2	104	54.5	109	4	70-130/25
75-27-4	Bromodichloromethane	50	54.0	108	56.0	112	4	70-130/25
75-25-2	Bromoform	50	57.6	115	53.8	108	7	70-130/25
74-83-9	Bromomethane	50	60.7	121	61.0	122	0	70-130/25
78-93-3	2-Butanone (MEK)	50	54.3	109	60.1	120	10	70-130/25
75-15-0	Carbon disulfide	50	53.0	106	53.8	108	1	70-130/25
56-23-5	Carbon tetrachloride	50	57.4	115	62.7	125	9	70-130/25
108-90-7	Chlorobenzene	50	50.5	101	50.7	101	0	70-130/25
75-00-3	Chloroethane	50	38.5	77	39.1	78	2	70-130/25
67-66-3	Chloroform	50	54.9	110	54.1	108	1	70-130/25
74-87-3	Chloromethane	50	57.3	115	57.5	115	0	70-130/25
110-82-7	Cyclohexane	50	55.9	112	60.3	121	8	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	53.2	106	51.4	103	3	70-130/25
124-48-1	Dibromochloromethane	50	57.4	115	55.6	111	3	70-130/25
106-93-4	1,2-Dibromoethane	50	52.9	106	51.1	102	3	70-130/25
95-50-1	1,2-Dichlorobenzene	50	50.2	100	50.6	101	1	70-130/25
541-73-1	1,3-Dichlorobenzene	50	52.1	104	53.0	106	2	70-130/25
106-46-7	1,4-Dichlorobenzene	50	50.8	102	51.8	104	2	70-130/25
75-71-8	Dichlorodifluoromethane	50	50.8	102	55.9	112	10	70-130/25
75-34-3	1,1-Dichloroethane	50	54.4	109	53.8	108	1	70-130/25
107-06-2	1,2-Dichloroethane	50	55.8	112	57.5	115	3	70-130/25
75-35-4	1,1-Dichloroethene	50	52.4	105	52.2	104	0	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	53.3	107	52.2	104	2	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	49.7	99	49.9	100	0	70-130/25
78-87-5	1,2-Dichloropropane	50	51.4	103	52.8	106	3	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	48.8	98	50.2	100	3	70-130/25
10061-02-6	trans-1,3-Dichloropropene	50	51.1	102	53.6	107	5	70-130/25
100-41-4	Ethylbenzene	50	54.7	109	55.4	111	1	70-130/25
76-13-1	Freon 113	50	55.1	110	57.3	115	4	70-130/25
591-78-6	2-Hexanone	50	53.5	107	61.0	122	13	70-130/25
98-82-8	Isopropylbenzene	50	57.8	116	60.6	121	5	70-130/25
79-20-9	Methyl Acetate	50	39.4	79	36.3	73	8	33-141/25
108-87-2	Methylcyclohexane	50	48.6	97	53.4	107	9	78-140/25
1634-04-4	Methyl Tert Butyl Ether	50	55.6	111	53.3	107	4	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	51.5	103	51.5	103	0	70-130/25

## Blank Spike/Blank Spike Duplicate Summary

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**Job Number:** M86522**Account:** ENSTNM ENSAFE**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL1181-BS	L36066.D	1	10/21/09	AMY	n/a	n/a	MSL1181
MSL1181-BSD	L36067.D	1	10/21/09	AMY	n/a	n/a	MSL1181

**The QC reported here applies to the following samples:****Method:** SW846 8260B

M86522-12A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
75-09-2	Methylene chloride	50	51.1	102	49.7	99	3	70-130/25
100-42-5	Styrene	50	52.6	105	52.2	104	1	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	53.2	106	53.0	106	0	70-130/25
127-18-4	Tetrachloroethene	50	54.2	108	57.5	115	6	70-130/25
108-88-3	Toluene	50	50.7	101	52.6	105	4	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	51.3	103	52.1	104	2	70-130/25
71-55-6	1,1,1-Trichloroethane	50	54.7	109	55.1	110	1	70-130/25
79-00-5	1,1,2-Trichloroethane	50	51.0	102	52.2	104	2	70-130/25
79-01-6	Trichloroethene	50	51.1	102	54.0	108	6	70-130/25
75-69-4	Trichlorofluoromethane	50	52.1	104	55.2	110	6	70-130/25
75-01-4	Vinyl chloride	50	59.9	120	63.7	127	4	70-130/25
1330-20-7	Xylene (total)	150	166	111	166	111	0	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	107%	102%	70-130%
2037-26-5	Toluene-D8	97%	98%	70-130%
460-00-4	4-Bromofluorobenzene	97%	97%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.



## Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: M86522

Account: ENSTNM ENSAFE

Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR404-BS	R10634.D	1	10/21/09	AT	n/a	n/a	MSR404
MSR404-BSD	R10635.D	1	10/21/09	AT	n/a	n/a	MSR404

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12, M86522-10A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	2550	102	2360	94	8	70-130/25
71-43-2	Benzene	2500	2430	97	2510	100	3	70-130/25
75-27-4	Bromodichloromethane	2500	2570	103	2590	104	1	70-130/25
75-25-2	Bromoform	2500	2530	101	2630	105	4	70-130/25
74-83-9	Bromomethane	2500	2690	108	2900	116	8	70-130/25
78-93-3	2-Butanone (MEK)	2500	2610	104	2670	107	2	70-130/25
75-15-0	Carbon disulfide	2500	2540	102	2650	106	4	70-130/25
56-23-5	Carbon tetrachloride	2500	2590	104	2580	103	0	70-130/25
108-90-7	Chlorobenzene	2500	2590	104	2760	110	6	70-130/25
75-00-3	Chloroethane	2500	2600	104	2680	107	3	70-130/25
67-66-3	Chloroform	2500	2490	100	2540	102	2	70-130/25
74-87-3	Chloromethane	2500	2060	82	2200	88	7	70-130/25
110-82-7	Cyclohexane	2500	2500	100	2630	105	5	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2700	108	2480	99	8	70-130/25
124-48-1	Dibromochloromethane	2500	2720	109	2860	114	5	70-130/25
106-93-4	1,2-Dibromoethane	2500	2770	111	2850	114	3	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2590	104	2670	107	3	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2590	104	2690	108	4	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2590	104	2670	107	3	70-130/25
75-71-8	Dichlorodifluoromethane	2500	3160	126	3120	125	1	70-130/25
75-34-3	1,1-Dichloroethane	2500	2520	101	2580	103	2	70-130/25
107-06-2	1,2-Dichloroethane	2500	2520	101	2510	100	0	70-130/25
75-35-4	1,1-Dichloroethene	2500	2400	96	2530	101	5	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2500	100	2580	103	3	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2510	100	2620	105	4	70-130/25
78-87-5	1,2-Dichloropropane	2500	2540	102	2600	104	2	70-130/25
10061-01-5	cis-1,3-Dichloropropene	2500	2600	104	2630	105	1	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	2590	104	2640	106	2	70-130/25
100-41-4	Ethylbenzene	2500	2620	105	2730	109	4	70-130/25
76-13-1	Freon 113	2500	2480	99	2510	100	1	70-130/25
591-78-6	2-Hexanone	2500	2560	102	2560	102	0	70-130/25
98-82-8	Isopropylbenzene	2500	2600	104	2690	108	3	70-130/25
79-20-9	Methyl Acetate	2500	2670	107	2810	112	5	33-141/25
108-87-2	Methylcyclohexane	2500	2430	97	2660	106	9	78-140/25
1634-04-4	Methyl Tert Butyl Ether	2500	2530	101	2520	101	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2640	106	2710	108	3	70-130/25

## Blank Spike/Blank Spike Duplicate Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSR404-BS	R10634.D	1	10/21/09	AT	n/a	n/a	MSR404
MSR404-BSD	R10635.D	1	10/21/09	AT	n/a	n/a	MSR404

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12, M86522-10A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
75-09-2	Methylene chloride	2500	2520	101	2620	105	4	70-130/25
100-42-5	Styrene	2500	2460	98	2570	103	4	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2720	109	2780	111	2	70-130/25
127-18-4	Tetrachloroethene	2500	2740	110	2900	116	6	70-130/25
108-88-3	Toluene	2500	2550	102	2640	106	3	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	2790	112	2870	115	3	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	2570	103	2540	102	1	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2560	102	2630	105	3	70-130/25
79-01-6	Trichloroethene	2500	2490	100	2590	104	4	70-130/25
75-69-4	Trichlorofluoromethane	2500	2750	110	2780	111	1	70-130/25
75-01-4	Vinyl chloride	2500	2380	95	2270	91	5	70-130/25
1330-20-7	Xylene (total)	7500	7940	106	8280	110	4	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	93%	103%	70-130%
2037-26-5	Toluene-D8	84%	95%	70-130%
460-00-4	4-Bromofluorobenzene	95%	104%	70-130%

# Blank Spike/Blank Spike Duplicate Summary

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Job Number: M86522

Account: ENSTNM ENSAFE

Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1401-BS	N37427.D	1	10/22/09	WC	n/a	n/a	MSN1401
MSN1401-BSD	N37428.D	1	10/22/09	WC	n/a	n/a	MSN1401

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	68.0	136* a	57.3	115	17	70-130/25
71-43-2	Benzene	50	49.0	98	48.9	98	0	70-130/25
75-27-4	Bromodichloromethane	50	52.9	106	53.3	107	1	70-130/25
75-25-2	Bromoform	50	47.9	96	47.4	95	1	70-130/25
74-83-9	Bromomethane	50	51.9	104	50.5	101	3	70-130/25
78-93-3	2-Butanone (MEK)	50	69.0	138* a	61.2	122	12	70-130/25
75-15-0	Carbon disulfide	50	50.9	102	49.4	99	3	70-130/25
56-23-5	Carbon tetrachloride	50	46.0	92	46.9	94	2	70-130/25
108-90-7	Chlorobenzene	50	50.1	100	50.0	100	0	70-130/25
75-00-3	Chloroethane	50	50.3	101	48.6	97	3	70-130/25
67-66-3	Chloroform	50	52.2	104	51.0	102	2	70-130/25
74-87-3	Chloromethane	50	47.9	96	47.0	94	2	70-130/25
110-82-7	Cyclohexane	50	49.9	100	50.4	101	1	71-145/25
96-12-8	1,2-Dibromo-3-chloropropane	50	60.6	121	59.4	119	2	70-130/25
124-48-1	Dibromochloromethane	50	52.8	106	52.2	104	1	70-130/25
106-93-4	1,2-Dibromoethane	50	51.7	103	52.0	104	1	70-130/25
95-50-1	1,2-Dichlorobenzene	50	55.2	110	55.0	110	0	70-130/25
541-73-1	1,3-Dichlorobenzene	50	55.4	111	54.1	108	2	70-130/25
106-46-7	1,4-Dichlorobenzene	50	55.9	112	55.7	111	0	70-130/25
75-71-8	Dichlorodifluoromethane	50	48.9	98	47.5	95	3	70-130/25
75-34-3	1,1-Dichloroethane	50	52.0	104	51.0	102	2	70-130/25
107-06-2	1,2-Dichloroethane	50	51.6	103	51.5	103	0	70-130/25
75-35-4	1,1-Dichloroethene	50	52.9	106	51.6	103	2	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	51.1	102	48.7	97	5	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	50.8	102	48.7	97	4	70-130/25
78-87-5	1,2-Dichloropropane	50	52.2	104	52.9	106	1	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	52.1	104	52.3	105	0	70-130/25
10061-02-6	trans-1,3-Dichloropropene	50	54.4	109	54.7	109	1	70-130/25
100-41-4	Ethylbenzene	50	51.7	103	51.7	103	0	70-130/25
76-13-1	Freon 113	50	50.1	100	50.8	102	1	70-130/25
591-78-6	2-Hexanone	50	63.0	126	59.4	119	6	70-130/25
98-82-8	Isopropylbenzene	50	60.5	121	59.8	120	1	70-130/25
79-20-9	Methyl Acetate	50	54.1	108	53.0	106	2	40-137/25
108-87-2	Methylcyclohexane	50	51.6	103	51.5	103	0	74-143/25
1634-04-4	Methyl Tert Butyl Ether	50	53.7	107	53.7	107	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	56.8	114	55.9	112	2	70-130/25

## Blank Spike/Blank Spike Duplicate Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1401-BS	N37427.D	1	10/22/09	WC	n/a	n/a	MSN1401
MSN1401-BSD	N37428.D	1	10/22/09	WC	n/a	n/a	MSN1401

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
75-09-2	Methylene chloride	50	49.1	98	48.4	97	1	70-130/25
100-42-5	Styrene	50	50.9	102	51.1	102	0	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	64.8	130	62.1	124	4	70-130/25
127-18-4	Tetrachloroethene	50	52.6	105	52.4	105	0	70-130/25
108-88-3	Toluene	50	50.3	101	50.9	102	1	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	55.7	111	55.6	111	0	70-130/25
71-55-6	1,1,1-Trichloroethane	50	51.7	103	51.2	102	1	70-130/25
79-00-5	1,1,2-Trichloroethane	50	53.5	107	54.0	108	1	70-130/25
79-01-6	Trichloroethene	50	50.3	101	51.0	102	1	70-130/25
75-69-4	Trichlorofluoromethane	50	52.0	104	51.9	104	0	70-130/25
75-01-4	Vinyl chloride	50	49.1	98	48.5	97	1	70-130/25
1330-20-7	Xylene (total)	150	145	97	145	97	0	70-130/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	93%	94%	70-130%
2037-26-5	Toluene-D8	93%	95%	70-130%
460-00-4	4-Bromofluorobenzene	103%	103%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

# Matrix Spike/Matrix Spike Duplicate Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86534-3MS	R10641.D	1	10/21/09	AT	n/a	n/a	MSR404
M86534-3MSD	R10642.D	1	10/21/09	AT	n/a	n/a	MSR404
M86534-3	R10640.D	1	10/21/09	AT	n/a	n/a	MSR404

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12, M86522-10A

CAS No.	Compound	M86534-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		4350	3620	83	3610	83	0	70-130/30
71-43-2	Benzene	ND		4350	4010	92	4190	96	4	70-130/30
75-27-4	Bromodichloromethane	ND		4350	4100	94	4270	98	4	70-130/30
75-25-2	Bromoform	ND		4350	4100	94	4230	97	3	70-130/30
74-83-9	Bromomethane	ND		4350	4500	104	4630	107	3	70-130/30
78-93-3	2-Butanone (MEK)	ND		4350	4240	98	4600	106	8	70-130/30
75-15-0	Carbon disulfide	ND		4350	4160	96	4350	100	4	70-130/30
56-23-5	Carbon tetrachloride	ND		4350	4130	95	4300	99	4	70-130/30
108-90-7	Chlorobenzene	ND		4350	4200	97	4420	102	5	70-130/30
75-00-3	Chloroethane	ND		4350	4220	97	4390	101	4	70-130/30
67-66-3	Chloroform	ND		4350	4110	95	4190	96	2	70-130/30
74-87-3	Chloromethane	ND		4350	3810	88	4100	94	7	70-130/30
110-82-7	Cyclohexane	ND		4350	3710	85	3960	91	7	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		4350	3860	89	3800	87	2	70-130/30
124-48-1	Dibromochloromethane	ND		4350	4390	101	4520	104	3	70-130/30
106-93-4	1,2-Dibromoethane	ND		4350	4470	103	4560	105	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		4350	3900	90	4070	94	4	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		4350	3870	89	4000	92	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		4350	3850	89	4020	93	4	70-130/30
75-71-8	Dichlorodifluoromethane	ND		4350	4800	110	4970	114	3	70-130/30
75-34-3	1,1-Dichloroethane	ND		4350	4080	94	4270	98	5	70-130/30
107-06-2	1,2-Dichloroethane	ND		4350	4090	94	4090	94	0	70-130/30
75-35-4	1,1-Dichloroethene	ND		4350	4050	93	4230	97	4	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		4350	4090	94	4270	98	4	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		4350	4170	96	4300	99	3	70-130/30
78-87-5	1,2-Dichloropropane	ND		4350	4120	95	4260	98	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		4350	4150	95	4270	98	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		4350	4100	94	4190	96	2	70-130/30
100-41-4	Ethylbenzene	ND		4350	4150	95	4290	99	3	70-130/30
76-13-1	Freon 113	ND		4350	3930	90	4070	94	4	70-130/30
591-78-6	2-Hexanone	ND		4350	3930	90	4100	94	4	70-130/30
98-82-8	Isopropylbenzene	ND		4350	3930	90	4100	94	4	70-130/30
79-20-9	Methyl Acetate	ND		4350	4170	96	4430	102	6	30-160/30
108-87-2	Methylcyclohexane	ND		4350	3450	79	3480	80	1	43-163/30
1634-04-4	Methyl Tert Butyl Ether	ND		4350	4000	92	4110	95	3	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		4350	4080	94	4130	95	1	70-130/30

# Matrix Spike/Matrix Spike Duplicate Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86534-3MS	R10641.D	1	10/21/09	AT	n/a	n/a	MSR404
M86534-3MSD	R10642.D	1	10/21/09	AT	n/a	n/a	MSR404
M86534-3	R10640.D	1	10/21/09	AT	n/a	n/a	MSR404

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12, M86522-10A

CAS No.	Compound	M86534-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
75-09-2	Methylene chloride	ND		4350	4170	96	4330	100	4	70-130/30
100-42-5	Styrene	ND		4350	3940	91	4090	94	4	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		4350	4230	97	4340	100	3	70-130/30
127-18-4	Tetrachloroethene	ND		4350	4250	98	4340	100	2	70-130/30
108-88-3	Toluene	ND		4350	4150	95	4350	100	5	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		4350	3260	75	3440	79	5	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		4350	4050	93	4250	98	5	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		4350	4200	97	4270	98	2	70-130/30
79-01-6	Trichloroethene	ND		4350	4100	94	4290	99	5	70-130/30
75-69-4	Trichlorofluoromethane	ND		4350	4340	100	4520	104	4	70-130/30
75-01-4	Vinyl chloride	ND		4350	4100	94	4090	94	0	70-130/30
1330-20-7	Xylene (total)	ND		13000	12500	96	13100	100	5	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	M86534-3	Limits
1868-53-7	Dibromofluoromethane	101%	105%	100%	70-130%
2037-26-5	Toluene-D8	94%	98%	93%	70-130%
460-00-4	4-Bromofluorobenzene	100%	101%	101%	70-130%

# Matrix Spike/Matrix Spike Duplicate Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86570-1MS	L36089.D	1	10/21/09	AMY	n/a	n/a	MSL1181
M86570-1MSD	L36090.D	1	10/21/09	AMY	n/a	n/a	MSL1181
M86570-1	L36071.D	1	10/21/09	AMY	n/a	n/a	MSL1181

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12A

CAS No.	Compound	M86570-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		57.9	56.3	97	80.8	142* a	36* a	70-130/30
71-43-2	Benzene	ND		57.9	66.7	115	69.3	121	4	70-130/30
75-27-4	Bromodichloromethane	ND		57.9	69.0	119	70.5	123	2	70-130/30
75-25-2	Bromoform	ND		57.9	74.9	129	76.9	135* b	3	70-130/30
74-83-9	Bromomethane	ND		57.9	79.8	138* b	79.9	140* b	0	70-130/30
78-93-3	2-Butanone (MEK)	ND		57.9	75.2	130	69.2	121	8	70-130/30
75-15-0	Carbon disulfide	ND		57.9	66.0	114	66.0	116	0	70-130/30
56-23-5	Carbon tetrachloride	ND		57.9	66.9	115	70.4	123	5	70-130/30
108-90-7	Chlorobenzene	ND		57.9	57.9	100	61.8	108	7	70-130/30
75-00-3	Chloroethane	ND		57.9	52.9	91	53.2	93	1	70-130/30
67-66-3	Chloroform	ND		57.9	77.2	133* b	77.0	135* b	0	70-130/30
74-87-3	Chloromethane	ND		57.9	75.0	129	79.5	139* b	6	70-130/30
110-82-7	Cyclohexane	ND		57.9	50.0	86	55.1	97	10	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		57.9	75.2	130	84.4	148* b	12	70-130/30
124-48-1	Dibromochloromethane	ND		57.9	75.0	129	77.7	136* b	4	70-130/30
106-93-4	1,2-Dibromoethane	ND		57.9	76.2	132* b	79.8	140* b	5	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		57.9	43.8	76	50.1	88	13	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		57.9	45.7	79	50.8	89	11	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		57.9	46.5	80	51.2	90	10	70-130/30
75-71-8	Dichlorodifluoromethane	ND		57.9	69.4	120	69.2	121	0	70-130/30
75-34-3	1,1-Dichloroethane	ND		57.9	74.4	128	74.0	130	1	70-130/30
107-06-2	1,2-Dichloroethane	ND		57.9	77.6	134* b	82.7	145* b	6	70-130/30
75-35-4	1,1-Dichloroethene	ND		57.9	67.3	116	68.0	119	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		57.9	72.3	125	73.2	128	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		57.9	64.0	110	65.6	115	2	70-130/30
78-87-5	1,2-Dichloropropane	ND		57.9	66.5	115	70.8	124	6	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		57.9	58.4	101	63.4	111	8	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		57.9	63.6	110	69.7	122	9	70-130/30
100-41-4	Ethylbenzene	ND		57.9	55.6	96	60.3	106	8	70-130/30
76-13-1	Freon 113	ND		57.9	66.0	114	66.3	116	0	70-130/30
591-78-6	2-Hexanone	ND		57.9	81.5	141* b	86.1	151* b	5	70-130/30
98-82-8	Isopropylbenzene	ND		57.9	53.0	91	60.4	106	13	70-130/30
79-20-9	Methyl Acetate	ND		57.9	37.6	65	33.5	59	12	30-160/30
108-87-2	Methylcyclohexane	ND		57.9	31.6	55	34.5	60	9	43-163/30
1634-04-4	Methyl Tert Butyl Ether	ND		57.9	84.6	146* b	89.2	156* b	5	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		57.9	86.5	149* b	91.8	161* b	6	70-130/30

# Matrix Spike/Matrix Spike Duplicate Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86570-1MS	L36089.D	1	10/21/09	AMY	n/a	n/a	MSL1181
M86570-1MSD	L36090.D	1	10/21/09	AMY	n/a	n/a	MSL1181
M86570-1	L36071.D	1	10/21/09	AMY	n/a	n/a	MSL1181

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-12A

CAS No.	Compound	M86570-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
75-09-2	Methylene chloride	ND		57.9	74.4	128	73.6	129	1	70-130/30
100-42-5	Styrene	ND		57.9	45.0	78	49.7	87	10	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		57.9	88.9	153* b	91.2	160* b	3	70-130/30
127-18-4	Tetrachloroethene	ND		57.9	54.9	95	59.2	104	8	70-130/30
108-88-3	Toluene	ND		57.9	59.4	103	63.1	111	6	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		57.9	25.7	44* b	29.1	51* b	12	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		57.9	70.7	122	71.4	125	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		57.9	72.8	126	78.6	138* b	8	70-130/30
79-01-6	Trichloroethene	ND		57.9	60.5	104	63.9	112	5	70-130/30
75-69-4	Trichlorofluoromethane	ND		57.9	68.3	118	68.1	119	0	70-130/30
75-01-4	Vinyl chloride	ND		57.9	80.5	139* b	81.8	143* b	2	70-130/30
1330-20-7	Xylene (total)	ND		174	171	98	182	106	6	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	M86570-1	Limits
1868-53-7	Dibromofluoromethane	119%	116%	123%	70-130%
2037-26-5	Toluene-D8	92%	95%	102%	70-130%
460-00-4	4-Bromofluorobenzene	108%	107%	89%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

(b) Outside control limits due to possible matrix interference. Refer to Blank Spike.



# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86649-1MS	N37439.D	1	10/22/09	WC	n/a	n/a	MSN1401
M86649-1MSD	N37440.D	1	10/22/09	WC	n/a	n/a	MSN1401
M86649-1	N37438.D	1	10/22/09	WC	n/a	n/a	MSN1401

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-13

CAS No.	Compound	M86649-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	35.7	71	35.1	70	2	70-130/30
71-43-2	Benzene	ND		50	50.9	102	49.8	100	2	70-130/30
75-27-4	Bromodichloromethane	ND		50	54.3	109	54.1	108	0	70-130/30
75-25-2	Bromoform	ND		50	45.2	90	45.9	92	2	70-130/30
74-83-9	Bromomethane	ND		50	34.8	70	43.2	86	22	70-130/30
78-93-3	2-Butanone (MEK)	ND		50	45.2	90	42.8	86	5	70-130/30
75-15-0	Carbon disulfide	ND		50	55.4	111	54.5	109	2	70-130/30
56-23-5	Carbon tetrachloride	ND		50	46.8	94	47.3	95	1	70-130/30
108-90-7	Chlorobenzene	ND		50	51.1	102	52.4	105	3	70-130/30
75-00-3	Chloroethane	ND		50	51.3	103	49.5	99	4	70-130/30
67-66-3	Chloroform	ND		50	54.3	109	54.1	108	0	70-130/30
74-87-3	Chloromethane	0.90		50	43.4	85	42.7	84	2	70-130/30
110-82-7	Cyclohexane	ND		50	55.0	110	54.2	108	1	60-160/30
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	56.5	113	54.3	109	4	70-130/30
124-48-1	Dibromochloromethane	ND		50	52.9	106	55.1	110	4	70-130/30
106-93-4	1,2-Dibromoethane	ND		50	51.9	104	52.4	105	1	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		50	53.6	107	54.9	110	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		50	54.9	110	55.6	111	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		50	55.5	111	55.7	111	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND		50	41.7	83	41.4	83	1	70-130/30
75-34-3	1,1-Dichloroethane	ND		50	55.9	112	54.3	109	3	70-130/30
107-06-2	1,2-Dichloroethane	ND		50	53.4	107	53.0	106	1	70-130/30
75-35-4	1,1-Dichloroethene	ND		50	57.9	116	55.5	111	4	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		50	52.9	106	53.2	106	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		50	51.2	102	50.8	102	1	70-130/30
78-87-5	1,2-Dichloropropane	ND		50	53.1	106	53.1	106	0	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND		50	52.3	105	53.4	107	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		50	59.0	118	58.3	117	1	70-130/30
100-41-4	Ethylbenzene	ND		50	53.9	108	54.0	108	0	70-130/30
76-13-1	Freon 113	ND		50	54.6	109	54.6	109	0	70-130/30
591-78-6	2-Hexanone	1.3		50	45.8	89	46.9	91	2	70-130/30
98-82-8	Isopropylbenzene	ND		50	69.5	139* a	69.3	139* a	0	70-130/30
79-20-9	Methyl Acetate	ND		50	33.3	67	31.4	63	6	34-145/30
108-87-2	Methylcyclohexane	ND		50	54.5	109	54.2	108	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	5.7		50	58.5	106	58.4	105	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	52.2	104	51.2	102	2	70-130/30

# Matrix Spike/Matrix Spike Duplicate Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86649-1MS	N37439.D	1	10/22/09	WC	n/a	n/a	MSN1401
M86649-1MSD	N37440.D	1	10/22/09	WC	n/a	n/a	MSN1401
M86649-1	N37438.D	1	10/22/09	WC	n/a	n/a	MSN1401

The QC reported here applies to the following samples:

Method: SW846 8260B

M86522-13

CAS No.	Compound	M86649-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-09-2	Methylene chloride	ND	50	51.5	103	50.5	101	2	70-130/30
100-42-5	Styrene	ND	50	52.3	105	53.4	107	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	59.0	118	57.7	115	2	70-130/30
127-18-4	Tetrachloroethene	ND	50	54.2	108	55.1	110	2	70-130/30
108-88-3	Toluene	ND	50	52.7	105	53.1	106	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	50	51.9	104	54.3	109	5	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	50	56.1	112	56.5	113	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	50	52.9	106	52.0	104	2	70-130/30
79-01-6	Trichloroethene	ND	50	54.5	109	53.2	106	2	70-130/30
75-69-4	Trichlorofluoromethane	ND	50	52.5	105	52.2	104	1	70-130/30
75-01-4	Vinyl chloride	ND	50	57.0	114	57.4	115	1	70-130/30
1330-20-7	Xylene (total)	ND	150	151	101	152	101	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	M86649-1	Limits
1868-53-7	Dibromofluoromethane	95%	93%	96%	70-130%
2037-26-5	Toluene-D8	93%	93%	88%	70-130%
460-00-4	4-Bromofluorobenzene	103%	100%	95%	70-130%

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

**Volatile Surrogate Recovery Summary**

**Job Number:** M86522  
**Account:** ENSTNM ENSAFE  
**Project:** Carrier-Thompson-PCB Investigation

<b>Method:</b> SW846 8260B	<b>Matrix:</b> AQ
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**Samples and QC shown here apply to the above method**

Lab Sample ID	Lab File ID	S1	S2	S3
M86522-13	N37436.D	93.0	91.0	90.0
M86649-1MS	N37439.D	95.0	93.0	103.0
M86649-1MSD	N37440.D	93.0	93.0	100.0
MSN1401-BS	N37427.D	93.0	93.0	103.0
MSN1401-BSD	N37428.D	94.0	95.0	103.0
MSN1401-MB	N37430.D	94.0	89.0	90.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

4.4.1  
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**Volatile Surrogate Recovery Summary**

**Job Number:** M86522  
**Account:** ENSTNM ENSAFE  
**Project:** Carrier-Thompson-PCB Investigation

<b>Method:</b> SW846 8260B	<b>Matrix:</b> SO
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**Samples and QC shown here apply to the above method**

Lab Sample ID	Lab File ID	S1	S2	S3
M86522-12	R10644.D	90.0	87.0	94.0
M86522-10A	R10648.D	81.0	74.0	82.0
M86522-12A	L36070.D	113.0	101.0	94.0
M86534-3MS	R10641.D	101.0	94.0	100.0
M86534-3MSD	R10642.D	105.0	98.0	101.0
M86570-1MS	L36089.D	119.0	92.0	108.0
M86570-1MSD	L36090.D	116.0	95.0	107.0
MSL1181-BS	L36066.D	107.0	97.0	97.0
MSL1181-BSD	L36067.D	102.0	98.0	97.0
MSL1181-MB	L36069.D	112.0	99.0	92.0
MSR404-BS	R10634.D	93.0	84.0	95.0
MSR404-BSD	R10635.D	103.0	95.0	104.0
MSR404-MB	R10637.D	98.0	95.0	102.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%



## GC Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19712-MB	EF70771.D	1	10/15/09	SL	10/15/09	OP19712	GEF3252

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-1, M86522-2, M86522-3, M86522-4, M86522-5, M86522-6, M86522-7, M86522-8, M86522-9, M86522-10, M86522-29, M86522-31, M86522-32, M86522-33, M86522-34, M86522-37

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	97	24	ug/kg	
11104-28-2	Aroclor 1221	ND	97	6.3	ug/kg	
11141-16-5	Aroclor 1232	ND	97	14	ug/kg	
53469-21-9	Aroclor 1242	ND	97	8.3	ug/kg	
12672-29-6	Aroclor 1248	ND	97	26	ug/kg	
11097-69-1	Aroclor 1254	ND	97	11	ug/kg	
11096-82-5	Aroclor 1260	ND	97	19	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	106% 30-150%
877-09-8	Tetrachloro-m-xylene	106% 30-150%
2051-24-3	Decachlorobiphenyl	106% 30-150%
2051-24-3	Decachlorobiphenyl	107% 30-150%

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19716-MB	BB27719.D	1	10/16/09	CZ	10/16/09	OP19716	GBB1144

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-11

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.076	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.18	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.20	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.24	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.12	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.16	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	113% 30-150%
877-09-8	Tetrachloro-m-xylene	118% 30-150%
2051-24-3	Decachlorobiphenyl	71% 30-150%
2051-24-3	Decachlorobiphenyl	68% 30-150%

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19724-MB	EF70801.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-30

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	98	25	ug/kg	
11104-28-2	Aroclor 1221	ND	98	6.4	ug/kg	
11141-16-5	Aroclor 1232	ND	98	14	ug/kg	
53469-21-9	Aroclor 1242	ND	98	8.4	ug/kg	
12672-29-6	Aroclor 1248	ND	98	26	ug/kg	
11097-69-1	Aroclor 1254	ND	98	11	ug/kg	
11096-82-5	Aroclor 1260	ND	98	19	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	103% 30-150%
877-09-8	Tetrachloro-m-xylene	105% 30-150%
2051-24-3	Decachlorobiphenyl	103% 30-150%
2051-24-3	Decachlorobiphenyl	108% 30-150%



## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19719-MB	EF70825.D	1	10/18/09	SL	10/16/09	OP19719	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-26, M86522-27, M86522-28, M86522-35, M86522-36

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	98	25	ug/kg	
11104-28-2	Aroclor 1221	ND	98	6.4	ug/kg	
11141-16-5	Aroclor 1232	ND	98	14	ug/kg	
53469-21-9	Aroclor 1242	ND	98	8.4	ug/kg	
12672-29-6	Aroclor 1248	ND	98	26	ug/kg	
11097-69-1	Aroclor 1254	ND	98	11	ug/kg	
11096-82-5	Aroclor 1260	ND	98	19	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	119% 30-150%
877-09-8	Tetrachloro-m-xylene	111% 30-150%
2051-24-3	Decachlorobiphenyl	104% 30-150%
2051-24-3	Decachlorobiphenyl	95% 30-150%

## Method Blank Summary

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**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19757-MB	EF70967.D	1	10/23/09	SL	10/21/09	OP19757	GEF3258

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-22, M86522-25

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	98	25	ug/kg	
11104-28-2	Aroclor 1221	ND	98	6.4	ug/kg	
11141-16-5	Aroclor 1232	ND	98	14	ug/kg	
53469-21-9	Aroclor 1242	ND	98	8.4	ug/kg	
12672-29-6	Aroclor 1248	ND	98	26	ug/kg	
11097-69-1	Aroclor 1254	ND	98	11	ug/kg	
11096-82-5	Aroclor 1260	ND	98	19	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	117% 30-150%
877-09-8	Tetrachloro-m-xylene	113% 30-150%
2051-24-3	Decachlorobiphenyl	116% 30-150%
2051-24-3	Decachlorobiphenyl	107% 30-150%

## Blank Spike Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19712-BS	EF70772.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-1, M86522-2, M86522-3, M86522-4, M86522-5, M86522-6, M86522-7, M86522-8, M86522-9, M86522-10, M86522-29, M86522-31, M86522-32, M86522-33, M86522-34, M86522-37

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	262	295	112	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	262	313	119	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	108%	30-150%
877-09-8	Tetrachloro-m-xylene	109%	30-150%
2051-24-3	Decachlorobiphenyl	111%	30-150%
2051-24-3	Decachlorobiphenyl	110%	30-150%

## Blank Spike Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19724-BS	EF70802.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-30

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	261	306	117	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	261	306	117	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	115%	30-150%
877-09-8	Tetrachloro-m-xylene	116%	30-150%
2051-24-3	Decachlorobiphenyl	116%	30-150%
2051-24-3	Decachlorobiphenyl	118%	30-150%

## Blank Spike Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19719-BS	EF70826.D	1	10/18/09	SL	10/16/09	OP19719	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-26, M86522-27, M86522-28, M86522-35, M86522-36

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	259	289	111	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	259	303	117	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	109%	30-150%
877-09-8	Tetrachloro-m-xylene	103%	30-150%
2051-24-3	Decachlorobiphenyl	99%	30-150%
2051-24-3	Decachlorobiphenyl	89%	30-150%

## Blank Spike Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19757-BS	EF70968.D	1	10/23/09	SL	10/21/09	OP19757	GEF3258

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-22, M86522-25

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	259	286	110	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	259	291	112	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	114%	30-150%
877-09-8	Tetrachloro-m-xylene	112%	30-150%
2051-24-3	Decachlorobiphenyl	113%	30-150%
2051-24-3	Decachlorobiphenyl	105%	30-150%

## Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19716-BS	BB27721.D	1	10/16/09	CZ	10/16/09	OP19716	GBB1144
OP19716-BSD	BB27722.D	1	10/16/09	CZ	10/16/09	OP19716	GBB1144

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	2	2.5	125	2.6	130	4	40-140/20
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/20
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/20
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/20
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/20
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/20
11096-82-5	Aroclor 1260	2	2.6	130	2.6	130	0	40-140/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	110%	106%	30-150%
877-09-8	Tetrachloro-m-xylene	115%	111%	30-150%
2051-24-3	Decachlorobiphenyl	62%	63%	30-150%
2051-24-3	Decachlorobiphenyl	59%	61%	30-150%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19712-MS	EF70791.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
OP19712-MSD	EF70792.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252
M86500-1	EF70790.D	1	10/16/09	SL	10/15/09	OP19712	GEF3252

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-1, M86522-2, M86522-3, M86522-4, M86522-5, M86522-6, M86522-7, M86522-8, M86522-9, M86522-10, M86522-29, M86522-31, M86522-32, M86522-33, M86522-34, M86522-37

CAS No.	Compound	M86500-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		275	324	118	304	109	6	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		275	330	120	319	114	3	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86500-1	Limits
877-09-8	Tetrachloro-m-xylene	107%	102%	108%	30-150%
877-09-8	Tetrachloro-m-xylene	107%	102%	108%	30-150%
2051-24-3	Decachlorobiphenyl	102%	99%	104%	30-150%
2051-24-3	Decachlorobiphenyl	105%	99%	106%	30-150%



# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19716-MS	BB27723.D	1	10/16/09	CZ	10/16/09	OP19716	GBB1144
OP19716-MSD	BB27724.D	1	10/16/09	CZ	10/16/09	OP19716	GBB1144
M86444-14	BB27725.D	1	10/16/09	CZ	10/16/09	OP19716	GBB1144

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-11

CAS No.	Compound	M86444-14 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2	2.8	140	2.6	130	7	40-140/50
11104-28-2	Aroclor 1221	ND		ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND		ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2	2.9	145* a	2.7	135	7	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86444-14	Limits
877-09-8	Tetrachloro-m-xylene	119%	110%	113%	30-150%
877-09-8	Tetrachloro-m-xylene	124%	115%	117%	30-150%
2051-24-3	Decachlorobiphenyl	70%	63%	73%	30-150%
2051-24-3	Decachlorobiphenyl	67%	60%	69%	30-150%

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

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19724-MS	EF70803.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
OP19724-MSD	EF70804.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
M86551-1	EF70805.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-30

CAS No.	Compound	M86551-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		300	352	117	369	121	5	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		300	367	122	369	121	1	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86551-1	Limits
877-09-8	Tetrachloro-m-xylene	112%	112%	108%	30-150%
877-09-8	Tetrachloro-m-xylene	115%	113%	109%	30-150%
2051-24-3	Decachlorobiphenyl	113%	109%	106%	30-150%
2051-24-3	Decachlorobiphenyl	116%	118%	111%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: M86522  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19719-MS	EF70833.D	1	10/19/09	SL	10/16/09	OP19719	GEF3253
OP19719-MSD	EF70834.D	1	10/19/09	SL	10/16/09	OP19719	GEF3253
M86509-1	EF70835.D	1	10/19/09	SL	10/16/09	OP19719	GEF3253

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

M86522-26, M86522-27, M86522-28, M86522-35, M86522-36

CAS No.	Compound	M86509-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	284	343	121	370	131	8	40-140/50
11104-28-2	Aroclor 1221	ND		ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND		ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	22.6	284	317	104	346	115	9	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86509-1	Limits
877-09-8	Tetrachloro-m-xylene	110%	120%	114%	30-150%
877-09-8	Tetrachloro-m-xylene	106%	115%	108%	30-150%
2051-24-3	Decachlorobiphenyl	87%	90%	85%	30-150%
2051-24-3	Decachlorobiphenyl	109%	110%	98%	30-150%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86522

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19757-MS	EF70969.D	1	10/23/09	SL	10/21/09	OP19757	GEF3258
OP19757-MSD	EF70970.D	1	10/23/09	SL	10/21/09	OP19757	GEF3258
M86601-11	EF70971.D	1	10/23/09	SL	10/21/09	OP19757	GEF3258

The QC reported here applies to the following samples:

Method: SW846 8082

M86522-22, M86522-25

CAS No.	Compound	M86601-11 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		262	287	110	285	109	1	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		262	320	122	311	119	3	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86601-11	Limits
877-09-8	Tetrachloro-m-xylene	111%	118%	114%	30-150%
877-09-8	Tetrachloro-m-xylene	105%	111%	108%	30-150%
2051-24-3	Decachlorobiphenyl	116%	115%	111%	30-150%
2051-24-3	Decachlorobiphenyl	110%	106%	105%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M86522  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Method: SW846 8082	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
M86522-11	BB27720.D	113.0	115.0	60.0	57.0
OP19716-BS	BB27721.D	110.0	115.0	62.0	59.0
OP19716-BSD	BB27722.D	106.0	111.0	63.0	61.0
OP19716-MB	BB27719.D	113.0	118.0	71.0	68.0
OP19716-MS	BB27723.D	119.0	124.0	70.0	67.0
OP19716-MSD	BB27724.D	110.0	115.0	63.0	60.0

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

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

5.5.1  
5

# Semivolatile Surrogate Recovery Summary

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**Job Number:** M86522  
**Account:** ENSTNM ENSAFE  
**Project:** Carrier-Thompson-PCB Investigation

**Method:** SW846 8082 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
M86522-1	EF70773.D	105.0	106.0	110.0	110.0
M86522-2	EF70774.D	97.0	98.0	102.0	102.0
M86522-3	EF70775.D	93.0	93.0	100.0	102.0
M86522-4	EF70776.D	98.0	102.0	105.0	107.0
M86522-5	EF70778.D	93.0	99.0	102.0	104.0
M86522-6	EF70779.D	94.0	102.0	103.0	107.0
M86522-7	EF70780.D	96.0	100.0	100.0	103.0
M86522-8	EF70796.D	115.0	114.0	131.0	129.0
M86522-8	EF70781.D	81.0	87.0	80.0	101.0
M86522-9	EF70782.D	93.0	103.0	105.0	111.0
M86522-10	EF70783.D	80.0	81.0	81.0	100.0
M86522-22	EF70973.D	109.0	106.0	98.0	98.0
M86522-25	EF70974.D	100.0	97.0	106.0	112.0
M86522-26	EF70827.D	45.0	40.0	46.0	41.0
M86522-27	EF70828.D	131.0	125.0	119.0	153.0* <sup>c</sup>
M86522-28	EF70829.D	138.0	132.0	130.0	122.0
M86522-29	EF70784.D	94.0	98.0	98.0	95.0
M86522-30	EF70824.D	114.0	106.0	94.0	96.0
M86522-31	EF70786.D	97.0	99.0	96.0	104.0
M86522-32	EF70798.D	102.0	103.0	109.0	111.0
M86522-32	EF70787.D	99.0	100.0	94.0	100.0
M86522-33	BB27726.D	96.0	100.0	123.0	120.0
M86522-33	BB27717.D	98.0	103.0	120.0	116.0
M86522-34	BB27718.D	90.0	92.0	103.0	109.0
M86522-35	EF70830.D	116.0	110.0	113.0	102.0
M86522-36	EF70831.D	123.0	117.0	121.0	108.0
M86522-37	EF70789.D	107.0	110.0	109.0	111.0
OP19712-BS	EF70772.D	108.0	109.0	111.0	110.0
OP19712-MB	EF70771.D	106.0	106.0	106.0	107.0
OP19712-MS	EF70791.D	107.0	107.0	102.0	105.0
OP19712-MSD	EF70792.D	102.0	102.0	99.0	99.0
OP19719-BS	EF70826.D	109.0	103.0	99.0	89.0
OP19719-MB	EF70825.D	119.0	111.0	104.0	95.0
OP19719-MS	EF70833.D	110.0	106.0	87.0	109.0
OP19719-MSD	EF70834.D	120.0	115.0	90.0	110.0
OP19724-BS	EF70802.D	115.0	116.0	116.0	118.0
OP19724-MB	EF70801.D	103.0	105.0	103.0	108.0
OP19724-MS	EF70803.D	112.0	115.0	113.0	116.0
OP19724-MSD	EF70804.D	112.0	113.0	109.0	118.0
OP19757-BS	EF70968.D	114.0	112.0	113.0	105.0

5.5.2  
5

Semivolatile Surrogate Recovery Summary

Job Number: M86522  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Method: SW846 8082	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
OP19757-MB	EF70967.D	117.0	113.0	116.0	107.0
OP19757-MS	EF70969.D	111.0	105.0	116.0	110.0
OP19757-MSD	EF70970.D	118.0	111.0	115.0	106.0

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

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to possible matrix interference.

5.5.2  
5



10/19/09

## Technical Report for

ENSAFE

Carrier-Thompson-PCB Investigation

0888808318

Accutest Job Number: M86551

Sampling Date: 10/15/09

Report to:

ENSAFE

mheflin@ensafe.com

ATTN: May Heflin

Total number of pages in report: **31**



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

Reza Fand  
Lab Director

Client Service contact: Diane Komar 508-481-6200

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

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## Sample Summary

ENSAFE

Job No: M86551

Carrier-Thompson-PCB Investigation  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M86551-1	10/15/09	08:31 WG	10/16/09	SO	Soil	CARSSS2012
M86551-2	10/15/09	09:00 WG	10/16/09	SO	Soil	CARSSS2112
M86551-3	10/15/09	09:20 WG	10/16/09	SO	Soil	CARSSS2212
M86551-4	10/15/09	09:38 WG	10/16/09	SO	Soil	CARSSS2312
M86551-5	10/15/09	09:50 WG	10/16/09	SO	Soil	CARSSS2401
M86551-6	10/15/09	10:15 WG	10/16/09	SO	Soil	CARSSS2512
M86551-7	10/15/09	10:33 WG	10/16/09	SO	Soil	CARSSS2612
M86551-8	10/15/09	10:40 WG	10/16/09	SO	Soil	CARSSS2701
M86551-9	10/15/09	10:46 WG	10/16/09	SO	Soil	CARSSS2801
M86551-10	10/15/09	10:55 WG	10/16/09	SO	Soil	CARSSS2901
M86551-11	10/15/09	13:20 WG	10/16/09	SO	Soil	CARSSS3023
M86551-13	10/15/09	14:04 WG	10/16/09	SO	Soil	CARSSS3112
M86551-16	10/15/09	14:20 WG	10/16/09	SO	Soil	CARSSS3212

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



Sample Summary  
(continued)

ENSAFE

Job No: M86551

Carrier-Thompson-PCB Investigation  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M86551-19	10/15/09	14:35	WG	10/16/09	SO Soil	CARSSS3312
M86551-22	10/15/09	15:02	WG	10/16/09	SO Soil	CARSSS3412
M86551-25	10/15/09	16:05	WG	10/16/09	SO Soil	CARSSS3512
M86551-28	10/15/09	16:30	WG	10/16/09	SO Soil	CARSSS3623

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



## Sample Results

## Report of Analysis

## Report of Analysis

<b>Client Sample ID:</b>	CARSSS2012		
<b>Lab Sample ID:</b>	M86551-1	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	86.9
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70805.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.4	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.7	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	108%		30-150%
877-09-8	Tetrachloro-m-xylene	109%		30-150%
2051-24-3	Decachlorobiphenyl	106%		30-150%
2051-24-3	Decachlorobiphenyl	111%		30-150%

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

<b>Client Sample ID:</b>	CARSSS2112	
<b>Lab Sample ID:</b>	M86551-2	<b>Date Sampled:</b> 10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 97.4
<b>Project:</b>	Carrier-Thompson-PCB Investigation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70806.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	100	26	ug/kg	
11104-28-2	Aroclor 1221	ND	100	6.6	ug/kg	
11141-16-5	Aroclor 1232	ND	100	14	ug/kg	
53469-21-9	Aroclor 1242	ND	100	8.7	ug/kg	
12672-29-6	Aroclor 1248	ND	100	27	ug/kg	
11097-69-1	Aroclor 1254	ND	100	12	ug/kg	
11096-82-5	Aroclor 1260	ND	100	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%		30-150%
877-09-8	Tetrachloro-m-xylene	109%		30-150%
2051-24-3	Decachlorobiphenyl	81%		30-150%
2051-24-3	Decachlorobiphenyl	93%		30-150%

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

<b>Client Sample ID:</b>	CARSSS2212	
<b>Lab Sample ID:</b>	M86551-3	<b>Date Sampled:</b> 10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 81.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70807.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.9	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	ND	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%		30-150%
877-09-8	Tetrachloro-m-xylene	103%		30-150%
2051-24-3	Decachlorobiphenyl	76%		30-150%
2051-24-3	Decachlorobiphenyl	85%		30-150%

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

<b>Client Sample ID:</b>	CARSSS2312	
<b>Lab Sample ID:</b>	M86551-4	<b>Date Sampled:</b> 10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 86.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70808.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.3	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.6	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		30-150%
877-09-8	Tetrachloro-m-xylene	101%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%

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

<b>Client Sample ID:</b>	CARSSS2401		
<b>Lab Sample ID:</b>	M86551-5	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	82.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70809.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
Run #2	EF70832A.D	2	10/18/09	SL	10/16/09	OP19724	GEF3253

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.8	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	1190 <sup>a</sup>	240	46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	120%	136%	30-150%
877-09-8	Tetrachloro-m-xylene	120%	126%	30-150%
2051-24-3	Decachlorobiphenyl	100%	130%	30-150%
2051-24-3	Decachlorobiphenyl	107%	126%	30-150%

(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: CARSSS2512

Lab Sample ID: M86551-6

Date Sampled: 10/15/09

Matrix: SO - Soil

Date Received: 10/16/09

Method: SW846 8082 SW846 3545

Percent Solids: 83.0

Project: Carrier-Thompson-PCB Investigation

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70810.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.7	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	ND	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	95%		30-150%
2051-24-3	Decachlorobiphenyl	93%		30-150%
2051-24-3	Decachlorobiphenyl	89%		30-150%

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

<b>Client Sample ID:</b>	CARSSS2612	
<b>Lab Sample ID:</b>	M86551-7	<b>Date Sampled:</b> 10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 88.3
<b>Project:</b>	Carrier-Thompson-PCB Investigation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70812.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	28	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.3	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.6	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	ND	110	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		30-150%
877-09-8	Tetrachloro-m-xylene	118%		30-150%
2051-24-3	Decachlorobiphenyl	106%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

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

<b>Client Sample ID:</b>	CARSSS2701		
<b>Lab Sample ID:</b>	M86551-8	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	76.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70813.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2	EF70832B.D	50	10/18/09	SL	10/16/09	OP19724	GEF3253

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	32	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.4	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	34	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	26700 <sup>a</sup>	6400	1200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	118%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	118%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	101%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	185% <sup>c</sup>	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

ND = Not detected 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: CARSSS2801

Lab Sample ID: M86551-9

Date Sampled: 10/15/09

Matrix: SO - Soil

Date Received: 10/16/09

Method: SW846 8082 SW846 3545

Percent Solids: 75.3

Project: Carrier-Thompson-PCB Investigation

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70814.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2	EF70832C.D	20	10/18/09	SL	10/16/09	OP19724	GEF3253

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	33	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.4	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	34	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	5500 <sup>a</sup>	2600	500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	128%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	132%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	110%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	114%	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARSSS2901		
<b>Lab Sample ID:</b>	M86551-10	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	74.9
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70815.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	33	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.6	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	35	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	72.6	130	25	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	121%		30-150%
877-09-8	Tetrachloro-m-xylene	117%		30-150%
2051-24-3	Decachlorobiphenyl	111%		30-150%
2051-24-3	Decachlorobiphenyl	101%		30-150%

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

<b>Client Sample ID:</b>	CARSSS3023		
<b>Lab Sample ID:</b>	M86551-11	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.0
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70816.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	29	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.5	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	9.9	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	ND	120	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	115%		30-150%
877-09-8	Tetrachloro-m-xylene	110%		30-150%
2051-24-3	Decachlorobiphenyl	110%		30-150%
2051-24-3	Decachlorobiphenyl	100%		30-150%

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

<b>Client Sample ID:</b>	CARSSS3112		
<b>Lab Sample ID:</b>	M86551-13	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	82.9
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70817.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.7	ug/kg	
11141-16-5	Aroclor 1232	ND	120	16	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	31	ug/kg	
11097-69-1	Aroclor 1254	ND	120	13	ug/kg	
11096-82-5	Aroclor 1260	ND	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	118%		30-150%
877-09-8	Tetrachloro-m-xylene	113%		30-150%
2051-24-3	Decachlorobiphenyl	113%		30-150%
2051-24-3	Decachlorobiphenyl	106%		30-150%

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

<b>Client Sample ID:</b>	CARSSS3212		
<b>Lab Sample ID:</b>	M86551-16	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.1
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70818.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	29	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.5	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.9	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	83.6	110	22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	122%		30-150%
877-09-8	Tetrachloro-m-xylene	117%		30-150%
2051-24-3	Decachlorobiphenyl	115%		30-150%
2051-24-3	Decachlorobiphenyl	109%		30-150%

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

<b>Client Sample ID:</b>	CARSSS3312		
<b>Lab Sample ID:</b>	M86551-19	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	85.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70819.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	29	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.5	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.8	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	37.7	110	22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	116%		30-150%
877-09-8	Tetrachloro-m-xylene	111%		30-150%
2051-24-3	Decachlorobiphenyl	115%		30-150%
2051-24-3	Decachlorobiphenyl	107%		30-150%

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

<b>Client Sample ID:</b>	CARSSS3412		
<b>Lab Sample ID:</b>	M86551-22	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	90.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70820.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	27	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.1	ug/kg	
11141-16-5	Aroclor 1232	ND	110	15	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.4	ug/kg	
12672-29-6	Aroclor 1248	ND	110	29	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	71.3	110	21	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	125%		30-150%
877-09-8	Tetrachloro-m-xylene	118%		30-150%
2051-24-3	Decachlorobiphenyl	111%		30-150%
2051-24-3	Decachlorobiphenyl	114%		30-150%

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

<b>Client Sample ID:</b>	CARSSS3512		
<b>Lab Sample ID:</b>	M86551-25	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	86.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70821.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	110	29	ug/kg	
11104-28-2	Aroclor 1221	ND	110	7.4	ug/kg	
11141-16-5	Aroclor 1232	ND	110	16	ug/kg	
53469-21-9	Aroclor 1242	ND	110	9.8	ug/kg	
12672-29-6	Aroclor 1248	ND	110	30	ug/kg	
11097-69-1	Aroclor 1254	ND	110	13	ug/kg	
11096-82-5	Aroclor 1260	32.3	110	22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	126%		30-150%
877-09-8	Tetrachloro-m-xylene	118%		30-150%
2051-24-3	Decachlorobiphenyl	112%		30-150%
2051-24-3	Decachlorobiphenyl	117%		30-150%

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

<b>Client Sample ID:</b>	CARSSS3623		
<b>Lab Sample ID:</b>	M86551-28	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	95.4
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70823.D	1	10/18/09	SL	10/16/09	OP19724	GEF3253
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	100	26	ug/kg	
11104-28-2	Aroclor 1221	ND	100	6.7	ug/kg	
11141-16-5	Aroclor 1232	ND	100	14	ug/kg	
53469-21-9	Aroclor 1242	ND	100	8.8	ug/kg	
12672-29-6	Aroclor 1248	ND	100	27	ug/kg	
11097-69-1	Aroclor 1254	ND	100	12	ug/kg	
11096-82-5	Aroclor 1260	92.2	100	20	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	126%		30-150%
877-09-8	Tetrachloro-m-xylene	121%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	101%		30-150%

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



## Misc. Forms

### Custody Documents and Other Forms

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Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (NY)
- Chain of Custody

2235 Route 130, Dayton, NJ 08810  
TEL 732-329-0200 FAX: 732-129-3499/3480  
www.accutest.com

968351501280  
968351501291

Accutest Quote # M86551

Bottle Order Control #

Accutest Job #

Requested Analysis (see TEST CODE sheet)

Matrix Codes

LAB USE ONLY

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

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 UTC

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

Relinquished By: 1 / Date Time: 10/15/09 / 1424 / Received By: 1 FedEx

Relinquished By: 2 / Date Time: 10/16/09 9:15 / Received By: 2

Relinquished By: 3 / Date Time: / Received By: 3

Relinquished By: 4 / Date Time: / Received By: 4

Relinquished By: 5 / Date Time: / Received By: 5

Custody Seal #

Intact  
Not intact

Preserved where applicable

On Ice

Cooler Temp: 3-7, 3.2, 3.4

Client / Reporting Information

Company Name: EnSite

Street Address: 220 Athens Way Ste. 400

City: Nashville TN 37228

Project Contact: David Wyatt dwyatt@ensite.com

Phone #: (615) 255-9300

Sampler(s) Name(s): Jason Kuykendall/Wes

Project Information

Project Name: Carrier Thompson A PCB Service Investigation

Street: Syracuse NY

Project #: 0888808318

Client Purchase Order #

Project Manager: May Ariffin

Collection

Field ID / Point of Collection

Accutest Sample #

Date

Time

Sampled by

Matrix

# of bottles

Number of preserved bottles

PCB 3082

Hold

LAB USE ONLY

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

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 UTC

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

Relinquished By: 1 / Date Time: 10/15/09 / 1424 / Received By: 1 FedEx

Relinquished By: 2 / Date Time: 10/16/09 9:15 / Received By: 2

Relinquished By: 3 / Date Time: / Received By: 3

Relinquished By: 4 / Date Time: / Received By: 4

Relinquished By: 5 / Date Time: / Received By: 5

Custody Seal #

Intact  
Not intact

Preserved where applicable

On Ice

Cooler Temp: 3-7, 3.2, 3.4

M86551: Chain of Custody

Page 1 of 3





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 # <b>M86551</b>	
Requested Analysis (see TEST CODE sheet)			Matrix Codes
<div style="display: flex; justify-content: space-between;"> <div> <p>PCB5 8082</p> <p>401A</p> </div> <div> <p>Level 2 QA/QC</p> </div> </div>			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 WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
			LAB USE ONLY
Turnaround Time (Business days) <input type="checkbox"/> Std. 15 Business Days <input type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink			
Approved By (Accutest PM): / Date: <b>PUSH!</b>		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other: <b>WTC</b> Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data	
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler: 1 <i>[Signature]</i> Relinquished by Sampler: 3 Relinquished by: 5	Date Time: 10/15/09/1724 Received By: 1 <i>FedEx</i> Received By: 3 Received By: 5	Relinquished By: 2 <i>FedEx</i> Relinquished By: 4 Custody Seal # <input type="checkbox"/> Intact <input type="checkbox"/> Not intact	Date Time: 10/16/09/15 Received By: 2 <i>[Signature]</i> Received By: 4 Preserved where applicable <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp: 37.32, 34

Client / Reporting Information		Project Information	
Company Name: <b>EnSite</b> Street Address: <b>220 Athens Way Ste. 40</b> City: <b>Nashville TN</b> State: <b>37228</b> Zip: Project Contact: <b>David Wyatt</b> Email: <b>dw@ensite.com</b> Phone #: <b>(615) 255-9300</b> Fax #: Sampler(s) Name(s): <b>Wes Coolnight</b> Phone #: Project Manager: <b>May Hefflin</b> Attention:		Project Name: <b>Carrier Thompson Rd - RB Source Investigation</b> Street: Billing Information (if different from Report to) Company Name: Project #: Client Purchase Order #: City: State: Zip:	
Accutest Sample # Field ID / Point of Collection		Collection Date Time Sampled by Matrix # of bottles Number of preserved Bottles PCB1 PCB2 PCB3 PCB4 PCB5 PCB6 PCB7 PCB8 PCB9 PCB10 PCB11 PCB12 PCB13 PCB14 PCB15 PCB16 PCB17 PCB18 PCB19 PCB20 PCB21 PCB22 PCB23 PCB24 PCB25 PCB26 PCB27 PCB28 PCB29 PCB30 PCB31 PCB32 PCB33 PCB34 PCB35 PCB36 PCB37 PCB38 PCB39 PCB40 PCB41 PCB42 PCB43 PCB44 PCB45 PCB46 PCB47 PCB48 PCB49 PCB50 PCB51 PCB52 PCB53 PCB54 PCB55 PCB56 PCB57 PCB58 PCB59 PCB60 PCB61 PCB62 PCB63 PCB64 PCB65 PCB66 PCB67 PCB68 PCB69 PCB70 PCB71 PCB72 PCB73 PCB74 PCB75 PCB76 PCB77 PCB78 PCB79 PCB80 PCB81 PCB82 PCB83 PCB84 PCB85 PCB86 PCB87 PCB88 PCB89 PCB90 PCB91 PCB92 PCB93 PCB94 PCB95 PCB96 PCB97 PCB98 PCB99 PCB100	
25 CARSSS 3512 26 CARSSS 3523 27 CARSSS 3534 28 CARSSS 3623 29 CARSSS 3634		24 hr. Hold Hold 24 hr. Hold 10/15/09 1605 VG SO 1 1607 1609 1630 1632	



## GC Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

Page 1 of 1

**Job Number:** M86551

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19724-MB	EF70801.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86551-1, M86551-2, M86551-3, M86551-4, M86551-5, M86551-6, M86551-7, M86551-8, M86551-9, M86551-10, M86551-11, M86551-13, M86551-16, M86551-19, M86551-22, M86551-25, M86551-28

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	98	25	ug/kg	
11104-28-2	Aroclor 1221	ND	98	6.4	ug/kg	
11141-16-5	Aroclor 1232	ND	98	14	ug/kg	
53469-21-9	Aroclor 1242	ND	98	8.4	ug/kg	
12672-29-6	Aroclor 1248	ND	98	26	ug/kg	
11097-69-1	Aroclor 1254	ND	98	11	ug/kg	
11096-82-5	Aroclor 1260	ND	98	19	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	103% 30-150%
877-09-8	Tetrachloro-m-xylene	105% 30-150%
2051-24-3	Decachlorobiphenyl	103% 30-150%
2051-24-3	Decachlorobiphenyl	108% 30-150%

## Blank Spike Summary

Page 1 of 1

**Job Number:** M86551

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19724-BS	EF70802.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86551-1, M86551-2, M86551-3, M86551-4, M86551-5, M86551-6, M86551-7, M86551-8, M86551-9, M86551-10, M86551-11, M86551-13, M86551-16, M86551-19, M86551-22, M86551-25, M86551-28

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	261	306	117	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	261	306	117	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	115%	30-150%
877-09-8	Tetrachloro-m-xylene	116%	30-150%
2051-24-3	Decachlorobiphenyl	116%	30-150%
2051-24-3	Decachlorobiphenyl	118%	30-150%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86551

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19724-MS	EF70803.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
OP19724-MSD	EF70804.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253
M86551-1	EF70805.D	1	10/17/09	SL	10/16/09	OP19724	GEF3253

The QC reported here applies to the following samples:

Method: SW846 8082

M86551-1, M86551-2, M86551-3, M86551-4, M86551-5, M86551-6, M86551-7, M86551-8, M86551-9, M86551-10, M86551-11, M86551-13, M86551-16, M86551-19, M86551-22, M86551-25, M86551-28

CAS No.	Compound	M86551-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	300		352	117	369	121	5	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	300		367	122	369	121	1	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86551-1	Limits
877-09-8	Tetrachloro-m-xylene	112%	112%	108%	30-150%
877-09-8	Tetrachloro-m-xylene	115%	113%	109%	30-150%
2051-24-3	Decachlorobiphenyl	113%	109%	106%	30-150%
2051-24-3	Decachlorobiphenyl	116%	118%	111%	30-150%

# Semivolatile Surrogate Recovery Summary

Page 1 of 1

**Job Number:** M86551

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

**Method:** SW846 8082

**Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
M86551-1	EF70805.D	108.0	109.0	106.0	111.0
M86551-2	EF70806.D	104.0	109.0	81.0	93.0
M86551-3	EF70807.D	104.0	103.0	76.0	85.0
M86551-4	EF70808.D	100.0	101.0	79.0	83.0
M86551-5	EF70832A.D	136.0	126.0	130.0	126.0
M86551-5	EF70809.D	120.0	120.0	100.0	107.0
M86551-6	EF70810.D	97.0	95.0	93.0	89.0
M86551-7	EF70812.D	109.0	118.0	106.0	104.0
M86551-8	EF70832B.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86551-8	EF70813.D	118.0	118.0	101.0	185.0* <sup>d</sup>
M86551-9	EF70832C.D	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>	0.0* <sup>c</sup>
M86551-9	EF70814.D	128.0	132.0	110.0	114.0
M86551-10	EF70815.D	121.0	117.0	111.0	101.0
M86551-11	EF70816.D	115.0	110.0	110.0	100.0
M86551-13	EF70817.D	118.0	113.0	113.0	106.0
M86551-16	EF70818.D	122.0	117.0	115.0	109.0
M86551-19	EF70819.D	116.0	111.0	115.0	107.0
M86551-22	EF70820.D	125.0	118.0	111.0	114.0
M86551-25	EF70821.D	126.0	118.0	112.0	117.0
M86551-28	EF70823.D	126.0	121.0	98.0	101.0
OP19724-BS	EF70802.D	115.0	116.0	116.0	118.0
OP19724-MB	EF70801.D	103.0	105.0	103.0	108.0
OP19724-MS	EF70803.D	112.0	115.0	113.0	116.0
OP19724-MSD	EF70804.D	112.0	113.0	109.0	118.0

## Surrogate Compounds

## Recovery Limits

**S1** = Tetrachloro-m-xylene

30-150%

**S2** = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

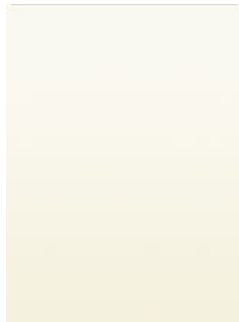
(b) Recovery from GC signal #2

(c) Outside control limits due to dilution.

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



11/04/09



## Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

0888808318, Thompson Road PCB Source Inv.

Accutest Job Number: JA31558

Sampling Date: 10/28/09

Report to:

Ensafe  
5724 Summer Trees Drive  
Memphis, TN 38134  
tcantwell@ensafe.com

ATTN: Tina Cantwell

Total number of pages in report: **20**



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

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

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Test results relate only to samples analyzed.

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Sample Summary

United Technology Corporation

Job No: JA31558

ENSTNN: Carrier, Syracuse, NY  
Project No: 0888808318, Thompson Road PCB Source Inv.

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JA31558-1	10/28/09	10:45 SG	10/29/09	SO	Sediment	CARSSS37
JA31558-2	10/28/09	10:50 SG	10/29/09	SO	Sediment	CARSSS38
JA31558-3	10/28/09	10:55 SG	10/29/09	SO	Sediment	CARSSS39
JA31558-4	10/28/09	11:00 SG	10/29/09	SO	Sediment	CARSSS40
JA31558-5	10/28/09	11:05 SG	10/29/09	SO	Sediment	CARSSS41
JA31558-6	10/28/09	11:10 SG	10/29/09	SO	Sediment	CARSSS42
JA31558-7	10/28/09	11:15 SG	10/29/09	SO	Sediment	CARSSS43
JA31558-8	10/28/09	11:20 SG	10/29/09	SO	Sediment	CARSSS44

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



## Sample Results

## Report of Analysis

## Report of Analysis

<b>Client Sample ID:</b>	CARSSS37		
<b>Lab Sample ID:</b>	JA31558-1	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	84.1
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86739.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
Run #2	EF86775.D	25	11/02/09	VDT	10/30/09	OP40685	GEF3860

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	12	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	6.9	ug/kg	
11097-69-1	Aroclor 1254	ND	35	8.8	ug/kg	
11096-82-5	Aroclor 1260	34400 <sup>a</sup>	870	340	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%	82%	33-141%
877-09-8	Tetrachloro-m-xylene	86%	84%	33-141%
2051-24-3	Decachlorobiphenyl	122%	150%	32-154%
2051-24-3	Decachlorobiphenyl	175% <sup>b</sup>	223% <sup>b</sup>	32-154%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference.

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

<b>Client Sample ID:</b>	CARSSS38		
<b>Lab Sample ID:</b>	JA31558-2	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	81.4
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86738.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
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	7.1	ug/kg	
11097-69-1	Aroclor 1254	ND	36	9.1	ug/kg	
11096-82-5	Aroclor 1260	907	36	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		33-141%
877-09-8	Tetrachloro-m-xylene	90%		33-141%
2051-24-3	Decachlorobiphenyl	98%		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

<b>Client Sample ID:</b>	CARSSS39		
<b>Lab Sample ID:</b>	JA31558-3	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	72.5
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86740.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
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	40	14	ug/kg	
11104-28-2	Aroclor 1221	ND	40	27	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	8.0	ug/kg	
11097-69-1	Aroclor 1254	ND	40	10	ug/kg	
11096-82-5	Aroclor 1260	691	40	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		33-141%
877-09-8	Tetrachloro-m-xylene	78%		33-141%
2051-24-3	Decachlorobiphenyl	85%		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

<b>Client Sample ID:</b>	CARSSS40		
<b>Lab Sample ID:</b>	JA31558-4	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	73.5
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86741.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
Run #2							

	Initial Weight	Final Volume
Run #1	17.4 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	13	ug/kg	
53469-21-9	Aroclor 1242	ND	39	14	ug/kg	
12672-29-6	Aroclor 1248	ND	39	7.8	ug/kg	
11097-69-1	Aroclor 1254	ND	39	9.9	ug/kg	
11096-82-5	Aroclor 1260	598	39	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	52%		33-141%
877-09-8	Tetrachloro-m-xylene	53%		33-141%
2051-24-3	Decachlorobiphenyl	61%		32-154%
2051-24-3	Decachlorobiphenyl	69%		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

<b>Client Sample ID:</b>	CARSSS41		
<b>Lab Sample ID:</b>	JA31558-5	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	77.2
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86742.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
Run #2							

	Initial Weight	Final Volume
Run #1	17.4 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	ND	37	9.4	ug/kg	
11096-82-5	Aroclor 1260	122	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%		33-141%
877-09-8	Tetrachloro-m-xylene	63%		33-141%
2051-24-3	Decachlorobiphenyl	80%		32-154%
2051-24-3	Decachlorobiphenyl	81%		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

<b>Client Sample ID:</b>	CARSSS42		
<b>Lab Sample ID:</b>	JA31558-6	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	77.6
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86743.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
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	38	13	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	ND	38	9.5	ug/kg	
11096-82-5	Aroclor 1260	ND	38	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	54%		33-141%
877-09-8	Tetrachloro-m-xylene	55%		33-141%
2051-24-3	Decachlorobiphenyl	60%		32-154%
2051-24-3	Decachlorobiphenyl	62%		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

<b>Client Sample ID:</b>	CARSSS43		
<b>Lab Sample ID:</b>	JA31558-7	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	75.7
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86744.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
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	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	7.6	ug/kg	
11097-69-1	Aroclor 1254	ND	38	9.7	ug/kg	
11096-82-5	Aroclor 1260	ND	38	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	54%		33-141%
877-09-8	Tetrachloro-m-xylene	54%		33-141%
2051-24-3	Decachlorobiphenyl	75%		32-154%
2051-24-3	Decachlorobiphenyl	80%		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

<b>Client Sample ID:</b>	CARSSS44		
<b>Lab Sample ID:</b>	JA31558-8	<b>Date Sampled:</b>	10/28/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/29/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	72.9
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF86747.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
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	40	14	ug/kg	
11104-28-2	Aroclor 1221	ND	40	27	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	8.0	ug/kg	
11097-69-1	Aroclor 1254	ND	40	10	ug/kg	
11096-82-5	Aroclor 1260	52.7	40	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	60%		33-141%
877-09-8	Tetrachloro-m-xylene	59%		33-141%
2051-24-3	Decachlorobiphenyl	75%		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



## Misc. Forms

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

## CHAIN OF CUSTODY

JA31558 PAGE 1 OF 1

SED

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

Client / Reporting Information			Project Information						Requested Analysis ( see TEST CODE sheet)												Matrix Codes
Company Name <b>ENSAFGE</b>			Project Name: <b>CARRIER THOMPSON RD PCB SOURCE WY.</b>																		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
Street Address <b>220 ATHENS WAY</b>			Street <b>NASHVILLE TN 37228</b>																		
City State Zip <b>NASHVILLE TN 37228</b>			Billing Information ( If different from Report to) Company Name <b>SVACUSE NY</b>																		
Project Contact <b>DAVID WYATT</b>			Project # <b>0588408318</b>																		
Phone # Fax # <b>615-255-9300</b>			Client Purchase Order #																		
Sampler(s) Name(s) <b>SHANE GOODNIGHT</b>			Project Manager <b>MAY HERLIN</b>																		
LAB USE ONLY			Attention:																		
Field ID / Point of Collection			Collection						Number of preserved bottles												
MECHNDI Vial #			Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Wash	MEQH	BENCORE						
1	CARSSS37	2-30M	10/28/09	1045	SG SED	1	/					/				X					
2	CARSSS38			1050		1	/					/				X					
3	CARSSS39			1055		1	/					/				X					
4	CARSSS40			1100		1	/					/				X					
5	CARSSS41			1105		1	/					/				X					
6	CARSSS42			1110		1	/					/				X					
7	CARSSS43			1115		1	/					/				X					
8	CARSSS44			1120		1	/					/				X					
Turnaround Time ( Business days)			Data Deliverable Information						Comments / Special Instructions												
<input type="checkbox"/> Std. 15 Business Days <input type="checkbox"/> Std. 10 Business Days ( by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input checked="" type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink			Approved By (Accutest PM): / Date: _____ _____ _____ _____ _____ _____						<input type="checkbox"/> Commercial "A" ( Level 1 ) <input type="checkbox"/> Commercial "B" ( Level 2 ) <input type="checkbox"/> FULLT1 ( Level 3+4 ) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C"  Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data						<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EBD Format <input type="checkbox"/> Other _____						
LEVEL 2 QA/QC			DNAB TRS 10/29/09																		
Sample Custody must be documented below each time samples change possession, including courier delivery.																					
Relinquished by Sampler <b>[Signature]</b> Date Time: <b>10/29/09</b>			Received By: <b>FED EX # 8702 8455 9308</b> Date Time: <b>10/29/09</b>			Relinquished By: <b>Fed</b> Date Time: <b>10/29/09</b>			Received By: <b>[Signature]</b> Date Time: <b>10/29/09</b>			Relinquished By: <b>[Signature]</b> Date Time: <b>10/29/09</b>			Received By: <b>[Signature]</b> Date Time: <b>10/29/09</b>						
Relinquished by Sampler: <b>[Signature]</b>			Received By: <b>3</b>			Relinquished By: <b>4</b>			Received By: <b>4</b>			Relinquished By: <b>4</b>			Received By: <b>4</b>						
Relinquished by: <b>A</b>			Received By: <b>5</b>			Custody Seal #			<input type="checkbox"/> Intact <input type="checkbox"/> Not intact			Preserved where applicable <input type="checkbox"/>			On Ice <input checked="" type="checkbox"/> Cooler Temp. <b>4.4°C</b>						

## JA31558: Chain of Custody

Page 1 of 2



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA31558

Client:

Immediate Client Services Action Required: No

Date / Time Received: 10/29/2009

Delivery Method:

Client Service Action Required at Login: No

Project:

No. Coolers: 1

Airbill #'s:

### Cooler Security

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Cooler Temperature

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun                        |                          |
| 3. Cooler media:             | Ice (bag)                           |                          |

### Quality Control Preservation

Y or N

N/A

- |                                 |                                     |                          |                                     |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Sample Integrity - Documentation

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Sample Integrity - Condition

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

### Sample Integrity - Instructions

Y or N N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Comments

Accutest Laboratories  
V: 732.329.0200

2235 US Highway 130  
F: 732.329.3499

Dayton, New Jersey  
www.accutest.com

JA31558: Chain of Custody

Page 2 of 2



## 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

Page 1 of 1

**Job Number:** JA31558

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40685-MB1	EF86728.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858

The QC reported here applies to the following samples:

Method: SW846 8082

JA31558-1, JA31558-2, JA31558-3, JA31558-4, JA31558-5, JA31558-6, JA31558-7, JA31558-8

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	87% 33-141%
877-09-8	Tetrachloro-m-xylene	89% 33-141%
2051-24-3	Decachlorobiphenyl	102% 32-154%
2051-24-3	Decachlorobiphenyl	106% 32-154%

## Blank Spike Summary

Page 1 of 1

**Job Number:** JA31558

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40685-BS1	EF86729.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858

The QC reported here applies to the following samples:

Method: SW846 8082

JA31558-1, JA31558-2, JA31558-3, JA31558-4, JA31558-5, JA31558-6, JA31558-7, JA31558-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	118	121	103	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	126	107	70-145

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	87%	33-141%
877-09-8	Tetrachloro-m-xylene	90%	33-141%
2051-24-3	Decachlorobiphenyl	98%	32-154%
2051-24-3	Decachlorobiphenyl	104%	32-154%



# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** JA31558

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40685-MS	EF86736.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
OP40685-MSD	EF86737.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858
JA31558-2	EF86738.D	1	10/30/09	VDT	10/30/09	OP40685	GEF3858

The QC reported here applies to the following samples:

Method: SW846 8082

JA31558-1, JA31558-2, JA31558-3, JA31558-4, JA31558-5, JA31558-6, JA31558-7, JA31558-8

CAS No.	Compound	JA31558-2		Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
		ug/kg	Q							
12674-11-2	Aroclor 1016	ND		144	151	105	149	104	1	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	ND			ND		ND		nc	70-130/24
11096-82-5	Aroclor 1260	907		144	1070	113	793	0* a	30	34-164/41

CAS No.	Surrogate Recoveries	MS	MSD	JA31558-2	Limits
877-09-8	Tetrachloro-m-xylene	83%	87%	88%	33-141%
877-09-8	Tetrachloro-m-xylene	86%	91%	90%	33-141%
2051-24-3	Decachlorobiphenyl	101%	100%	98%	32-154%
2051-24-3	Decachlorobiphenyl	111%	107%	105%	32-154%

(a) Outside control limits due to high level in sample relative to spike amount.

# Semivolatile Surrogate Recovery Summary

Page 1 of 1

**Job Number:** JA31558

**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 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
JA31558-1	EF86775.D	82.0	84.0	150.0	223.0* <sup>c</sup>
JA31558-1	EF86739.D	84.0	86.0	122.0	175.0* <sup>c</sup>
JA31558-2	EF86738.D	88.0	90.0	98.0	105.0
JA31558-3	EF86740.D	76.0	78.0	85.0	91.0
JA31558-4	EF86741.D	52.0	53.0	61.0	69.0
JA31558-5	EF86742.D	62.0	63.0	80.0	81.0
JA31558-6	EF86743.D	54.0	55.0	60.0	62.0
JA31558-7	EF86744.D	54.0	54.0	75.0	80.0
JA31558-8	EF86747.D	60.0	59.0	75.0	127.0
OP40685-BS1	EF86729.D	87.0	90.0	98.0	104.0
OP40685-MB1	EF86728.D	87.0	89.0	102.0	106.0
OP40685-MS	EF86736.D	83.0	86.0	101.0	111.0
OP40685-MSD	EF86737.D	87.0	91.0	100.0	107.0

## 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

(c) Outside control limits due to matrix interference.



12/09/09

## Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

0888808318

Accutest Job Number: JA33884

Sampling Date: 11/24/09

Report to:

Ensafe


tcantwell@ensafe.com

ATTN: Tina Cantwell

Total number of pages in report: **19**



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

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

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Test results relate only to samples analyzed.

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Sample Summary

United Technology Corporation

Job No: JA33884

ENSTNN: Carrier, Syracuse, NY  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JA33884-1	11/24/09	11:30 MS	11/25/09	SO	Soil	CARSSS45-01
JA33884-2	11/24/09	11:35 MS	11/25/09	SO	Soil	CARSSS46-01
JA33884-3	11/24/09	11:25 MS	11/25/09	SO	Soil	CARSSS47-01
JA33884-4	11/24/09	11:10 MS	11/25/09	SO	Soil	CARSSS48-01
JA33884-5	11/24/09	11:05 MS	11/25/09	SO	Soil	CARSSS49-01
JA33884-7	11/24/09	11:15 MS	11/25/09	SO	Soil	CARSSS51-01
JA33884-8	11/24/09	11:00 MS	11/25/09	SO	Soil	CARSSS52-01
JA33884-9	11/24/09	14:30 MS	11/25/09	SO	Soil	CARSSS53-01
JA33884-10	11/24/09	14:25 MS	11/25/09	SO	Soil	CARSSS54-01

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



## Sample Results

## Report of Analysis

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	CARSSS45-01	
<b>Lab Sample ID:</b>	JA33884-1	<b>Date Sampled:</b> 11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 81.9
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87623.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882
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	ND	35	8.9	ug/kg	
11096-82-5	Aroclor 1260	1530	35	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		33-141%
877-09-8	Tetrachloro-m-xylene	87%		33-141%
2051-24-3	Decachlorobiphenyl	100%		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

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	CARSSS46-01	
<b>Lab Sample ID:</b>	JA33884-2	<b>Date Sampled:</b> 11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 80.3
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87624.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882
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	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	ND	36	9.1	ug/kg	
11096-82-5	Aroclor 1260	608	36	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	36%		33-141%
877-09-8	Tetrachloro-m-xylene	35%		33-141%
2051-24-3	Decachlorobiphenyl	45%		32-154%
2051-24-3	Decachlorobiphenyl	48%		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

Page 1 of 1

<b>Client Sample ID:</b>	CARSSS47-01		
<b>Lab Sample ID:</b>	JA33884-3	<b>Date Sampled:</b>	11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	82.5
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87625.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882
Run #2	EF87632.D	4	12/02/09	OPM	11/28/09	OP41173	GEF3882

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	12	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	ND	35	8.8	ug/kg	
11096-82-5	Aroclor 1260	2760 <sup>a</sup>	140	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%	68%	33-141%
877-09-8	Tetrachloro-m-xylene	80%	65%	33-141%
2051-24-3	Decachlorobiphenyl	95%	105%	32-154%
2051-24-3	Decachlorobiphenyl	98%	105%	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

Page 1 of 1

<b>Client Sample ID:</b>	CARSSS48-01		
<b>Lab Sample ID:</b>	JA33884-4	<b>Date Sampled:</b>	11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	81.7
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87626.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882
Run #2	EF87633.D	20	12/02/09	OPM	11/28/09	OP41173	GEF3882

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

## 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	ND	35	8.9	ug/kg	
11096-82-5	Aroclor 1260	13600 <sup>a</sup>	710	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%	70%	33-141%
877-09-8	Tetrachloro-m-xylene	80%	68%	33-141%
2051-24-3	Decachlorobiphenyl	94%	119%	32-154%
2051-24-3	Decachlorobiphenyl	116%	134%	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

Page 1 of 1

<b>Client Sample ID:</b>	CARSSS49-01		
<b>Lab Sample ID:</b>	JA33884-5	<b>Date Sampled:</b>	11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	81.4
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87627.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882
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	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	ND	36	9.1	ug/kg	
11096-82-5	Aroclor 1260	632	36	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	100%		33-141%
2051-24-3	Decachlorobiphenyl	104%		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

Page 1 of 1

<b>Client Sample ID:</b>	CARSSS53-01	
<b>Lab Sample ID:</b>	JA33884-9	<b>Date Sampled:</b> 11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 94.7
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87628.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882
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	31	11	ug/kg	
11104-28-2	Aroclor 1221	ND	31	20	ug/kg	
11141-16-5	Aroclor 1232	ND	31	9.8	ug/kg	
53469-21-9	Aroclor 1242	ND	31	11	ug/kg	
12672-29-6	Aroclor 1248	ND	31	6.1	ug/kg	
11097-69-1	Aroclor 1254	ND	31	7.7	ug/kg	
11096-82-5	Aroclor 1260	ND	31	12	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	90%		33-141%
2051-24-3	Decachlorobiphenyl	104%		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

Page 1 of 1

<b>Client Sample ID:</b>	CARSSS54-01	
<b>Lab Sample ID:</b>	JA33884-10	<b>Date Sampled:</b> 11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 79.3
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87629.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882
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	24	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	7.3	ug/kg	
11097-69-1	Aroclor 1254	ND	37	9.2	ug/kg	
11096-82-5	Aroclor 1260	517	37	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	90%		33-141%
2051-24-3	Decachlorobiphenyl	100%		32-154%
2051-24-3	Decachlorobiphenyl	109%		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



## Misc. Forms

### Custody Documents and Other Forms

---

Includes the following where applicable:

- Chain of Custody

70

2235 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3499/3480  
[www.acutest.com](http://www.acutest.com)

Client / Reporting Information			Project Information			Requested Analysis ( see TEST CODE sheet)												Matrix Codes																											
<b>Company Name</b> ENSAFE <b>Street Address</b> 220 Adams Way <b>City, State, Zip</b> Nashville TN 37228 <b>Project Contact</b> DAVID WYATT <b>Phone #</b> 615-255-9300 <b>Sampler(s) Name(s)</b> MIKE SPINA			<b>Project Name:</b> UTC / CARRIER TRANSFORMER YARD <b>Street</b> <b>Billing Information ( If different from Report to )</b> <b>Company Name</b> <b>Street Address</b> <b>City</b> <b>State</b> <b>Zip</b> <b>Client Purchase Order #</b> <b>Project Manager</b> MAY HEFLIN			<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p><b>Project #</b> 0888808318</p> <p><b>Attention:</b></p> </div> <div style="width: 55%;"> <p><b>Analysis Requested:</b> (see TEST CODE sheet)</p> <p><b>Matrix Codes:</b></p> <ul style="list-style-type: none"> <li>DW - Drinking Water</li> <li>GW - Ground Water</li> <li>WW - Water</li> <li>SW - Surface Water</li> <li>SO - Soil</li> <li>SL - Sludge</li> <li>SED - Sediment</li> <li>OI - Oil</li> <li>LIQ - Other Liquid</li> <li>AIR - Air</li> <li>SOL - Other Solid</li> <li>WP - Wipe</li> <li>FB - Field Blank</li> <li>EB - Equipment Blank</li> <li>RB - Rinse Blank</li> <li>TB - Trip Blank</li> </ul> </div> </div>																																							
Account Sample #			Field ID / Point of Collection			Collection			Number of preserved Bottles												LAB USE ONLY																								
			TAT																																										
			MECH/DI Val #			Date			Time			Sampled by			Matrix			# of bottles			HCl			MESH			HNO3			H2SO4			HNO4			DI Water			MESH			MENDRE			
1			CARSSS45-01-1			2-3-94			11-24-09			1130			MS			SEP			1																					X			
2			CARSSS46-01-2									1135									1																					X			
3			CARSSS47-01-3									1125									1																					X			
4			CARSSS48-01-4									1110									1																					X			
5			CARSSS49-01-5									1105									1																					X			
6			CARSSS50-01 *HOLD*									1120									1																					X			
7			CARSSS51-01 *HOLD*									1115									1																					X			
8			CARSSS52-01 *HOLD*									1100									1																					X			
9			CARSSS53-01-9									1436									1																								X
10			CARSSS54-01-10			V			V			1425			V			V			1																								X
Turnaround Time ( Business days )																																													
<input type="checkbox"/> Std. 16 Business Days <input type="checkbox"/> Std. 10 Business Days ( by Contract only ) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input checked="" type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink.			<b>Approved By (Accutest PM): / Date:</b>     			<input type="checkbox"/> Commercial "A" ( Level 1 ) <input type="checkbox"/> Commercial "B" ( Level 2 ) <input type="checkbox"/> FULLT ( Level 3+4 ) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C"  Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data			<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____			<b>Comments / Special Instructions</b> LEVEL 2 QA/QC																																	
<b>Relinquished by:</b> [Signature] <b>Relinquished by Sampler:</b> <b>Relinquished by:</b>			<b>Date Time:</b> 11-04-09 <b>Date Time:</b>			<b>Received By:</b> 1 [Signature] <b>Received By:</b> 3 <b>Received By:</b> 5			<b>Date Time:</b> 11-04-09 <b>Date Time:</b>			<b>Relinquished By:</b> 2 <b>Relinquished By:</b> 4 <b>Custody Seal #</b>			<b>Date Time:</b> 930 <b>Date Time:</b>			<b>Received By:</b> 2 <b>Received By:</b> 4			<b>On Ice</b> <input type="checkbox"/> <b>Cooler Temp.</b> <input type="checkbox"/>																								

2.6 c

## JA33884: Chain of Custody

Page 1 of 2



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA33884

Client:

Immediate Client Services Action Required: No

Date / Time Received: 11/25/2009

Delivery Method:

Client Service Action Required at Login: No

Project:

No. Coolers: 1

Airbill #'s:

### Cooler Security

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Cooler Temperature

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun                        |                          |
| 3. Cooler media:             | Ice (bag)                           |                          |

### Quality Control Preservation

Y or N

N/A

- |                                 |                                     |                          |                                     |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Sample Integrity - Documentation

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Sample Integrity - Condition

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

### Sample Integrity - Instructions

Y or N N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Comments

Accutest Laboratories  
V: 732.329.0200

2235 US Highway 130  
F: 732.329.3499

Dayton, New Jersey  
www.accutest.com

JA33884: Chain of Custody

Page 2 of 2





## 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

Page 1 of 1

**Job Number:** JA33884

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41173-MB2	EF87621.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882

The QC reported here applies to the following samples:

Method: SW846 8082

JA33884-1, JA33884-2, JA33884-3, JA33884-4, JA33884-5, JA33884-9, JA33884-10

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	95% 33-141%
877-09-8	Tetrachloro-m-xylene	95% 33-141%
2051-24-3	Decachlorobiphenyl	115% 32-154%
2051-24-3	Decachlorobiphenyl	119% 32-154%

## Blank Spike Summary

Page 1 of 1

**Job Number:** JA33884

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41173-BS2	EF87622.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882

The QC reported here applies to the following samples:

Method: SW846 8082

JA33884-1, JA33884-2, JA33884-3, JA33884-4, JA33884-5, JA33884-9, JA33884-10

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	144	122	70-145

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	95%	33-141%
877-09-8	Tetrachloro-m-xylene	98%	33-141%
2051-24-3	Decachlorobiphenyl	115%	32-154%
2051-24-3	Decachlorobiphenyl	120%	32-154%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** JA33884

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41173-MS	AB85395.D	1	12/04/09	JSE	11/26/09	OP41173	GAB5412
OP41173-MSD	AB85408.D	1	12/04/09	JSE	11/26/09	OP41173	GAB5413
JA33601-5 <sup>a</sup>	AB85402.D	1	12/04/09	JSE	11/26/09	OP41173	GAB5413
JA33601-5 <sup>a</sup>	AB85407.D	5	12/04/09	JSE	11/26/09	OP41173	GAB5413

The QC reported here applies to the following samples:

Method: SW846 8082

JA33884-1, JA33884-2, JA33884-3, JA33884-4, JA33884-5, JA33884-9, JA33884-10

CAS No.	Compound	JA33601-5 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		174	373	215* <sup>b</sup>	506	291* <sup>b</sup>	30	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	703 <sup>c</sup>			541		668		21	70-130/30
12672-29-6	Aroclor 1248	ND			ND		ND		nc	70-130/30
11097-69-1	Aroclor 1254	166 <sup>c</sup>			144		209		37* <sup>d</sup>	70-130/24
11096-82-5	Aroclor 1260	43.6		174	168	72	217	100	25	34-164/41

CAS No.	Surrogate Recoveries	MS	MSD	JA33601-5	JA33601-5	Limits
877-09-8	Tetrachloro-m-xylene	80%	82%	75%	111%	33-141%
877-09-8	Tetrachloro-m-xylene	79%	118%	104%	107%	33-141%
2051-24-3	Decachlorobiphenyl	59%	71%	67%	90%	32-154%
2051-24-3	Decachlorobiphenyl	64%	73%	73%	94%	32-154%

(a) Had TBA cleanup.

(b) Outside control limits due to presence of other Aroclor pattern.

(c) Result is from Run #2.

(d) Outside control limits due to matrix interference.

# Semivolatile Surrogate Recovery Summary

Page 1 of 1

**Job Number:** JA33884

**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 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
JA33884-1	EF87623.D	87.0	87.0	100.0	99.0
JA33884-2	EF87624.D	36.0	35.0	45.0	48.0
JA33884-3	EF87632.D	68.0	65.0	105.0	105.0
JA33884-3	EF87625.D	80.0	80.0	95.0	98.0
JA33884-4	EF87633.D	70.0	68.0	119.0	134.0
JA33884-4	EF87626.D	80.0	80.0	94.0	116.0
JA33884-5	EF87627.D	100.0	100.0	104.0	111.0
JA33884-9	EF87628.D	92.0	90.0	104.0	108.0
JA33884-10	EF87629.D	91.0	90.0	100.0	109.0
OP41173-BS2	EF87622.D	95.0	98.0	115.0	120.0
OP41173-MB2	EF87621.D	95.0	95.0	115.0	119.0
OP41173-MS	AB85395.D	80.0	79.0	59.0	64.0
OP41173-MSD	AB85408.D	82.0	118.0	71.0	73.0

## 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



12/23/09

## Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

0888808318

Accutest Job Number: JA33884R

Sampling Date: 11/24/09

Report to:


Ensafe

ATTN: Tina Cantwell

Total number of pages in report: **27**



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

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

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Test results relate only to samples analyzed.

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Sample Summary

United Technology Corporation

Job No: JA33884R

ENSTNN: Carrier, Syracuse, NY  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JA33884-6R	11/24/09	11:20 MS	11/25/09	SO	Soil	CARSSS50-01
JA33884-6RA	11/24/09	11:20 MS	11/25/09	SO	Soil	CARSSS50-01
JA33884-7R	11/24/09	11:15 MS	11/25/09	SO	Soil	CARSSS51-01
JA33884-8R	11/24/09	11:00 MS	11/25/09	SO	Soil	CARSSS52-01

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





## Sample Results

## Report of Analysis

## Report of Analysis

<b>Client Sample ID:</b>	CARSSS50-01		
<b>Lab Sample ID:</b>	JA33884-6R	<b>Date Sampled:</b>	11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	82.1
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	3G42457.D	1	12/17/09	TDR	12/16/09	OP41448	G3G1579
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	ND	35	8.9	ug/kg	
11096-82-5	Aroclor 1260	307	35	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		33-141%
877-09-8	Tetrachloro-m-xylene	82%		33-141%
2051-24-3	Decachlorobiphenyl	71%		32-154%
2051-24-3	Decachlorobiphenyl	89%		32-154%

(a) Sample extracted outside the holding time per client's request.

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

<b>Client Sample ID:</b>	CARSSS50-01	<b>Date Sampled:</b>	11/24/09
<b>Lab Sample ID:</b>	JA33884-6RA	<b>Date Received:</b>	11/25/09
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	82.1
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Total Organic Content	15.8	0.010	%	1	12/21/09	RP	ASTM D2974

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	CARSSS51-01	
<b>Lab Sample ID:</b>	JA33884-7R	<b>Date Sampled:</b> 11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b> 84.6
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87871.D	1	12/09/09	VDT	11/28/09	OP41173	GEF3887
Run #2	EF87874.D	5	12/09/09	VDT	11/28/09	OP41173	GEF3887

	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	35	12	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	12	ug/kg	
12672-29-6	Aroclor 1248	ND	35	6.9	ug/kg	
11097-69-1	Aroclor 1254	ND	35	8.7	ug/kg	
11096-82-5	Aroclor 1260	7290 <sup>a</sup>	170	67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%	75%	33-141%
877-09-8	Tetrachloro-m-xylene	102%	90%	33-141%
2051-24-3	Decachlorobiphenyl	102%	124%	32-154%
2051-24-3	Decachlorobiphenyl	299% <sup>b</sup>	319% <sup>b</sup>	32-154%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference.

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

<b>Client Sample ID:</b>	CARSSS52-01		
<b>Lab Sample ID:</b>	JA33884-8R	<b>Date Sampled:</b>	11/24/09
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/25/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	83.5
<b>Project:</b>	ENSTNN: Carrier, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF87875.D	1	12/09/09	VDT	11/28/09	OP41173	GEF3887
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	35	12	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	12	ug/kg	
12672-29-6	Aroclor 1248	ND	35	6.9	ug/kg	
11097-69-1	Aroclor 1254	ND	35	8.7	ug/kg	
11096-82-5	Aroclor 1260	459	35	13	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	86%		33-141%
2051-24-3	Decachlorobiphenyl	87%		32-154%
2051-24-3	Decachlorobiphenyl	95%		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



## Misc. Forms

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

50

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 # <b>JA 33884</b>
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
LAB USE ONLY	

Client / Reporting Information		Project Information	
Company Name: <b>ENSAPE</b>		Project Name: <b>UTC / CARRIER TRANSFORMER YARD</b>	
Street Address: <b>220 AHEENS WAY</b>		Street:	
City: <b>MEMPHIS TN 37228</b>		City: <b>SYRACUSE NY</b>	
Project Contact: <b>DAVID WYATT</b>		Project # <b>0888808318</b>	
Phone # <b>615-255-9300</b>		Client Purchase Order #	
Sampler(s) Name(s): <b>MIKE SPINA</b>		Project Manager: <b>MAY HEFLIN</b>	
Field ID / Point of Collection		Collection	
Accutest Sample #	Field ID / Point of Collection	MEQ/OL Vial #	Date
1	CARSS545-01-1	2-3694	11-24-09
2	CARSS546-01-2		1135
3	CARSS547-01-3		1125
4	CARSS548-01-4		1110
5	CARSS549-01-5		1105
6	CARSS550-01 *HOLD*		1120
7	CARSS551-01 *HOLD*		1115
8	CARSS552-01 *HOLD*		1100
9	CARSS553-01-9		1436
10	CARSS554-01-10		1425
Turnaround Time (Business days)		Data Deliverable Information	
<input type="checkbox"/> Std. 15 Business Days <input type="checkbox"/> Std. 10 Business Days (by Contract only) <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input checked="" type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLITY (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data	
Approved By (Accutest PM): / Date:		Comments / Special Instructions	
		<b>LEVEL 2 QA/QC</b>	
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler:	Date Time:	Received By:	Date Time:
1 <b>PAZ</b>	11-24-09	1 <b>FEDEX</b>	11-25-09
Relinquished by Sampler:	Date Time:	Received By:	Date Time:
3		3	
Relinquished by:	Date Time:	Received By:	Date Time:
5		5	
Custody Seal #		<input type="checkbox"/> Intact <input type="checkbox"/> Not Intact	
		<input type="checkbox"/> Preserved where applicable <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp.	

JA33884R: Chain of Custody

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## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA33884

Client:

Immediate Client Services Action Required: No

Date / Time Received: 11/25/2009

Delivery Method:

Client Service Action Required at Login: No

Project:

No. Coolers: 1

Airbill #'s:

### Cooler Security

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Cooler Temperature

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun                        |                          |
| 3. Cooler media:             | Ice (bag)                           |                          |

### Quality Control Preservation

Y or N N/A

- |                                 |                                     |                          |                                     |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input type="checkbox"/> |                                     |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

### Sample Integrity - Documentation

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Sample Integrity - Condition

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

### Sample Integrity - Instructions

Y or N N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Comments

Accutest Laboratories  
V:732.329.0200

2235 US Highway 130  
F: 732.329.3499

Dayton, New Jersey  
www.accutest.com

JA33884R: Chain of Custody

Page 2 of 6



**Job Change Order:** JA33884<sup>R</sup>\_12/8/2009

<b>Requested Date:</b>	12/8/2009	<b>Received Date:</b>	11/25/2009
<b>Account Name:</b>	United Technology Corporation	<b>Due Date:</b>	12/2/2009
<b>Project Description:</b>	ENSTNN: Carrier, Syracuse, NY	<b>Deliverable:</b>	COMMB
<b>CSR:</b>	MM	<b>TAT (Days):</b>	2
<b>Sample #:</b>	JA33884-7, 8	<b>Change:</b>	Please relog (R job) for P8082PCB. 2 day TAT requested. Holdtime for extraction is today, 12/8.

**Above Changes Per:** May Heflin

**Date:** 12/8/2009

**JA33884R: Chain of Custody**  
**Page 3 of 6**

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

**Job Change Order:** JA33884R\_12/9/2009

<b>Requested Date:</b>	12/9/2009	<b>Received Date:</b>	11/25/2009
<b>Account Name:</b>	United Technology Corporation	<b>Due Date:</b>	12/10/2009
<b>Project Description:</b>	ENSTNN: Carrier, Syracuse, NY	<b>Deliverable:</b>	COMMB
<b>CSR:</b>	MM	<b>TAT (Days):</b>	2
<b>Sample #:</b> JA33884R-7,8	<b>Change:</b>	Please change the "J" in the sample ID to "S" (4th character).	

**Above Changes Per:** Tina Cantwell**Date:** 12/9/2009**JA33884R: Chain of Custody****Page 4 of 6**

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

**Job Change Order:** JA33884\_12/15/2009

<b>Requested Date:</b>	12/15/2009	<b>Received Date:</b>	11/25/2009
<b>Account Name:</b>	United Technology Corporation	<b>Due Date:</b>	12/2/2009
<b>Project Description:</b>	ENSTNN: Carrier, Syracuse, NY	<b>Deliverable:</b>	COMMB
<b>CSR:</b>	DK	<b>TAT (Days):</b>	2

**Sample #:**  
JA33884-6

**Change:** Take off HOLD and log in for P8082PCB. OK to run out of HOLD.

CARSSS50-01

**Above Changes**

May Heflin

**Date:** 12/15/2009

**JA33884R: Chain of Custody**

**Page 5 of 6**

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

**Job Change Order:** JA33884\_12/16/2009

<b>Requested Date:</b>	12/16/2009	<b>Received Date:</b>	11/25/2009
<b>Account Name:</b>	United Technology Corporation	<b>Due Date:</b>	12/2/2009
<b>Project Description:</b>	ENSTNN: Carrier, Syracuse, NY	<b>Deliverable:</b>	COMMB
<b>CSR:</b>	MM	<b>TAT (Days):</b>	14

**Sample #:** JA33884-6  
**Change:** Please relog for TOCNT analysis.

CARSSS50-01

**Above Changes Per:** May Heflin

**Date:** 12/16/2009

**JA33884R: Chain of Custody**

**Page 6 of 6**

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

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## 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

Page 1 of 1

**Job Number:** JA33884R

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41173-MB2	EF87621.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882

The QC reported here applies to the following samples:

Method: SW846 8082

JA33884-7R, JA33884-8R

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	95% 33-141%
877-09-8	Tetrachloro-m-xylene	95% 33-141%
2051-24-3	Decachlorobiphenyl	115% 32-154%
2051-24-3	Decachlorobiphenyl	119% 32-154%

## Method Blank Summary

Page 1 of 1

**Job Number:** JA33884R

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41448-MB1	3G42452.D	1	12/17/09	TDR	12/16/09	OP41448	G3G1579

The QC reported here applies to the following samples:

Method: SW846 8082

JA33884-6R

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	88% 33-141%
877-09-8	Tetrachloro-m-xylene	84% 33-141%
2051-24-3	Decachlorobiphenyl	82% 32-154%
2051-24-3	Decachlorobiphenyl	77% 32-154%

## Method Blank Summary

Page 1 of 1

**Job Number:** JA33884R

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41173-MB1	AB85387.D	1	12/03/09	JSE	11/26/09	OP41173	GAB5412

The QC reported here applies to the following samples:

Method: SW846 8082

OP41173-MS, OP41173-MSD

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	104% 33-141%
877-09-8	Tetrachloro-m-xylene	116% 33-141%
2051-24-3	Decachlorobiphenyl	118% 32-154%
2051-24-3	Decachlorobiphenyl	112% 32-154%



Blank Spike Summary

Job Number: JA33884R  
Account: UTC United Technology Corporation  
Project: ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41173-BS2	EF87622.D	1	12/02/09	OPM	11/28/09	OP41173	GEF3882

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

JA33884-7R, JA33884-8R

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	144	122	70-145

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	95%	33-141%
877-09-8	Tetrachloro-m-xylene	98%	33-141%
2051-24-3	Decachlorobiphenyl	115%	32-154%
2051-24-3	Decachlorobiphenyl	120%	32-154%

Blank Spike Summary

Job Number: JA33884R  
Account: UTC United Technology Corporation  
Project: ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41448-BS1	3G42453.D	1	12/17/09	TDR	12/16/09	OP41448	G3G1579

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

JA33884-6R

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	118	119	101	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	111	94	70-145

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	90%	33-141%
877-09-8	Tetrachloro-m-xylene	88%	33-141%
2051-24-3	Decachlorobiphenyl	83%	32-154%
2051-24-3	Decachlorobiphenyl	78%	32-154%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** JA33884R

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41173-MS	AB85395.D	1	12/04/09	JSE	11/26/09	OP41173	GAB5412
OP41173-MSD	AB85408.D	1	12/04/09	JSE	11/26/09	OP41173	GAB5413
JA33601-5 <sup>a</sup>	AB85402.D	1	12/04/09	JSE	11/26/09	OP41173	GAB5413
JA33601-5 <sup>a</sup>	AB85407.D	5	12/04/09	JSE	11/26/09	OP41173	GAB5413

The QC reported here applies to the following samples:

Method: SW846 8082

JA33884-7R, JA33884-8R

CAS No.	Compound	JA33601-5 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		174	373	215* <sup>b</sup>	506	291* <sup>b</sup>	30	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	703 <sup>c</sup>			541		668		21	70-130/30
12672-29-6	Aroclor 1248	ND			ND		ND		nc	70-130/30
11097-69-1	Aroclor 1254	166 <sup>c</sup>			144		209		37* <sup>d</sup>	70-130/24
11096-82-5	Aroclor 1260	43.6		174	168	72	217	100	25	34-164/41

CAS No.	Surrogate Recoveries	MS	MSD	JA33601-5	JA33601-5	Limits
877-09-8	Tetrachloro-m-xylene	80%	82%	75%	111%	33-141%
877-09-8	Tetrachloro-m-xylene	79%	118%	104%	107%	33-141%
2051-24-3	Decachlorobiphenyl	59%	71%	67%	90%	32-154%
2051-24-3	Decachlorobiphenyl	64%	73%	73%	94%	32-154%

(a) Had TBA cleanup.

(b) Outside control limits due to presence of other Aroclor pattern.

(c) Result is from Run #2.

(d) Outside control limits due to matrix interference.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** JA33884R

**Account:** UTC United Technology Corporation

**Project:** ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP41448-MS	3G42454.D	1	12/17/09	TDR	12/16/09	OP41448	G3G1579
OP41448-MSD	3G42455.D	1	12/17/09	TDR	12/16/09	OP41448	G3G1579
JA35155-1	3G42456.D	1	12/17/09	TDR	12/16/09	OP41448	G3G1579

The QC reported here applies to the following samples:

Method: SW846 8082

JA33884-6R

CAS No.	Compound	JA35155-1	Spike	MS	MS	MSD	MSD	RPD	Limits
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg		%
12674-11-2	Aroclor 1016	ND	151	124	82	114	75	8	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	ND		ND		ND		nc	70-130/24
11096-82-5	Aroclor 1260	ND	151	128	85	124	82	3	34-164/41

CAS No.	Surrogate Recoveries	MS	MSD	JA35155-1	Limits
877-09-8	Tetrachloro-m-xylene	70%	75%	78%	33-141%
877-09-8	Tetrachloro-m-xylene	76%	79%	87%	33-141%
2051-24-3	Decachlorobiphenyl	69%	73%	69%	32-154%
2051-24-3	Decachlorobiphenyl	66%	68%	66%	32-154%

# Semivolatile Surrogate Recovery Summary

Page 1 of 1

**Job Number:** JA33884R

**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 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
JA33884-6R	3G42457.D	87.0	82.0	71.0	89.0
JA33884-7R	EF87874.D	75.0	90.0	124.0	319.0* <sup>c</sup>
JA33884-7R	EF87871.D	86.0	102.0	102.0	299.0* <sup>c</sup>
JA33884-8R	EF87875.D	84.0	86.0	87.0	95.0
OP41173-BS2	EF87622.D	95.0	98.0	115.0	120.0
OP41173-MB2	EF87621.D	95.0	95.0	115.0	119.0
OP41173-MS	AB85395.D	80.0	79.0	59.0	64.0
OP41173-MSD	AB85408.D	82.0	118.0	71.0	73.0
OP41448-BS1	3G42453.D	90.0	88.0	83.0	78.0
OP41448-MB1	3G42452.D	88.0	84.0	82.0	77.0
OP41448-MS	3G42454.D	70.0	76.0	69.0	66.0
OP41448-MSD	3G42455.D	75.0	79.0	73.0	68.0
OP41173-MB1	AB85387.D	104.0	116.0	118.0	112.0

## 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

(c) Outside control limits due to matrix interference.



## 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: JA33884R  
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 Content	GN33405	0.010	<0.010	%				

Associated Samples:  
Batch GN33405: JA33884-6RA  
(\*) Outside of QC limits

5.1  
5

DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: JA33884R  
Account: UTC - United Technology Corporation  
Project: ENSTNN: Carrier, Syracuse, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Total Organic Content	GN33405	JA33884-6RA	%	15.8	16.7	5.5	0-20%

Associated Samples:  
Batch GN33405: JA33884-6RA  
(\*) Outside of QC limits

5.2  
5





10/27/09

## Technical Report for

ENSAFE

Carrier-Thompson-PCB Investigation

0888808318

Accutest Job Number: M86550

Sampling Dates: 10/13/09 - 10/15/09

Report to:

ENSAFE

mheflin@ensafe.com

ATTN: May Heflin

Total number of pages in report: 26



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

Reza Fand  
Lab Director

Client Service contact: Diane Komar 508-481-6200

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

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Test results relate only to samples analyzed.

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Sample Summary

ENSAFE

Job No: M86550

Carrier-Thompson-PCB Investigation  
Project No: 0888808318

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M86550-1	10/13/09	11:58 JK	10/16/09	SO	Sediment	CARMMH0829
M86550-2	10/13/09	11:20 JK	10/16/09	SO	Sediment	CARMMH0899
M86550-3	10/15/09	15:00 JK	10/16/09	SO	Sediment	CARMMH1369
M86550-4	10/15/09	15:32 JK	10/16/09	SO	Sediment	CARMMH1359
M86550-5	10/15/09	15:43 JK	10/16/09	SO	Sediment	CARMMH1349
M86550-6	10/15/09	16:18 JK	10/16/09	SO	Sediment	CARMMH1319
M86550-7	10/15/09	16:35 JK	10/16/09	SO	Sediment	CARMMH1309
M86550-8	10/15/09	16:54 JK	10/16/09	SO	Sediment	CARMMH1229
M86550-9	10/15/09	17:06 JK	10/16/09	SO	Sediment	CARMMH1299
M86550-10	10/15/09	17:28 JK	10/16/09	SO	Sediment	CARMMH1269
M86550-11	10/15/09	18:11 JK	10/16/09	AQ	Field Blank Water	CARF101509

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



## Sample Results

## Report of Analysis

## Report of Analysis

<b>Client Sample ID:</b>	CARMMH0829		
<b>Lab Sample ID:</b>	M86550-1	<b>Date Sampled:</b>	10/13/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	70.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70907.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2	EF70930.D	2	10/21/09	SL	10/19/09	OP19738	GEF3256

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	140	35	ug/kg	
11104-28-2	Aroclor 1221	ND	140	9.1	ug/kg	
11141-16-5	Aroclor 1232	ND	140	20	ug/kg	
53469-21-9	Aroclor 1242	ND	140	12	ug/kg	
12672-29-6	Aroclor 1248	ND	140	37	ug/kg	
11097-69-1	Aroclor 1254	ND	140	16	ug/kg	
11096-82-5	Aroclor 1260	1700 <sup>a</sup>	280	54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%	108%	30-150%
877-09-8	Tetrachloro-m-xylene	104%	112%	30-150%
2051-24-3	Decachlorobiphenyl	99%	118%	30-150%
2051-24-3	Decachlorobiphenyl	110%	111%	30-150%

(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

<b>Client Sample ID:</b>	CARMMH0899	<b>Date Sampled:</b>	10/13/09
<b>Lab Sample ID:</b>	M86550-2	<b>Date Received:</b>	10/16/09
<b>Matrix:</b>	SO - Sediment	<b>Percent Solids:</b>	79.9
<b>Method:</b>	SW846 8082 SW846 3545		
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70908.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2	EF70931.D	500	10/22/09	SL	10/19/09	OP19738	GEF3256

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	31	ug/kg	
11104-28-2	Aroclor 1221	ND	120	8.0	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	79300 <sup>a</sup>	61000	12000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	110%	0% <sup>b</sup>	30-150%
877-09-8	Tetrachloro-m-xylene	111%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	106%	0% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	155% <sup>c</sup>	0% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

ND = Not detected 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

<b>Client Sample ID:</b>	CARMMH1369		
<b>Lab Sample ID:</b>	M86550-3	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	72.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70909.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	140	34	ug/kg	
11104-28-2	Aroclor 1221	ND	140	8.8	ug/kg	
11141-16-5	Aroclor 1232	ND	140	19	ug/kg	
53469-21-9	Aroclor 1242	ND	140	12	ug/kg	
12672-29-6	Aroclor 1248	ND	140	36	ug/kg	
11097-69-1	Aroclor 1254	ND	140	16	ug/kg	
11096-82-5	Aroclor 1260	756	140	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		30-150%
877-09-8	Tetrachloro-m-xylene	100%		30-150%
2051-24-3	Decachlorobiphenyl	89%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%

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

<b>Client Sample ID:</b>	CARMMH1359		
<b>Lab Sample ID:</b>	M86550-4	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	77.0
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70910.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	32	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.3	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248	ND	130	34	ug/kg	
11097-69-1	Aroclor 1254	ND	130	15	ug/kg	
11096-82-5	Aroclor 1260	167	130	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		30-150%
877-09-8	Tetrachloro-m-xylene	113%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%
2051-24-3	Decachlorobiphenyl	100%		30-150%

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

<b>Client Sample ID:</b>	CARMMH1349		
<b>Lab Sample ID:</b>	M86550-5	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	55.2
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70911.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2	EF70932.D	5	10/22/09	SL	10/19/09	OP19738	GEF3256

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	180	44	ug/kg	
11104-28-2	Aroclor 1221	ND	180	11	ug/kg	
11141-16-5	Aroclor 1232	ND	180	25	ug/kg	
53469-21-9	Aroclor 1242	ND	180	15	ug/kg	
12672-29-6	Aroclor 1248	ND	180	47	ug/kg	
11097-69-1	Aroclor 1254	ND	180	20	ug/kg	
11096-82-5	Aroclor 1260	3160 <sup>a</sup>	880	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%	119%	30-150%
877-09-8	Tetrachloro-m-xylene	108%	132%	30-150%
2051-24-3	Decachlorobiphenyl	103%	159% <sup>b</sup>	30-150%
2051-24-3	Decachlorobiphenyl	113%	158% <sup>b</sup>	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARMMH1319		
<b>Lab Sample ID:</b>	M86550-6	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	77.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70912.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	130	32	ug/kg	
11104-28-2	Aroclor 1221	ND	130	8.2	ug/kg	
11141-16-5	Aroclor 1232	ND	130	18	ug/kg	
53469-21-9	Aroclor 1242	ND	130	11	ug/kg	
12672-29-6	Aroclor 1248 <sup>a</sup>	379	130	33	ug/kg	
11097-69-1	Aroclor 1254	560	130	14	ug/kg	
11096-82-5	Aroclor 1260 <sup>a</sup>	196	130	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		30-150%
877-09-8	Tetrachloro-m-xylene	88%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%

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

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

<b>Client Sample ID:</b>	CARMMH1309		
<b>Lab Sample ID:</b>	M86550-7	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	56.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70914.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	170	43	ug/kg	
11104-28-2	Aroclor 1221	ND	170	11	ug/kg	
11141-16-5	Aroclor 1232	ND	170	24	ug/kg	
53469-21-9	Aroclor 1242	ND	170	15	ug/kg	
12672-29-6	Aroclor 1248	ND	170	45	ug/kg	
11097-69-1	Aroclor 1254 <sup>a</sup>	787	170	20	ug/kg	
11096-82-5	Aroclor 1260	842	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		30-150%
877-09-8	Tetrachloro-m-xylene	112%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%
2051-24-3	Decachlorobiphenyl	135%		30-150%

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

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

<b>Client Sample ID:</b>	CARMMH1229		
<b>Lab Sample ID:</b>	M86550-8	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	80.8
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70915.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2							

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.9	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	10	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254	ND	120	14	ug/kg	
11096-82-5	Aroclor 1260	68.3	120	23	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		30-150%
877-09-8	Tetrachloro-m-xylene	111%		30-150%
2051-24-3	Decachlorobiphenyl	109%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%

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

<b>Client Sample ID:</b>	CARMMH1299		
<b>Lab Sample ID:</b>	M86550-9	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	79.1
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70916.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2	EF70933.D	5	10/22/09	SL	10/19/09	OP19738	GEF3256

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2	15.7 g	10.0 ml

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	30	ug/kg	
11104-28-2	Aroclor 1221	ND	120	7.9	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	2500 <sup>a</sup>	600	52	ug/kg	
12672-29-6	Aroclor 1248	ND	120	32	ug/kg	
11097-69-1	Aroclor 1254 <sup>b</sup>	2100 <sup>a</sup>	600	69	ug/kg	
11096-82-5	Aroclor 1260 <sup>b</sup>	554	120	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	108%	142%	30-150%
877-09-8	Tetrachloro-m-xylene	106%	135%	30-150%
2051-24-3	Decachlorobiphenyl	106%	241% <sup>c</sup>	30-150%
2051-24-3	Decachlorobiphenyl	103%	132%	30-150%

(a) Result is from Run# 2

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

(c) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARMMH1269		
<b>Lab Sample ID:</b>	M86550-10	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	SO - Sediment	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3545	<b>Percent Solids:</b>	77.7
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70917.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
Run #2	EF70934.D	10	10/22/09	SL	10/19/09	OP19738	GEF3256

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

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	120	31	ug/kg	
11104-28-2	Aroclor 1221	ND	120	8.1	ug/kg	
11141-16-5	Aroclor 1232	ND	120	17	ug/kg	
53469-21-9	Aroclor 1242	ND	120	11	ug/kg	
12672-29-6	Aroclor 1248 <sup>a</sup>	4260 <sup>b</sup>	1200	330	ug/kg	
11097-69-1	Aroclor 1254	7020 <sup>b</sup>	1200	140	ug/kg	
11096-82-5	Aroclor 1260 <sup>a</sup>	2360 <sup>b</sup>	1200	240	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%	142%	30-150%
877-09-8	Tetrachloro-m-xylene	95%	142%	30-150%
2051-24-3	Decachlorobiphenyl	100%	277% <sup>c</sup>	30-150%
2051-24-3	Decachlorobiphenyl	138%	142%	30-150%

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

(b) Result is from Run# 2

(c) Outside control limits due to dilution.

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

<b>Client Sample ID:</b>	CARF101509		
<b>Lab Sample ID:</b>	M86550-11	<b>Date Sampled:</b>	10/15/09
<b>Matrix:</b>	AQ - Field Blank Water	<b>Date Received:</b>	10/16/09
<b>Method:</b>	SW846 8082 SW846 3510C	<b>Percent Solids:</b>	n/a
<b>Project:</b>	Carrier-Thompson-PCB Investigation		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70926.D	1	10/21/09	SL	10/20/09	OP19749	GEF3256
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	5.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	0.078	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	0.18	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	0.21	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	0.12	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	0.16	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	0.052	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	103%		30-150%
2051-24-3	Decachlorobiphenyl	34%		30-150%
2051-24-3	Decachlorobiphenyl	29% <sup>a</sup>		30-150%

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

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



## Misc. Forms

### Custody Documents and Other Forms

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Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (NY)
- Chain of Custody



2235 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3499/3480  
[www.accufest.com](http://www.accufest.com)

Client / Reporting Information		Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes		
Company Name <b>EnSafe</b>		Project Name <b>Carrier Thompson Rd-PCB Source Investigation</b>																				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		
Street Address <b>220 Athens Way Ste 410</b>		Street		Billing Information (If different from Report to) Company Name																				
City State Zip <b>Nashville, TN 37228</b>		City State		Client Purchase Order # <b>088808318</b>																				
Phone # <b>(615) 255-9300</b>		Fax #		Attention:																				
Sampler(s) Name(s) <b>Jesse Kay Kendall</b>		Phone #		Project Manager <b>May Heflin</b>																				
Accutest Sample #	Field ID / Point of Collection	MEQMDI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCL	NaOH	HNO3	H2SO4	NONE	Dilution	MESH	PINCH	LAB USE ONLY								
-1	CARMMH0829		10/13/09	1158	JK	SED	1				X					X								
-2	CARMMH0899		1	1120																				
-3	CARMMH1369		10/13/09	1500																				
-4	CARMMH1359			1532																				
-5	CARMMH1349			1543																				
-6	CARMMH1319			1618																				
-7	CARMMH1309			1635																				
-8	CARMMH1229			1654																				
-9	CARMMH1219			1706																				
-10	CARMMH1269			1728																				
-11	CARFIDIS09		10/15/09	1811	FB		2				X					X								
Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Data Deliverable Information										Comments / Special Instructions										
<input type="checkbox"/> Std. 15 Business Days <input type="checkbox"/> Std. 10 Business Days (Per Contract Only) <input checked="" type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA LstLink		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other JTC										<b>Level 2 QA/QC</b>  <b>BSD 19EE</b>										
Sample Custody must be documented below each time samples change possession, including courier delivery.																								
Relinquished by Sampler: <b>1 Y. Burt</b>	Date Time: <b>10/15/09 1316</b>	Received By: <b>1 FedEx</b>	Date Time: <b>10/16/09 9:15</b>	Relinquished By: <b>2 FedEx</b>	Date Time: <b>10/16/09 2:00</b>	Received By: <b>2 [Signature]</b>	Relinquished by: <b>3</b>	Date Time:	Received By: <b>3</b>	Date Time:	Received By: <b>4</b>	Date Time:	Received By: <b>4</b>	Date Time:	Received By:	Cooler Temp. <b>32.3-32.3</b>								
Relinquished by: <b>5</b>	Date Time:	Received By: <b>5</b>	Date Time:	Custody Seal #	<input type="checkbox"/> Intact <input type="checkbox"/> Not intact	Preserved where applicable <input type="checkbox"/>	On Ice <input type="checkbox"/>																	

## M86550: Chain of Custody

Page 1 of 1



## GC Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

Page 1 of 1

**Job Number:** M86550

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19738-MB	EF70896.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255

The QC reported here applies to the following samples:

Method: SW846 8082

M86550-1, M86550-2, M86550-3, M86550-4, M86550-5, M86550-6, M86550-7, M86550-8, M86550-9, M86550-10

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	97	24	ug/kg	
11104-28-2	Aroclor 1221	ND	97	6.3	ug/kg	
11141-16-5	Aroclor 1232	ND	97	14	ug/kg	
53469-21-9	Aroclor 1242	ND	97	8.3	ug/kg	
12672-29-6	Aroclor 1248	ND	97	26	ug/kg	
11097-69-1	Aroclor 1254	ND	97	11	ug/kg	
11096-82-5	Aroclor 1260	ND	97	19	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	113% 30-150%
877-09-8	Tetrachloro-m-xylene	108% 30-150%
2051-24-3	Decachlorobiphenyl	105% 30-150%
2051-24-3	Decachlorobiphenyl	101% 30-150%

## Method Blank Summary

Page 1 of 1

**Job Number:** M86550

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19749-MB	EF70920.D	1	10/21/09	SL	10/20/09	OP19749	GEF3256

The QC reported here applies to the following samples:

Method: SW846 8082

M86550-11

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.076	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.18	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.20	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.24	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.12	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.16	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.050	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	102% 30-150%
877-09-8	Tetrachloro-m-xylene	107% 30-150%
2051-24-3	Decachlorobiphenyl	46% 30-150%
2051-24-3	Decachlorobiphenyl	38% 30-150%

Blank Spike Summary

Job Number: M86550  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19749-BS	EF70921.D	1	10/21/09	SL	10/20/09	OP19749	GEF3256

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

M86550-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.6	130	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.3	115	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	124%	30-150%
877-09-8	Tetrachloro-m-xylene	120%	30-150%
2051-24-3	Decachlorobiphenyl	50%	30-150%
2051-24-3	Decachlorobiphenyl	43%	30-150%

## Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86550

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19738-BS	EF70897.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
OP19738-BSD	EF70898.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255

The QC reported here applies to the following samples:

Method: SW846 8082

M86550-1, M86550-2, M86550-3, M86550-4, M86550-5, M86550-6, M86550-7, M86550-8, M86550-9, M86550-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	259	309	119	327	126	6	40-140/30
11104-28-2	Aroclor 1221		ND		ND		nc	40-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	40-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	40-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	40-140/30
11097-69-1	Aroclor 1254		ND		ND		nc	40-140/30
11096-82-5	Aroclor 1260	259	306	118	315	121	3	40-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	104%	110%	30-150%
877-09-8	Tetrachloro-m-xylene	106%	108%	30-150%
2051-24-3	Decachlorobiphenyl	93%	105%	30-150%
2051-24-3	Decachlorobiphenyl	98%	99%	30-150%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86550

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19738-MS	EF70899.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
OP19738-MSD	EF70900.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255
M86462-5	EF70901.D	1	10/21/09	SL	10/19/09	OP19738	GEF3255

The QC reported here applies to the following samples:

Method: SW846 8082

M86550-1, M86550-2, M86550-3, M86550-4, M86550-5, M86550-6, M86550-7, M86550-8, M86550-9, M86550-10

CAS No.	Compound	M86462-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		314	362	115	340	109	6	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND		314	395	126	392	126	1	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86462-5	Limits
877-09-8	Tetrachloro-m-xylene	104%	104%	108%	30-150%
877-09-8	Tetrachloro-m-xylene	104%	104%	109%	30-150%
2051-24-3	Decachlorobiphenyl	112%	101%	113%	30-150%
2051-24-3	Decachlorobiphenyl	103%	106%	106%	30-150%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** M86550

**Account:** ENSTNM ENSAFE

**Project:** Carrier-Thompson-PCB Investigation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19749-MS	EF70922.D	1	10/21/09	SL	10/20/09	OP19749	GEF3256
OP19749-MSD	EF70923.D	1	10/21/09	SL	10/20/09	OP19749	GEF3256
M86575-6	EF70924.D	1	10/21/09	SL	10/20/09	OP19749	GEF3256

The QC reported here applies to the following samples:

Method: SW846 8082

M86550-11

CAS No.	Compound	M86575-6 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2	2.5	125	2.3	115	8	40-140/50
11104-28-2	Aroclor 1221	ND		ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND		ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2	2.2	110	2.3	115	4	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86575-6	Limits
877-09-8	Tetrachloro-m-xylene	109%	103%	89%	30-150%
877-09-8	Tetrachloro-m-xylene	108%	112%	102%	30-150%
2051-24-3	Decachlorobiphenyl	70%	74%	89%	30-150%
2051-24-3	Decachlorobiphenyl	59%	64%	74%	30-150%



Semivolatile Surrogate Recovery Summary

Job Number: M86550  
Account: ENSTNM ENSAFE  
Project: Carrier-Thompson-PCB Investigation

Method: SW846 8082	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
M86550-11	EF70926.D	93.0	103.0	34.0	29.0* <sup>c</sup>
OP19749-BS	EF70921.D	124.0	120.0	50.0	43.0
OP19749-MB	EF70920.D	102.0	107.0	46.0	38.0
OP19749-MS	EF70922.D	109.0	108.0	70.0	59.0
OP19749-MSD	EF70923.D	103.0	112.0	74.0	64.0

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

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to possible matrix interference.

4.5.1  
4

# Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M86550

Account: ENSTNM ENSAFE

Project: Carrier-Thompson-PCB Investigation

Method: SW846 8082

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
M86550-1	EF70907.D	100.0	104.0	99.0	110.0
M86550-1	EF70930.D	108.0	112.0	118.0	111.0
M86550-2	EF70908.D	110.0	111.0	106.0	155.0* <sup>c</sup>
M86550-2	EF70931.D	0.0* <sup>d</sup>	0.0* <sup>d</sup>	0.0* <sup>d</sup>	0.0* <sup>d</sup>
M86550-3	EF70909.D	87.0	100.0	89.0	98.0
M86550-4	EF70910.D	100.0	113.0	104.0	100.0
M86550-5	EF70911.D	94.0	108.0	103.0	113.0
M86550-5	EF70932.D	119.0	132.0	159.0* <sup>d</sup>	158.0* <sup>d</sup>
M86550-6	EF70912.D	84.0	88.0	94.0	71.0
M86550-7	EF70914.D	100.0	112.0	104.0	135.0
M86550-8	EF70915.D	109.0	111.0	109.0	96.0
M86550-9	EF70916.D	108.0	106.0	106.0	103.0
M86550-9	EF70933.D	142.0	135.0	241.0* <sup>d</sup>	132.0
M86550-10	EF70917.D	101.0	95.0	100.0	138.0
M86550-10	EF70934.D	142.0	142.0	277.0* <sup>d</sup>	142.0
OP19738-BS	EF70897.D	104.0	106.0	93.0	98.0
OP19738-BSD	EF70898.D	110.0	108.0	105.0	99.0
OP19738-MB	EF70896.D	113.0	108.0	105.0	101.0
OP19738-MS	EF70899.D	104.0	104.0	112.0	103.0
OP19738-MSD	EF70900.D	104.0	104.0	101.0	106.0

## Surrogate Compounds

## Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

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

(d) Outside control limits due to dilution.

## ANALYTICAL REPORT

Job Number: 220-10773-1

Job Description: UTC-Carrier XF Yard Storm Water

For:  
EnSafe, Inc.  
220 Athens Way  
Suite 410  
Nashville, TN 37228  
Attention: Ms. May Heflin



Approved for release.  
Cheryl Cascella  
11/27/2009 9:55 AM

---

Designee for  
Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
11/27/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

**TestAmerica Laboratories, Inc.**

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 [www.testamericainc.com](http://www.testamericainc.com)



**Job Narrative**  
**220-10773-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

No analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: EnSafe, Inc.

Job Number: 220-10773-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
--------------------------	------------------	--------------------	--------------------	-------	--------

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No Detections

## METHOD SUMMARY

Client: EnSafe, Inc.

Job Number: 220-10773-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Organochlorine Pesticides & PCBs (GC)	TAL CT	40CFR136A 608	
Liquid-Liquid Extraction (Separtory Funnel)	TAL CT		40CFR136A 608

### Lab References:

TAL CT = TestAmerica Connecticut

### Method References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

## METHOD / ANALYST SUMMARY

Client: EnSafe, Inc.

Job Number: 220-10773-1

Method	Analyst	Analyst ID
40CFR136A 608	Dini, Tracy	TD

## SAMPLE SUMMARY

Client: EnSafe, Inc.

Job Number: 220-10773-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
220-10773-1	XF YARD	Water	11/20/2009 1135	11/21/2009 1030



# **SAMPLE RESULTS**

## Analytical Data

Client: EnSafe, Inc.

Job Number: 220-10773-1

Client Sample ID: XF YARD

Lab Sample ID: 220-10773-1

Client Matrix: Water

Date Sampled: 11/20/2009 1135

Date Received: 11/21/2009 1030

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-33637	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-33587	Initial Weight/Volume:	1920 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	11/23/2009 2349		Injection Volume:	1 uL
Date Prepared:	11/23/2009 0922		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.016	0.052
PCB-1221	0.052	U	0.016	0.052
PCB-1232	0.052	U	0.016	0.052
PCB-1242	0.052	U	0.016	0.052
PCB-1248	0.052	U	0.016	0.052
PCB-1254	0.052	U	0.016	0.052
PCB-1260	0.052	U	0.011	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	25	*	28 - 139
Tetrachloro-m-xylene	72		45 - 129

## DATA REPORTING QUALIFIERS

Client: EnSafe, Inc.

Job Number: 220-10773-1

Lab Section	Qualifier	Description
GC Semi VOA	U	Analyzed for but not detected.
	*	Surrogate exceeds the control limit

# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: EnSafe, Inc.

Job Number: 220-10773-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC Semi VOA</b>					
<b>Prep Batch: 220-33587</b>					
LCS 220-33587/2-A	Lab Control Sample	T	Water	608	
MB 220-33587/1-A	Method Blank	T	Water	608	
220-10773-1	XF YARD	T	Water	608	
<b>Analysis Batch:220-33637</b>					
LCS 220-33587/2-A	Lab Control Sample	T	Water	608	220-33587
MB 220-33587/1-A	Method Blank	T	Water	608	220-33587
220-10773-1	XF YARD	T	Water	608	220-33587

#### Report Basis

T = Total

## Quality Control Results

Client: EnSafe, Inc.

Job Number: 220-10773-1

### Surrogate Recovery Report

#### 608 Organochlorine Pesticides & PCBs (GC)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCB2 %Rec	TCX2 %Rec
220-10773-1	XF YARD	25*	72
MB 220-33587/1-A		74	89
LCS 220-33587/2-A		83	94

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	28-139
TCX = Tetrachloro-m-xylene	45-129

## Quality Control Results

Client: EnSafe, Inc.

Job Number: 220-10773-1

### Method Blank - Batch: 220-33587

**Method: 608**  
**Preparation: 608**

Lab Sample ID: MB 220-33587/1-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/23/2009 2311  
Date Prepared: 11/23/2009 0922

Analysis Batch: 220-33637  
Prep Batch: 220-33587  
Units: ug/L

Instrument ID: HP 6890 dual ECD  
Lab File ID: D9058122.D  
Initial Weight/Volume: 2000 mL  
Final Weight/Volume: 2.0 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	74	28 - 139
Tetrachloro-m-xylene	89	45 - 129

### Lab Control Sample - Batch: 220-33587

**Method: 608**  
**Preparation: 608**

Lab Sample ID: LCS 220-33587/2-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 11/23/2009 2330  
Date Prepared: 11/23/2009 0922

Analysis Batch: 220-33637  
Prep Batch: 220-33587  
Units: ug/L

Instrument ID: HP 6890 dual ECD  
Lab File ID: D9058123.D  
Initial Weight/Volume: 2000 mL  
Final Weight/Volume: 2.0 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	0.500	0.495	99	50 - 114	
PCB-1260	0.500	0.426	85	32 - 119	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	83	28 - 139
Tetrachloro-m-xylene	94	45 - 129

Calculations are performed before rounding to avoid round-off errors in calculated results.

## **MISCELLANEOUS DOCUMENTS**





220-10773

Ensafe - UTC Carrier XF yard

48hr lat

Date Received: 11/21/09

Sample #5:

Water: 1/

Locations:

[illegible]

JOB NO: 220-10773Fraction: BNA / Pesticide PCB / Herbicide / O/P Pesticide / DRO / CT ETPH / Other  
(Circle one)

SAMPLE IN (Extractions)					SAMPLE IN (Extractions)				
Sample(s)	Date	Time	Sign.	Location	Sample(s)	Date	Time	Sign.	Location
1	11/23/09	11:16	MS	GC					

SAMPLE OUT					SAMPLE IN			
Sample(s)	Date	Time	Code	Sign.	Date	Time	Location	Sign.
1	11/23/09	11:55	AN	MS	1	11/23/09	12:00	MS

Codes: SC = Screening

AN = Analysis

Verified By: [Signature]Date: 11/24/09

Lab Form: SMF01203.CT

## Login Sample Receipt Check List

Client: EnSafe, Inc.

Job Number: 220-10773-1

Login Number: 10773

Creator: Blocker, Kristina

List Number: 1

List Source: TestAmerica Connecticut

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	N/A	

## ANALYTICAL REPORT

Job Number: 220-10988-1

Job Description: UTC-Carrier XF Yard Storm Water

For:  
EnSafe, Inc.  
220 Athens Way  
Suite 410  
Nashville, TN 37228  
Attention: Ms. May Heflin



Approved for release.  
Cheryl Cascella  
12/21/2009 3:17 PM

---

Designee for  
Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
12/21/2009

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TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

**TestAmerica Laboratories, Inc.**

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**Job Narrative**  
**220-10988-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

Method(s) 608: The following sample has been reported with preliminary results SWS-2 (220-10988-6). The sample requires dilution.

Preliminary results sent client on 12/14/09. -J.Duhancik

12/15/09- Results are final now for all samples. K.Maturo

No other analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: EnSafe, Inc.

Job Number: 220-10988-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
<b>220-10988-1</b> PCB-1260	<b>MH-259A</b>	0.019	J	0.052	ug/L	608
<b>220-10988-2</b> PCB-1260	<b>MH-256S</b>	0.022	J	0.052	ug/L	608
<b>220-10988-3</b> PCB-1260	<b>MH-TR-12</b>	0.013	J	0.052	ug/L	608
<b>220-10988-4</b> PCB-1254 PCB-1260	<b>MH-116A</b>	0.12 0.11		0.053 0.053	ug/L ug/L	608 608
<b>220-10988-5</b> PCB-1260	<b>SWS-1</b>	0.33		0.062	ug/L	608
<b>220-10988-6</b> PCB-1260	<b>SWS-2</b>	3.7		0.53	ug/L	608



## METHOD SUMMARY

Client: EnSafe, Inc.

Job Number: 220-10988-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Organochlorine Pesticides & PCBs (GC)	TAL CT	40CFR136A 608	
Liquid-Liquid Extraction (Separtory Funnel)	TAL CT		40CFR136A 608

### Lab References:

TAL CT = TestAmerica Connecticut

### Method References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

## METHOD / ANALYST SUMMARY

Client: EnSafe, Inc.

Job Number: 220-10988-1

Method	Analyst	Analyst ID
40CFR136A 608	Dini, Tracy	TD

## SAMPLE SUMMARY

Client: EnSafe, Inc.

Job Number: 220-10988-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10988-1	MH-259A	Water	12/09/2009 2015	12/11/2009 0955
220-10988-2	MH-256S	Water	12/09/2009 2045	12/11/2009 0955
220-10988-3	MH-TR-12	Water	12/09/2009 2105	12/11/2009 0955
220-10988-4	MH-116A	Water	12/09/2009 2120	12/11/2009 0955
220-10988-5	SWS-1	Water	12/09/2009 2155	12/11/2009 0955
220-10988-6	SWS-2	Water	12/09/2009 2140	12/11/2009 0955

# **SAMPLE RESULTS**

## Analytical Data

Client: EnSafe, Inc.

Job Number: 220-10988-1

Client Sample ID: MH-259A

Lab Sample ID: 220-10988-1

Client Matrix: Water

Date Sampled: 12/09/2009 2015

Date Received: 12/11/2009 0955

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-34224	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34177	Initial Weight/Volume:	1910 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/12/2009 1752		Injection Volume:	1 uL
Date Prepared:	12/11/2009 1036		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.016	0.052
PCB-1221	0.052	U	0.016	0.052
PCB-1232	0.052	U	0.016	0.052
PCB-1242	0.052	U	0.016	0.052
PCB-1248	0.052	U	0.016	0.052
PCB-1254	0.052	U	0.016	0.052
PCB-1260	0.019	J	0.012	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	38		28 - 139
Tetrachloro-m-xylene	82		45 - 129

## Analytical Data

Client: EnSafe, Inc.

Job Number: 220-10988-1

Client Sample ID: MH-256S

Lab Sample ID: 220-10988-2

Client Matrix: Water

Date Sampled: 12/09/2009 2045

Date Received: 12/11/2009 0955

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-34224	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34177	Initial Weight/Volume:	1910 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/12/2009 1811		Injection Volume:	1 uL
Date Prepared:	12/11/2009 1036		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.016	0.052
PCB-1221	0.052	U	0.016	0.052
PCB-1232	0.052	U	0.016	0.052
PCB-1242	0.052	U	0.016	0.052
PCB-1248	0.052	U	0.016	0.052
PCB-1254	0.052	U	0.016	0.052
PCB-1260	0.022	J	0.012	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	39		28 - 139
Tetrachloro-m-xylene	79		45 - 129

## Analytical Data

Client: EnSafe, Inc.

Job Number: 220-10988-1

**Client Sample ID:** MH-TR-12

Lab Sample ID: 220-10988-3

Client Matrix: Water

Date Sampled: 12/09/2009 2105

Date Received: 12/11/2009 0955

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-34224	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34177	Initial Weight/Volume:	1910 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/12/2009 1830		Injection Volume:	1 uL
Date Prepared:	12/11/2009 1036		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.016	0.052
PCB-1221	0.052	U	0.016	0.052
PCB-1232	0.052	U	0.016	0.052
PCB-1242	0.052	U	0.016	0.052
PCB-1248	0.052	U	0.016	0.052
PCB-1254	0.052	U	0.016	0.052
PCB-1260	0.013	J	0.012	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	31		28 - 139
Tetrachloro-m-xylene	79		45 - 129

## Analytical Data

Client: EnSafe, Inc.

Job Number: 220-10988-1

**Client Sample ID:** MH-116A

Lab Sample ID: 220-10988-4

Client Matrix: Water

Date Sampled: 12/09/2009 2120

Date Received: 12/11/2009 0955

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-34224	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34177	Initial Weight/Volume:	1900 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/12/2009 1849		Injection Volume:	1 uL
Date Prepared:	12/11/2009 1036		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.12		0.016	0.053
PCB-1260	0.11		0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	34		28 - 139
Tetrachloro-m-xylene	83		45 - 129



## Analytical Data

Client: EnSafe, Inc.

Job Number: 220-10988-1

**Client Sample ID: SWS-1**

Lab Sample ID: 220-10988-5

Client Matrix: Water

Date Sampled: 12/09/2009 2155

Date Received: 12/11/2009 0955

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-34224	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34177	Initial Weight/Volume:	810 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	12/12/2009 1908		Injection Volume:	1 uL
Date Prepared:	12/11/2009 1036		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.062	U	0.019	0.062
PCB-1221	0.062	U	0.019	0.062
PCB-1232	0.062	U	0.019	0.062
PCB-1242	0.062	U	0.019	0.062
PCB-1248	0.062	U	0.019	0.062
PCB-1254	0.062	U	0.019	0.062
PCB-1260	0.33		0.014	0.062

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	52		28 - 139
Tetrachloro-m-xylene	96		45 - 129

## Analytical Data

Client: EnSafe, Inc.

Job Number: 220-10988-1

Client Sample ID: SWS-2

Lab Sample ID: 220-10988-6

Client Matrix: Water

Date Sampled: 12/09/2009 2140

Date Received: 12/11/2009 0955

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-34276	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34177	Initial Weight/Volume:	1870 mL
Dilution:	10		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/15/2009 0106		Injection Volume:	1 uL
Date Prepared:	12/11/2009 1036		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.53	U	0.16	0.53
PCB-1221	0.53	U	0.16	0.53
PCB-1232	0.53	U	0.16	0.53
PCB-1242	0.53	U	0.16	0.53
PCB-1248	0.53	U	0.16	0.53
PCB-1254	0.53	U	0.16	0.53
PCB-1260	3.7		0.12	0.53

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	0	*	28 - 139
Tetrachloro-m-xylene	0	*	45 - 129

## DATA REPORTING QUALIFIERS

Client: EnSafe, Inc.

Job Number: 220-10988-1

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit

# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: EnSafe, Inc.

Job Number: 220-10988-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC Semi VOA</b>					
<b>Prep Batch: 220-34177</b>					
LCS 220-34177/2-A	Lab Control Sample	T	Water	608	
LCSD 220-34177/3-A	Lab Control Sample Duplicate	T	Water	608	
MB 220-34177/1-A	Method Blank	T	Water	608	
220-10988-1	MH-259A	T	Water	608	
220-10988-2	MH-256S	T	Water	608	
220-10988-3	MH-TR-12	T	Water	608	
220-10988-4	MH-116A	T	Water	608	
220-10988-5	SWS-1	T	Water	608	
220-10988-6	SWS-2	T	Water	608	
<b>Analysis Batch:220-34224</b>					
LCS 220-34177/2-A	Lab Control Sample	T	Water	608	220-34177
LCSD 220-34177/3-A	Lab Control Sample Duplicate	T	Water	608	220-34177
MB 220-34177/1-A	Method Blank	T	Water	608	220-34177
220-10988-1	MH-259A	T	Water	608	220-34177
220-10988-2	MH-256S	T	Water	608	220-34177
220-10988-3	MH-TR-12	T	Water	608	220-34177
220-10988-4	MH-116A	T	Water	608	220-34177
220-10988-5	SWS-1	T	Water	608	220-34177
<b>Analysis Batch:220-34276</b>					
220-10988-6	SWS-2	T	Water	608	220-34177

#### Report Basis

T = Total

## Quality Control Results

Client: EnSafe, Inc.

Job Number: 220-10988-1

### Surrogate Recovery Report

#### 608 Organochlorine Pesticides & PCBs (GC)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCB2 %Rec	TCX2 %Rec
220-10988-1	MH-259A	38	82
220-10988-2	MH-256S	39	79
220-10988-3	MH-TR-12	31	79
220-10988-4	MH-116A	34	83
220-10988-5	SWS-1	52	96
220-10988-6	SWS-2	0*	0*
MB 220-34177/1-A		76	88
LCS 220-34177/2-A		79	89
LCSD 220-34177/3-A		76	78

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	28-139
TCX = Tetrachloro-m-xylene	45-129

## Quality Control Results

Client: EnSafe, Inc.

Job Number: 220-10988-1

### Method Blank - Batch: 220-34177

**Method: 608**  
**Preparation: 608**

Lab Sample ID: MB 220-34177/1-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 12/12/2009 1655  
Date Prepared: 12/11/2009 1036

Analysis Batch: 220-34224  
Prep Batch: 220-34177  
Units: ug/L

Instrument ID: HP 6890 dual ECD  
Lab File ID: D9058193.D  
Initial Weight/Volume: 2000 mL  
Final Weight/Volume: 2.0 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	76	28 - 139
Tetrachloro-m-xylene	88	45 - 129

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: EnSafe, Inc.

Job Number: 220-10988-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 220-34177**

**Method: 608  
Preparation: 608**

LCS Lab Sample ID: LCS 220-34177/2-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 12/12/2009 1714  
Date Prepared: 12/11/2009 1036

Analysis Batch: 220-34224  
Prep Batch: 220-34177  
Units: ug/L

Instrument ID: HP 6890 dual ECD  
Lab File ID: D9058194.D  
Initial Weight/Volume: 2000 mL  
Final Weight/Volume: 2.0 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 220-34177/3-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 12/12/2009 1733  
Date Prepared: 12/11/2009 1036

Analysis Batch: 220-34224  
Prep Batch: 220-34177  
Units: ug/L

Instrument ID: HP 6890 dual ECD  
Lab File ID: D9058195.D  
Initial Weight/Volume: 2000 mL  
Final Weight/Volume: 2.0 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
PCB-1016	93	78	50 - 114	18	30		
PCB-1260	86	81	32 - 119	7	30		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
DCB Decachlorobiphenyl	79		76		28 - 139		
Tetrachloro-m-xylene	89		78		45 - 129		

Calculations are performed before rounding to avoid round-off errors in calculated results.



# Chain of Custody Record

Temperature on Receipt \_\_\_\_\_  
Drinking Water? Yes ☐ No ☒

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

10988

TAL-4124 (1007)

Client

Project Manager

Date

Chain of Custody Number

Address

Telephone Number (Area Code/Fax Number)

Lab Number

City

State

Zip Code

Site Contact

Lab Contact

Project Name and Location (State)

Carrier/Waybill Number

Analysis (Attach list if more space is needed)

Page 1 of 1

Contract/Purchase Order/Quote No.

Contract/Purchase Order/Quote No.

Matrix

Containers & Preservatives

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)

Date

Time

Air

Aqueous

Sed.

Soil

Unpres.

H2SO4

HNO3

HCl

NaOH

ZnAc/NaOH

Total PCBs

2

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## Login Sample Receipt Check List

Client: EnSafe, Inc.

Job Number: 220-10988-1

Login Number: 10988

Creator: Blocker, Kristina

List Number: 1

List Source: TestAmerica Connecticut

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	N/A	

220-10988  
Ensafe-UTC Carrier XF Yard  
Storm water

24th

Date Received: 12/11/09

Sample #s: 1-6

Water: 1-6

Locations: 95D

Laboratory Sample #	Signature-Sample Removal	Date	Time	Reason	Signature-Sample Return	Date	Time
1-6	<i>[Signature]</i>	12-11-09	16:30	571	<i>[Signature]</i>		
<i>501091211154M</i>							

Page 23 of 24
12/21/2009

JOB NO: 220-10988
 Fraction: BNA / Pesticide-PCB<sup>LL</sup> / Herbicide / O/P Pesticide / DRO / CT ETPH / Other  
 (Circle one)

SAMPLE IN (Extractions)					SAMPLE IN (Extractions)				
Sample(s)	Date	Time	Sign.	Location	Sample(s)	Date	Time	Sign.	Location
1-6	12/11/09	14:05	J.C.	60					

SAMPLE OUT					SAMPLE IN			
Sample(s)	Date	Time	Code	Sign.	Date	Time	Location	Sign.
1-6	12/12/09	10:37	AN	TJ	12/12/09	11:25	60	TJ
6	12/14/09	15:08	AN	TJ	12/14/09	15:10	60	TJ

Codes: SC = Screening

AN = Analysis

Verified By: [Signature]Date: 12/14/09

Lab Form: SMF01203.CT

**Appendix D**  
**Potential PCB Source Report: Rooftop Runoff, September 30, 2009**



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220 Athens Way, Suite 410 | Nashville, Tennessee 37228 | Telephone 615-255-9300 | Facsimile 615-255-9345 | [www.ensafe.com](http://www.ensafe.com)

September 30, 2009

Mr. Larry A. Rosenmann  
New York State Department of Environmental Conservation  
Bureau of Hazardous Waste & Radiation Management  
Division of Solid & Hazardous Materials  
625 Broadway  
Albany, New York 12233-7528

Re: Carrier Corporation, Thompson Road Facility, Syracuse, New York  
Corrective Action Order — Index CO 7-20051118-4  
Potential PCB Source Report: Rooftop Runoff

Dear Mr. Rosenmann:

Please find enclosed one hard copy of the Potential PCB Source Report for rooftop runoff. A work plan was submitted to your office on September 11, 2009, proposing a total of 5 potential PCB source areas that warranted evaluation.

- Potential PCB Source Area — Transformer Yard Area
- Potential PCB Source Area — Thompson Road and TR-18 Storm Sewer Lines
- **Potential PCB Source Area — Rooftop Runoff (Buildings TR-1 and TR-2)**
- Potential PCB Source Area — MH-126 Area
- Potential PCB Source Area — Former Building TR-23 WSA

This report summarizes only the rooftop runoff area of investigation. The other potential source area reports will be submitted once the data has been collected, received, and evaluated, and may be submitted as a single report or by area.

Please call me if you have any questions at (615) 255-9300.

Sincerely,

EnSafe Inc.

By: May Heflin, PE

Encl. Potential PCB Source Report: Rooftop Runoff

cc: Mr. James Burke — NYSDEC, Division of Water  
Mr. Brian Baker — NYSDEC, Division of Water, Albany  
Mr. Dare Adelugba — NYSDEC, Division of Water, Albany  
Ms. Mary Jane Peachey — NYSDEC, Regional Engineer  
Mr. William Penn — UTC  
Mr. Nelson Wong — Carrier Corporation

**POTENTIAL PCB SOURCES REPORT:  
ROOFTOP RUNOFF**

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

**EnSafe Project Number  
0888805771, Phase 11**

**Revision No.: 0**

**Prepared for:**

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

**Prepared by:**



**EnSafe Inc.  
220 Athens Way, Suite 410  
Nashville, Tennessee 37228  
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(800) 588-7962  
[www.ensafe.com](http://www.ensafe.com)**

**September 2009**

**POTENTIAL PCB SOURCES REPORT:  
ROOFTOP RUNOFF**

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

**EnSafe Project Number  
0888805771, Phase 11**

**Revision No.: 0**

**Prepared for:**

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

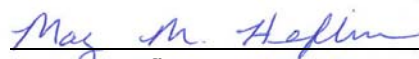
**Prepared by:**



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Nashville, Tennessee 37228  
(615) 255-9300  
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www.ensafe.com**

**September 2009**

**Prepared By:**

  
\_\_\_\_\_  
May M. Heflin, PE

\_\_\_\_\_  
September 30, 2009  
Date

**Reviewed By:**

  
\_\_\_\_\_  
Thomas B. Green

\_\_\_\_\_  
September 30, 2009  
Date



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## Appendices

Appendix A	Rooftop Runoff Laboratory Data
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## **1.0 INTRODUCTION**

Carrier Corporation (Carrier), a wholly-owned subsidiary of United Technologies Corporation, has prepared this *Potential PCB Sources Report: Rooftop Runoff*, under Corrective Action Order — Index CO 7-20051118-4 (order) dated February 13, 2006, and in response to the requests outlined in the New York State Department of Environmental Conservation's (NYSDEC) letter dated July 27, 2009, (comments on Focused CMS for PCBs in Sanders Creek sediments). In this letter, NYSDEC requested a work plan to support Carrier's State Pollution Discharge Elimination System (SPDES) permit issued to Carrier on September 14, 2007, from NYSDEC, Division of Environmental Permits, Region 7. Specifically, NYSDEC requested that a work plan be prepared, in part, to determine if any roof drains posed a continuing source of poly-chlorinated biphenyls (PCBs) to the storm drains discharging to SPDES permitted Outfall 002 and ultimately Sanders Creek.

### **1.1 Background**

A NYSDEC sediment sampling program in 1996 and 1997 detected elevated PCB levels in Sanders Creek. Detections near the Carrier property led the NYSDEC — Division of Solid and Hazardous Materials, to request additional site investigations under the Consent Order to better ascertain and determine the potential source of PCBs in the Sanders Creek sediments.

Under its current SPDES permit (not part of the Consent Order), Carrier developed and implemented a ***PCB Storm Water Quality Study (PSWS)*** which includes data from 12 months of monitoring PCB concentrations in storm water discharges from Outfalls 001, 002, and 01A discharging to Sanders Creek. The monitoring period began mid-November 2007 and was completed mid-October 2008. A report on that study was submitted to the NYSDEC in November 2008.

During the study period, overflows at Outfall 001 occurred on 82 days, of which samples (composite, grab, or both) were collected on 26 days. Samples were also collected on another 4 days when there was no overflow, that is, all flow was pumped to the 01A treatment system. Thirty-five composite samples and 21 grab samples were collected on the 26 days when overflows at 001 occurred. Two days had PCB detections (a 7/13/08 grab sample at 0.076 µg/l and a 9/27/08 grab sample at 0.092 µg/l and composite sample at 0.083 µg/l).

This storm water will not be treated for PCBs because PSWS and PMP (Pollutant Management Plan (PMP) sampling data show the occurrence of any Aroclor greater than 0.065 µg/l is rare and the maximum concentration is on the order of 0.1 µg/l. Similarly, rooftop runoff from buildings that discharge to Outfall 001 were not considered in the *Potential PCB Source Work Plan*, September 2009.



Storm water overflows from this outfall will continue to be monitored. If data shows the frequency or magnitude of PCB concentrations in overflows from this outfall reach a level of concern, Carrier will reassess the potential for rooftop runoff as a continuing source of PCBs to Outfall 001.

Overflows at Outfall 002 occurred on 90 days, of which samples (composite, grab, or both) were collected on 26 days. PCBs were not detected above the PQL of 0.30 µg/l per Aroclor in any of the 36 composite samples collected over 3-hour to 24-hour periods on 22 of these days; however, 3 of 24 grab samples yielded PCB above this threshold. Fifteen of the composite samples and 16 of the grab samples had a PCB concentration above 0.065 µg/l per Aroclor. As part of preliminary discussions on a revised SPDES permit, Carrier and NYSDEC discussed (July 17 conference call) the immediate implementation of a rooftop runoff sampling program to assess possibility and practicality of diverting rooftop runoff away from Outfall 002 to a new permitted outfall. This is due to the large contribution of storm water runoff from Building TR-1 and TR-2 roofs to Outfall 002 during storm events. This sampling program was initiated on July 24, 2009, as discussed in Section 2, with a planned Rooftop Runoff Report submittal date of September 30, 2009.

After the rooftop sampling program had started, NYSDEC correspondence dated July 27, 2009 (comments referenced above), requested that Carrier prepare a Potential PCB Source Work Plan, with a specific request that roof drains (or rather runoff from the roofs) be investigated as a potential continuing source of PCBs to the storm sewer system.

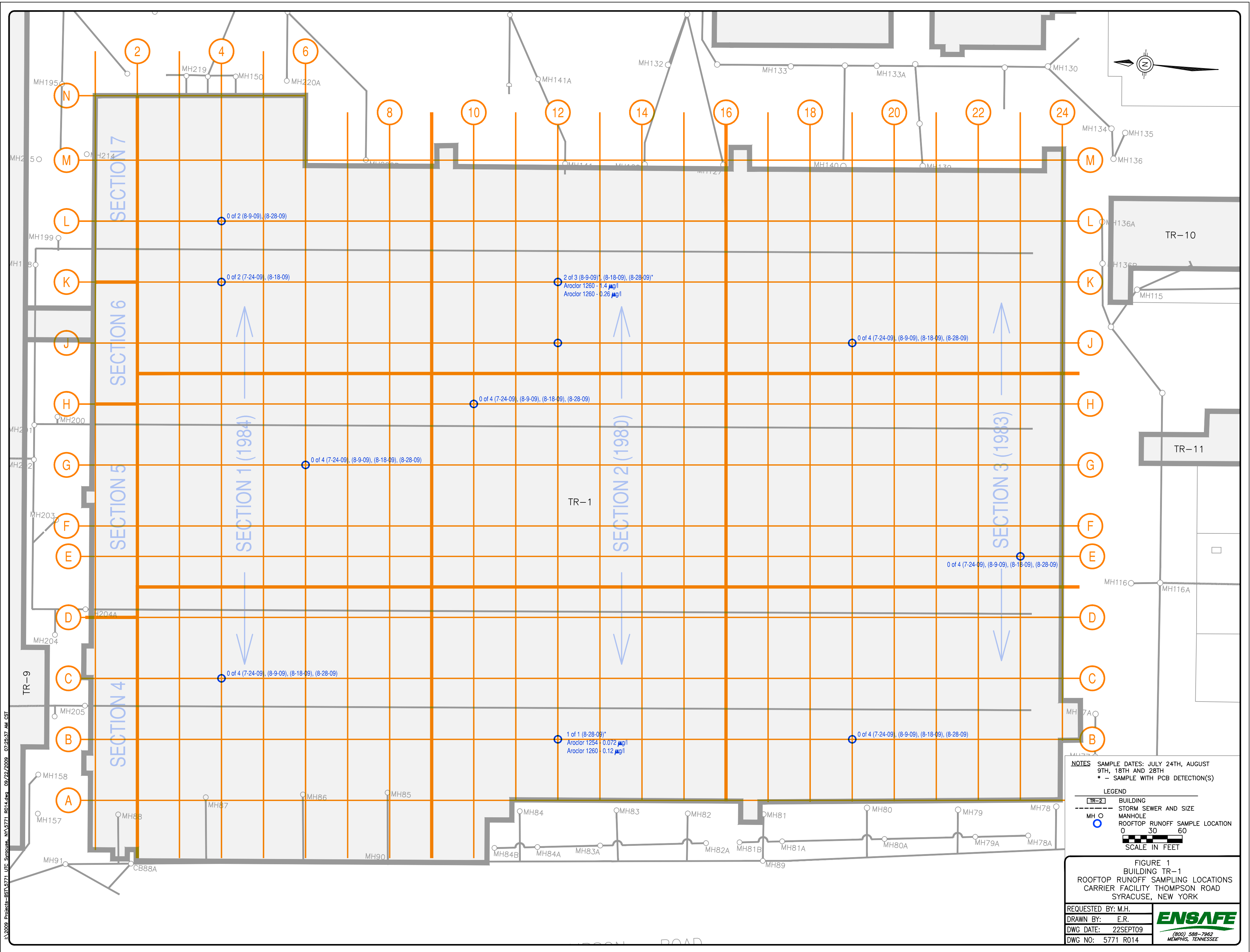
## **2.0 POTENTIAL SOURCE: ROOFTOP RUNOFF**

### **2.1 Sampling Activities**

The roofs of Buildings TR-1 and TR-2 cover approximately 48% of the 002 watershed but contribute from 52% to 57% of the storm water runoff discharging at Outfall 002, depending on the storm event. Because of the large area covered by these roofs (Building TR-1 is approximately 14 acres and Building TR-2 is approximately 13.5 acres), rooftop runoff samples were obtained from select locations/drains based on:

- The age of the roof section — the assumption is that older sections are more likely to contain PCB in roofing materials than are the newer sections
- The overall area that is drained by the various inlet points on the roof — an attempt was made to sample each drainage area of a roof.

**Building TR-1:** The main roof has approximately 144 roof drain inlets. The most recent information on the roof construction of Building TR-1 shows the roof was replaced or re-covered in 1980 (Section 2), and 1983 (Section 3), and 1984 (Section 1). Sections 4 through 7 were recent additions that were roofs over the office area and were last replaced in 1984. Rooftop samples from each of the larger drainage sections (1 through 3) were taken on the roof at the inlet to the rooftop leader that ultimately carries roof runoff to the site-wide storm lines. Eleven locations were sampled over a 35-day period on July 24, August 9, August 18, and August 28, 2009, with some locations sampled less frequently (**Figure 1 – Building TR-1 Sample Locations**). Table 1 summarizes the data collected during this time period.




**NOTES** SAMPLE DATES: JULY 24TH, AUGUST 9TH, 18TH AND 28TH  
\* - SAMPLE WITH PCB DETECTION(S)

**LEGEND**

- TR-2 BUILDING
- STORM SEWER AND SIZE
- MH O MANHOLE
- ROOFTOP RUNOFF SAMPLE LOCATION

0 30 60  
SCALE IN FEET

**FIGURE 1**  
BUILDING TR-1  
ROOFTOP RUNOFF SAMPLING LOCATIONS  
CARRIER FACILITY THOMPSON ROAD  
SYRACUSE, NEW YORK

REQUESTED BY: M.H.	
DRAWN BY: E.R.	
DWG DATE: 22SEPT09	
DWG NO: 5771 R014	

(800) 588-7962  
MEMPHIS, TENNESSEE

IA-2009 Projects-8571-UTC Syracuse, NY 5771 R014.dwg 09/22/2009 07:25:37 AM CST



Table 1  
Building TR-1 Rooftop Runoff Sample Locations  
Carrier Corporation, Syracuse, New York

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	B-12	B-12	B-12	B-12
Aroclor ↓				
PCB-1248	NS	NS	NS	0.053 U
PCB-1254	NS	NS	NS	0.072
PCB-1260	NS	NS	NS	0.12

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	B-19 *	B-19 **	B-19	B-19
Aroclor ↓				
PCB-1248	0.05 U	0.27 U	0.05 U	0.052 U
PCB-1254	0.05 U	0.27 U	0.05 U	0.052 U
PCB-1260	0.05 U	0.071 J	0.05 U	0.052 U

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	C-4 *	C-4	C-4	C-4
Aroclor ↓				
PCB-1248	0.05 U	0.053	0.056 U	0.053 U
PCB-1254	0.047 J	0.036 J	0.045 J	0.053 U
PCB-1260	0.021 J	0.037 J	0.045 J	0.021 J

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	E-23 *	E-23 **	E-23 **	E-23
Aroclor ↓				
PCB-1248	0.05 U	0.27 U	0.26 U	0.051 U
PCB-1254	0.05 U	0.27 U	0.26 U	0.051 U
PCB-1260	0.05 U	0.14 J	0.26 U	0.030 J

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	G-6 *	G-6	G-6	G-6
Aroclor ↓				
PCB-1248	0.05 U	0.053	0.053	0.052 U
PCB-1254	0.05 U	0.053	0.053	0.052 U
PCB-1260	0.05 U	0.015 J	0.012 J	0.013 J



Table 1  
 Building TR-1 Rooftop Runoff Sample Locations  
 Carrier Corporation, Syracuse, New York

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	H-10 *	H-10	H-10**	H-10
Aroclor ↓				
PCB-1248	0.05 U	0.053	0.5 U	0.055 U
PCB-1254	0.05 U	0.053	0.5 U	0.055 U
PCB-1260	0.05 U	0.042 J	0.11 J	0.055 U
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	J-12 *	J-12	J-12	J-12
Aroclor ↓				
PCB-1248	0.05 U	NS	NS	NS
PCB-1254	0.05 U	NS	NS	NS
PCB-1260	0.05 U	NS	NS	NS
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	J-19 *	J-19 **	J-19	J-19
Aroclor ↓				
PCB-1248	0.05 U	0.27 U	.055 U	0.054 U
PCB-1254	0.05 U	0.27 U	.055 U	0.054 U
PCB-1260	0.05 U	0.14 J	0.015 J	0.024 J
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	K-4 *	K-4	K-4	K-4
Aroclor ↓				
PCB-1248	0.05 U	NS	0.059 U	NS
PCB-1254	0.05 U	NS	0.059 U	NS
PCB-1260	0.05 U	NS	0.059 U	NS
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	K-12	K-12 **	K-12 **	K-12
Aroclor ↓				
PCB-1248	NS	0.68 U	0.25	0.053 U
PCB-1254	NS	0.42 J	0.25	0.053 U
PCB-1260	NS	1.4	0.13 J	0.26



Table 1  
Building TR-1 Rooftop Runoff Sample Locations  
Carrier Corporation, Syracuse, New York

Sample Date → Leader Sampled → Aroclor ↓	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
	L-4	L-4	L-4	L-4
PCB-1248	NS	0.05 U	NS	0.052 U
PCB-1254	NS	0.05 U	NS	0.052 U
PCB-1260	NS	0.05 U	NS	0.052 U

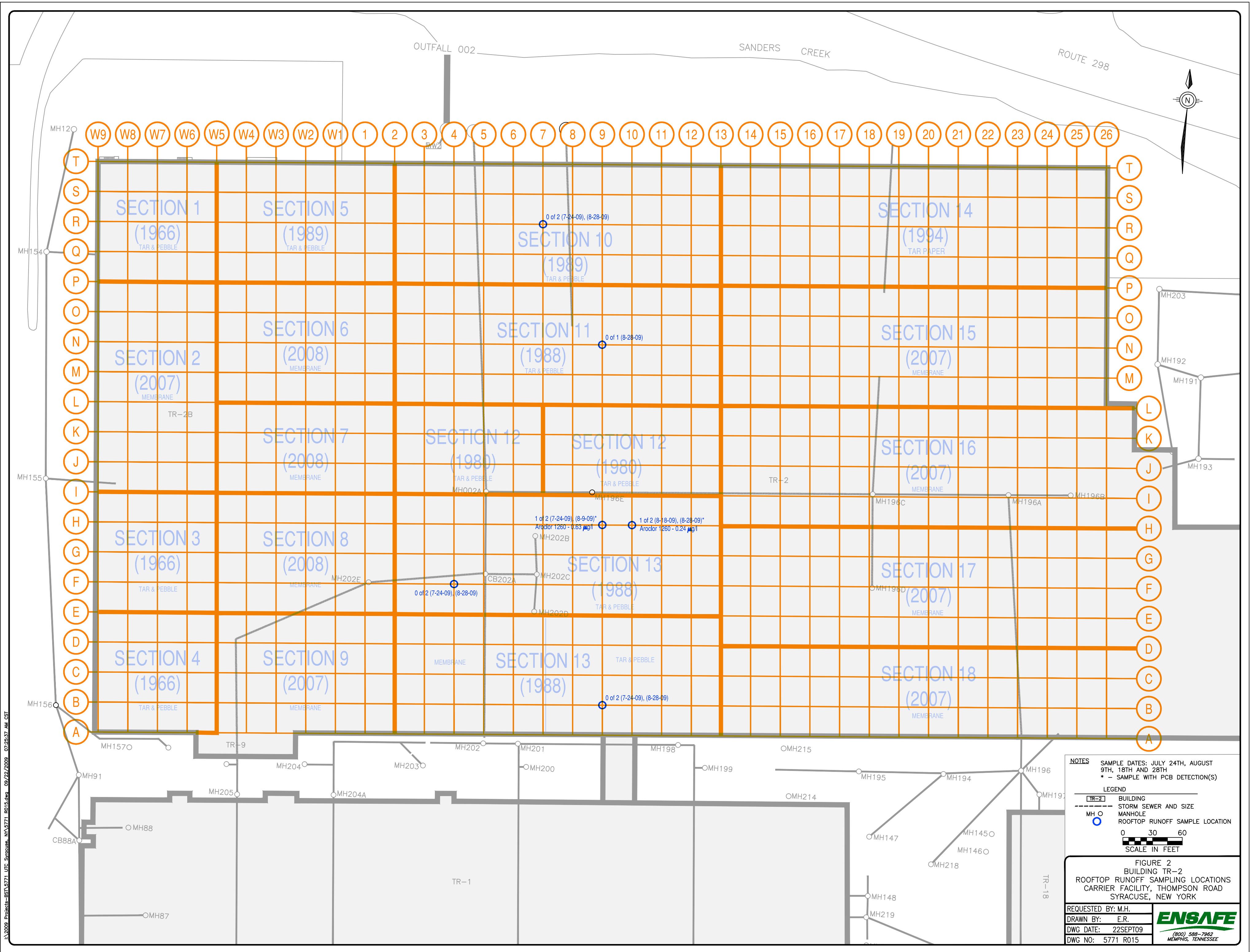
**Notes:**

\*These samples were received by lab with insufficient volume for full volume extraction. See laboratory data package included as Appendix A of this report.

\*\*Due to the matrix, these samples could not be concentrated to the final method required volume. See laboratory data package included as Appendix A of this report.

**Building TR-2:** The most recent information on the roof construction of Building TR-2 shows the roof was replaced or re-covered in up to 18 sections from 1966 to 2007, using tar and pebble construction, a single-ply synthetic membrane, or tar paper only. This roof has approximately 100 roof drain inlets and manholes that ultimately carry rooftop runoff to the site-wide storm lines. The drainage sections associated with these inlets are not readily apparent. Initial runoff sampling focused on the sections of the roof constructed of tar and pebble in the central portion (north/south) of the TR-2 roof. Samples were taken at the inlet to the roof leader. Six locations were sampled over a 35-day period on July 24, August 9, August 18, and August 28, 2009, with some locations sampled less frequently (**Figure 2 – Building TR-2 Sample Locations**). Table 2 summarizes the data collected during this time period.





JA2009 Projects-8571-UTG Structures, NY 5771 R015.dwg 09/22/2009 07:25:37 AM CST

**NOTES**  
SAMPLE DATES: JULY 24TH, AUGUST 9TH, 18TH AND 28TH  
\* - SAMPLE WITH PCB DETECTION(S)

**LEGEND**  
TR-2 BUILDING  
--- STORM SEWER AND SIZE  
MH O MANHOLE  
O ROOFTOP RUNOFF SAMPLE LOCATION  
0 30 60  
SCALE IN FEET

**FIGURE 2**  
BUILDING TR-2  
ROOFTOP RUNOFF SAMPLING LOCATIONS  
CARRIER FACILITY, THOMPSON ROAD  
SYRACUSE, NEW YORK

REQUESTED BY: M.H.  
DRAWN BY: E.R.  
DWG DATE: 22SEPT09  
DWG NO: 5771 R015

**ENSAFÉ**  
(800) 588-7962  
MEMPHIS, TENNESSEE



Table 2  
 Building TR-2 Rooftop Runoff Sample Locations  
 Carrier Corporation, Syracuse, New York

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	B-9	B-9	B-9	B-9
Aroclor ↓				
PCB-1248	0.05 U	0.051 U	NS	NS
PCB-1254	0.05 U	0.051 U	NS	NS
PCB-1260	0.028 J	0.019 J	NS	NS
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	F-4	F-4	F-4	F-4
Aroclor ↓				
PCB-1248	NS	NS	0.05 U	0.050 U
PCB-1254	NS	NS	0.05 U	0.043 J
PCB-1260	NS	NS	0.05 U	0.039 J
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	31-Aug-09
Leader Sampled→	H-9 **	H-9 **	H-9	H-9
Aroclor ↓				
PCB-1248	1.2 U	0.62 U	NS	NS
PCB-1254	1.2 U	0.62 U	NS	NS
PCB-1260	0.76 J	0.63	NS	NS
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	H-10	H-10	H-10	H-10
Aroclor ↓				
PCB-1248	NS	NS	0.051 U	0.10 U
PCB-1254	NS	NS	0.051 U	0.10 U
PCB-1260	NS	NS	0.051 U	0.24
Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	N-9	N-9	N-9	N-9
Aroclor ↓				
PCB-1248	NS	NS	0.05 U	0.053 U
PCB-1254	NS	NS	0.05 U	0.053 U
PCB-1260	NS	NS	0.05 U	0.026 J



Table 2  
Building TR-2 Rooftop Runoff Sample Locations  
Carrier Corporation, Syracuse, New York

Sample Date →	24-Jul-09	9-Aug-09	18-Aug-09	28-Aug-09
Leader Sampled→	R-7	R-7 **	R-7	R-7
Aroclor ↓				
PCB-1248	0.05 U	0.05 U	NS	NS
PCB-1254	0.05 U	0.05 U	NS	NS
PCB-1260	0.019 J	0.017 J	NS	NS

**Notes:**

\*These samples were received by lab with insufficient volume for full volume extraction. See laboratory data package included as Appendix A of this report.

\*\*Due to the matrix, these samples could not be concentrated to the final method required volume. See laboratory data package included as Appendix A of this report.

### 3.0 CONCLUSIONS

#### 3.1 Building TR-1

Rooftop runoff samples collected over a 35-day period found PCBs at concentrations above Carrier's SPDES Permit discharge goal (MDL) of 0.065 µg/L in 3 of 28 samples collected. The 3 detections were found at 2 sample locations, both in Section 2 of the TR-1 roof. None of the detections was above the permit discharge limit of 0.3 µg/L per Aroclor. These permit limits and goals do not apply directly to individual rooftop runoff discharges to the site-wide storm lines, but they provide a basis for evaluation of the data.

One of the goals of the rooftop runoff sampling program was to determine the feasibility of diverting runoff and discharging it directly to Sanders Creek. Segregation would reduce total runoff volume and peak flows, and thus overflows, at Outfall 002. Rooftop runoff samples from Sections 1 and 3 did not yield any PCB Aroclor above 0.065 µg/L, making these areas possible candidates for storm water diversion. However, 16 of the 28 samples, representing all but one drainage section (Section 1, samples K4 and L4) of the roof, were J-flagged in the laboratory report, indicating PCB was detected but not at a concentration that could be reliably quantified. Further evaluation of the data is required prior to determining if diversion would lessen the likelihood of PCBs being discharged to Sanders Creek. This evaluation is only the first step in the overall process for determining the feasibility and practicality of segregating this storm water for ultimate discharge to a new outfall. Other considerations include:

- Impact of diversion on Outfall 002 overflow frequency
- Impact (cost and construction feasibility) on end-of-pipe treatment system
- Cost of diversion project
- Permitting implications

Samples from Section 2 of Building TR-1 found PCBs above the SPDES permit discharge goal at 2 of 5 sample locations (3 of 8 samples). Runoff from this section of TR-1 will not be diverted unless the PCB is mitigated. Carrier will evaluate future actions for this section of the roof. Consideration will be given to the following:

- Additional runoff samples to determine the source of PCBs in the rooftop runoff (e.g., erosion of roofing materials or past use of portions of the roofing section).
- Roofing construction (i.e., specific materials used) and samples from roofing materials

- Impact of Section 2 runoff on overflows and end-of-pipe treatment system

A second goal of the rooftop sampling program was to determine the feasibility of remediating the roofing materials. The evaluations for the sections of roof mentioned above will aid in future decisions regarding the handling of rooftop runoff.

### 3.2 Building TR-2

Rooftop runoff samples collected over a 35-day period found PCBs at concentrations above Carrier's SPDES Permit discharge goal of 0.065 µg/L in 2 of 12 samples collected. The 2 detections were found at 2 sample locations, both in Section 13 of the TR-2 roof. One of the 2 detections was above the permit discharge limit of 0.3 µg/L per Aroclor at 0.63 µg/L (sample location H9). Rooftop runoff samples from Sections 10, 11, and the southern portion of Section 13 (sample locations F4 and B9), did not detect an Aroclor above 0.065 µg/L, making these areas possible candidates for storm water diversion. However, 7 samples, representing all sections sampled except Section 13 of the roof, were J-flagged. Further evaluation of the data is required prior to determining if diversion would lessen the likelihood of PCBs being discharged to Sanders Creek. This evaluation is only the first step in the overall process for determining the feasibility and practicality of segregating this storm water for ultimate discharge to a new outfall. Other considerations include:

- Impact of diversion on Outfall 002 overflow frequency
- Impact (cost and construction feasibility) on end-of-pipe treatment system
- Cost of diversion project
- Permitting implications

Two of 4 samples from the northern portion of Section 13 (sample locations H9 and H10) of Building TR-2 yielded an Aroclor above 0.065 µg/L. Runoff from this section of TR-2 will not be diverted, unless mitigation can be implemented. Carrier will evaluate future actions for this section of the roof. Consideration will be given to the following:

- Additional runoff samples to determine the source of PCBs in the rooftop runoff (e.g., erosion of roofing materials or past use of portions of the roofing section).
- Additional runoff samples from older sections of the roof constructed of tar and pebble materials



- Roofing construction (i.e., specific materials used) and samples from roofing materials
- Impact of Section 13 runoff on overflows and end-of-pipe treatment system
- Additional runoff samples from Sections 1 through 9 and Sections 14 through 18, to determine if runoff from these portions of the rooftop can be considered for diversion

A second goal of the rooftop sampling program was to determine the feasibility of remediating the roofing materials. The evaluations for the sections of roof mentioned above will aid in future decisions regarding the handling of rooftop runoff.

### **3.3 Additional Rooftop Sampling Program**

As mentioned in Sections 3.1 and 3.2, additional runoff samples will be obtained from Buildings TR-1 and TR-2 to either determine the source of PCBs in the runoff (Building TR-1) or to better define portions of the rooftop that may be candidates for diversion or remediation (Building TR-2).

Because PCBs were found in runoff from these buildings, Carrier will expand the sampling program to include other buildings whose rooftop runoff discharges to Outfall 002. These buildings include TR-18, TR-18S, TR-6, TR-7, TR-8, TR-10, TR-11, TR-12, TR-13, TR-14, and TR-23.

**Appendix A**  
**Rooftop Runoff Laboratory Data**

July 24, 2009  
August 9, 2009  
August 18, 2009  
August 28, 2009

## ANALYTICAL REPORT

Job Number: 220-9737-1

SDG Number: 220-9737

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:

Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221

Attention: Mr. Nelson Wong



Approved for release.  
Jill M Duhancik  
Project Manager I  
7/31/2009 4:47 PM

---

Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
07/31/2009

cc: Mr. Thomas Green  
Ms. May Heflin

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

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**Job Narrative**  
**220-J9737-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

Method(s) 608: Surrogate recovery for the following sample(s) was outside of acceptance limits: TR2 LEADER B-9 (220-9737-1), TR2 LEADER R-7 (220-9737-3). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

No other analytical or quality issues were noted.

**Organic Prep**

Method(s) 608: Samples TR1 LEADER B-19 (220-9737-10), TR1 LEADER C-4 (220-9737-11), TR1 LEADER E-23 (220-9737-7), TR1 LEADER G-6 (220-9737-9), TR1 LEADER H-10 (220-9737-8), TR1 LEADER J-12 (220-9737-5), TR1 LEADER J-19 (220-9737-6), TR1 LEADER K-4 (220-9737-4) were recieved with insufficient volume for full volume extraction. Samples are being extracted at 1L, and will be brought to a final volume of 1mL, for LL PCB analysis.

Method(s) 608: Due to the matrix, the following sample could not be concentrated to the final method required volume: TR2 LEADER H-9 (220-9737-2). The reporting limit (RL) is elevated proportionately. The sample was brought to a final volume of 50mL for Low Level PCB analysis.

No other analytical or quality issues were noted.

## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-9737-1	TR2 LEADER B-9	Water	07/24/2009 1400	07/29/2009 1000
220-9737-2	TR2 LEADER H-9	Water	07/24/2009 1400	07/29/2009 1000
220-9737-3	TR2 LEADER R-7	Water	07/24/2009 1400	07/29/2009 1000
220-9737-4	TR1 LEADER K-4	Water	07/24/2009 1400	07/29/2009 1000
220-9737-5	TR1 LEADER J-12	Water	07/24/2009 1400	07/29/2009 1000
220-9737-6	TR1 LEADER J-19	Water	07/24/2009 1400	07/29/2009 1000
220-9737-7	TR1 LEADER E-23	Water	07/24/2009 1400	07/29/2009 1000
220-9737-8	TR1 LEADER H-10	Water	07/24/2009 1400	07/29/2009 1000
220-9737-9	TR1 LEADER G-6	Water	07/24/2009 1400	07/29/2009 1000
220-9737-10	TR1 LEADER B-19	Water	07/24/2009 1400	07/29/2009 1000
220-9737-11	TR1 LEADER C-4	Water	07/24/2009 1400	07/29/2009 1000

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR2 LEADER B-9

Lab Sample ID: 220-9737-1

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	07/30/2009 2000		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.028	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	20	*	28 - 139
Tetrachloro-m-xylene	39	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR2 LEADER H-9**

Lab Sample ID: 220-9737-2

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	50.0 mL
Date Analyzed:	07/30/2009 2019		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	1.2	U *	0.38	1.2
PCB-1221	1.2	U	0.38	1.2
PCB-1232	1.2	U	0.38	1.2
PCB-1242	1.2	U	0.38	1.2
PCB-1248	1.2	U	0.38	1.2
PCB-1254	1.2	U	0.38	1.2
PCB-1260	0.76	J	0.28	1.2

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	0	*	28 - 139
Tetrachloro-m-xylene	0	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR2 LEADER R-7

Lab Sample ID: 220-9737-3

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	07/30/2009 2038		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.019	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	14	*	28 - 139
Tetrachloro-m-xylene	37	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR1 LEADER K-4**

Lab Sample ID: 220-9737-4

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2057		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	27	*	28 - 139
Tetrachloro-m-xylene	106		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR1 LEADER J-12**

Lab Sample ID: 220-9737-5

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2116		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	18	*	28 - 139
Tetrachloro-m-xylene	47		45 - 129



**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER J-19

Lab Sample ID: 220-9737-6

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2135		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	16	*	28 - 139
Tetrachloro-m-xylene	50		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR1 LEADER E-23**

Lab Sample ID: 220-9737-7

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2154		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	21	*	28 - 139
Tetrachloro-m-xylene	50		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR1 LEADER H-10**

Lab Sample ID: 220-9737-8

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2251		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	90		28 - 139
Tetrachloro-m-xylene	97		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR1 LEADER G-6**

Lab Sample ID: 220-9737-9

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2310		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	71		28 - 139
Tetrachloro-m-xylene	91		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR1 LEADER B-19**

Lab Sample ID: 220-9737-10

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2329		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	78		28 - 139
Tetrachloro-m-xylene	89		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Client Sample ID: TR1 LEADER C-4**

Lab Sample ID: 220-9737-11

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2348		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1449		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.047	J	0.015	0.050
PCB-1260	0.021	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	49		28 - 139
Tetrachloro-m-xylene	82		45 - 129

## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Lab Section	Qualifier	Description
GC Semi VOA		
	*	RPD of the LCS and LCSD exceeds the control limits
	*	Surrogate exceeds the control limit
	J	Indicates an estimated value.
	U	Analyzed for but not detected.

## Chain of Custody Record

9737

TAL-4142 (0907)

Client		Project Manager		Date		Chain of Custody Number	
EN SAFE Inc		May HEFLIN		07/28/09		391596	
Address		Telephone Number (Area Code)/Fax Number		Lab Number		Page	
230 ATHENS WAY		615 255, 9300		CONN		1 of 1	
City		Site Contact		Analysis (Attach list if more space is needed)		Special Instructions/ Conditions of Receipt	
Nashville TN 37228		M. Wong		TOTAL PCBs		Samples # 4-11 have 2-1 liter Ambers, 1 Amber per sample is only 1/2 filled. (18) 7/29/09	
Project Name and Location (State)		Carrier/Waybill Number		Containers & Preservatives			
WARRIOR SYNTHETIC ROOF RUNOFF (NY)							
Contract/Purchase Order/Quote No.		Matrix		Containers & Preservatives			
EN SAFE Job 0888805771, PHASE II							
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Soil	Unpres.	H2SO4
1 TR2 LEADER B-9	07/24/09	14:00	X	X	X	X	X
2 TR2 LEADER H-9			X	X	X	X	X
3 TR2 LEADER R-7			X	X	X	X	X
4 TR1 LEADER K-4			X	X	X	X	X
5 TR1 LEADER J-12			X	X	X	X	X
6 TR1 LEADER J-19			X	X	X	X	X
7 TR1 LEADER E-23			X	X	X	X	X
8 TR1 LEADER H-10			X	X	X	X	X
9 TR1 LEADER G-6			X	X	X	X	X
10 TR1 LEADER B-19			X	X	X	X	X
11 TR1 LEADER C-4			X	X	X	X	X

Possible Hazard Identification		Sample Disposal	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B
<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
Turn Around Time Required		QC Requirements (Specify)	
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days
<input type="checkbox"/> 21 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other	
1. Relinquished By		1. Received By	
R. E. G. L. S. G. R.		J. Blocker	
Date 07/28/09		Date 7/29/09	
Time 18:00		Time 1000	
2. Relinquished By		2. Received By	
Date		Date	
Time		Time	
3. Relinquished By		3. Received By	
Date		Date	
Time		Time	
Comments		passed rad screen	
Precipitation on sample date was 0.31 inches, R.E., 1.20°C, 4.40°C gun #1			



## ANALYTICAL REPORT

Job Number: 220-9737-1

SDG Number: 220-9737

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:

Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221

Attention: Mr. Nelson Wong



Approved for release.  
Joan Widomski  
8/5/2009 9:18 AM

---

Designee for  
Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
08/05/2009

cc: Mr. Thomas Green  
Ms. May Heflin

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

**TestAmerica Laboratories, Inc.**

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 [www.testamericainc.com](http://www.testamericainc.com)



**Job Narrative**  
**220-J9737-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

Method(s) 608: Surrogate recovery for the following sample(s) was outside of acceptance limits: TR2 LEADER B-9 (220-9737-1), TR2 LEADER R-7 (220-9737-3). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

No other analytical or quality issues were noted.

**Organic Prep**

Method(s) 608: Samples TR1 LEADER B-19 (220-9737-10), TR1 LEADER C-4 (220-9737-11), TR1 LEADER E-23 (220-9737-7), TR1 LEADER G-6 (220-9737-9), TR1 LEADER H-10 (220-9737-8), TR1 LEADER J-12 (220-9737-5), TR1 LEADER J-19 (220-9737-6), TR1 LEADER K-4 (220-9737-4) were recieved with insufficient volume for full volume extraction. Samples are being extracted at 1L, and will be brought to a final volume of 1mL, for LL PCB analysis.

Method(s) 608: Due to the matrix, the following sample could not be concentrated to the final method required volume: TR2 LEADER H-9 (220-9737-2). The reporting limit (RL) is elevated proportionately. The sample was brought to a final volume of 50mL for Low Level PCB analysis.

No other analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
<b>220-9737-1</b> PCB-1260	<b>TR2 LEADER B-9</b>	0.028	J	0.050	ug/L	608
<b>220-9737-2</b> PCB-1260	<b>TR2 LEADER H-9</b>	0.76	J	1.2	ug/L	608
<b>220-9737-3</b> PCB-1260	<b>TR2 LEADER R-7</b>	0.019	J	0.050	ug/L	608
<b>220-9737-11</b> PCB-1254 PCB-1260	<b>TR1 LEADER C-4</b>	0.047 0.021	J J	0.050 0.050	ug/L ug/L	608 608

## METHOD SUMMARY

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Organochlorine Pesticides & PCBs (GC)	TAL CT	40CFR136A 608	
Liquid-Liquid Extraction (Separtory Funnel)	TAL CT		40CFR136A 608

### Lab References:

TAL CT = TestAmerica Connecticut

### Method References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

## METHOD / ANALYST SUMMARY

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Method	Analyst	Analyst ID
40CFR136A 608	Smith, Karli	KS

## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-9737-1	TR2 LEADER B-9	Water	07/24/2009 1400	07/29/2009 1000
220-9737-2	TR2 LEADER H-9	Water	07/24/2009 1400	07/29/2009 1000
220-9737-3	TR2 LEADER R-7	Water	07/24/2009 1400	07/29/2009 1000
220-9737-4	TR1 LEADER K-4	Water	07/24/2009 1400	07/29/2009 1000
220-9737-5	TR1 LEADER J-12	Water	07/24/2009 1400	07/29/2009 1000
220-9737-6	TR1 LEADER J-19	Water	07/24/2009 1400	07/29/2009 1000
220-9737-7	TR1 LEADER E-23	Water	07/24/2009 1400	07/29/2009 1000
220-9737-8	TR1 LEADER H-10	Water	07/24/2009 1400	07/29/2009 1000
220-9737-9	TR1 LEADER G-6	Water	07/24/2009 1400	07/29/2009 1000
220-9737-10	TR1 LEADER B-19	Water	07/24/2009 1400	07/29/2009 1000
220-9737-11	TR1 LEADER C-4	Water	07/24/2009 1400	07/29/2009 1000

# **SAMPLE RESULTS**

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR2 LEADER B-9

Lab Sample ID: 220-9737-1

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-29512	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	07/30/2009 2000		Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.028	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	20	*	28 - 139
Tetrachloro-m-xylene	39	*	45 - 129



## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR2 LEADER H-9

Lab Sample ID: 220-9737-2

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	2000 mL
Dilution:	1.0			Final Weight/Volume:	50.0 mL
Date Analyzed:	07/30/2009 2019			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	1.2	U *	0.38	1.2
PCB-1221	1.2	U	0.38	1.2
PCB-1232	1.2	U	0.38	1.2
PCB-1242	1.2	U	0.38	1.2
PCB-1248	1.2	U	0.38	1.2
PCB-1254	1.2	U	0.38	1.2
PCB-1260	0.76	J	0.28	1.2

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	0	*	28 - 139
Tetrachloro-m-xylene	0	*	45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR2 LEADER R-7

Lab Sample ID: 220-9737-3

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	2000 mL
Dilution:	1.0			Final Weight/Volume:	2.0 mL
Date Analyzed:	07/30/2009 2038			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.019	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	14	*	28 - 139
Tetrachloro-m-xylene	37	*	45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER K-4

Lab Sample ID: 220-9737-4

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2057			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	27	*	28 - 139
Tetrachloro-m-xylene	106		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER J-12

Lab Sample ID: 220-9737-5

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2116			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	18	*	28 - 139
Tetrachloro-m-xylene	47		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER J-19

Lab Sample ID: 220-9737-6

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2135			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	16	*	28 - 139
Tetrachloro-m-xylene	50		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER E-23

Lab Sample ID: 220-9737-7

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2154			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	21	*	28 - 139
Tetrachloro-m-xylene	50		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER H-10

Lab Sample ID: 220-9737-8

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2251			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	90		28 - 139
Tetrachloro-m-xylene	97		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER G-6

Lab Sample ID: 220-9737-9

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2310			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	71		28 - 139
Tetrachloro-m-xylene	91		45 - 129



## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER B-19

Lab Sample ID: 220-9737-10

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2329			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1423			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	78		28 - 139
Tetrachloro-m-xylene	89		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Client Sample ID: TR1 LEADER C-4

Lab Sample ID: 220-9737-11

Date Sampled: 07/24/2009 1400

Client Matrix: Water

Date Received: 07/29/2009 1000

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-29606	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-29512	Initial Weight/Volume:	1000 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Date Analyzed:	07/30/2009 2348			Injection Volume:	1 uL
Date Prepared:	07/29/2009 1449			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U *	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.047	J	0.015	0.050
PCB-1260	0.021	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	49		28 - 139
Tetrachloro-m-xylene	82		45 - 129

## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	RPD of the LCS and LCSD exceeds the control limits
	*	Surrogate exceeds the control limit

# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC Semi VOA</b>					
<b>Prep Batch: 220-29512</b>					
LCS 220-29512/2-A	Lab Control Sample	T	Water	608	
LCSD 220-29512/3-A	Lab Control Sample Duplicate	T	Water	608	
MB 220-29512/1-A	Method Blank	T	Water	608	
220-9737-1	TR2 LEADER B-9	T	Water	608	
220-9737-2	TR2 LEADER H-9	T	Water	608	
220-9737-3	TR2 LEADER R-7	T	Water	608	
220-9737-4	TR1 LEADER K-4	T	Water	608	
220-9737-5	TR1 LEADER J-12	T	Water	608	
220-9737-6	TR1 LEADER J-19	T	Water	608	
220-9737-7	TR1 LEADER E-23	T	Water	608	
220-9737-8	TR1 LEADER H-10	T	Water	608	
220-9737-9	TR1 LEADER G-6	T	Water	608	
220-9737-10	TR1 LEADER B-19	T	Water	608	
220-9737-11	TR1 LEADER C-4	T	Water	608	
<b>Analysis Batch:220-29606</b>					
LCS 220-29512/2-A	Lab Control Sample	T	Water	608	220-29512
LCSD 220-29512/3-A	Lab Control Sample Duplicate	T	Water	608	220-29512
MB 220-29512/1-A	Method Blank	T	Water	608	220-29512
220-9737-1	TR2 LEADER B-9	T	Water	608	220-29512
220-9737-2	TR2 LEADER H-9	T	Water	608	220-29512
220-9737-3	TR2 LEADER R-7	T	Water	608	220-29512
220-9737-4	TR1 LEADER K-4	T	Water	608	220-29512
220-9737-5	TR1 LEADER J-12	T	Water	608	220-29512
220-9737-6	TR1 LEADER J-19	T	Water	608	220-29512
220-9737-7	TR1 LEADER E-23	T	Water	608	220-29512
220-9737-8	TR1 LEADER H-10	T	Water	608	220-29512
220-9737-9	TR1 LEADER G-6	T	Water	608	220-29512
220-9737-10	TR1 LEADER B-19	T	Water	608	220-29512
220-9737-11	TR1 LEADER C-4	T	Water	608	220-29512

#### Report Basis

T = Total

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

### Surrogate Recovery Report

#### 608 Organochlorine Pesticides & PCBs (GC)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCB2 %Rec	TCX2 %Rec
220-9737-1	TR2 LEADER B-9	20*	39*
220-9737-2	TR2 LEADER H-9	0*	0*
220-9737-3	TR2 LEADER R-7	14*	37*
220-9737-4	TR1 LEADER K-4	27*	106
220-9737-5	TR1 LEADER J-12	18*	47
220-9737-6	TR1 LEADER J-19	16*	50
220-9737-7	TR1 LEADER E-23	21*	50
220-9737-8	TR1 LEADER H-10	90	97
220-9737-9	TR1 LEADER G-6	71	91
220-9737-10	TR1 LEADER B-19	78	89
220-9737-11	TR1 LEADER C-4	49	82
MB 220-29512/1-A		45	49
LCS 220-29512/2-A		43	46
LCSD 220-29512/3-A		50	60

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	28-139
TCX = Tetrachloro-m-xylene	45-129

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

### Method Blank - Batch: 220-29512

Method: 608

Preparation: 608

Lab Sample ID: MB 220-29512/1-A

Client Matrix: Water

Dilution: 1.0

Date Analyzed: 07/30/2009 1903

Date Prepared: 07/29/2009 1423

Analysis Batch: 220-29606

Prep Batch: 220-29512

Units: ug/L

Instrument ID: HP 6890 dual ECD

Lab File ID: D9044028.D

Initial Weight/Volume: 2000 mL

Final Weight/Volume: 2.0 mL

Injection Volume: 1 uL

Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	45	28 - 139
Tetrachloro-m-xylene	49	45 - 129

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9737-1

Sdg Number: 220-9737

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 220-29512**

**Method: 608  
Preparation: 608**

LCS Lab Sample ID: LCS 220-29512/2-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 07/30/2009 1922  
Date Prepared: 07/29/2009 1423

Analysis Batch: 220-29606  
Prep Batch: 220-29512  
Units: ug/L

Instrument ID: HP 6890 dual ECD  
Lab File ID: D9044029.D  
Initial Weight/Volume: 2000 mL  
Final Weight/Volume: 2.0 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 220-29512/3-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 07/30/2009 1941  
Date Prepared: 07/29/2009 1423

Analysis Batch: 220-29606  
Prep Batch: 220-29512  
Units: ug/L

Instrument ID: HP 6890 dual ECD  
Lab File ID: D9044030.D  
Initial Weight/Volume: 2000 mL  
Final Weight/Volume: 2.0 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
PCB-1016	52	77	50 - 114	38	30		*
PCB-1260	48	63	32 - 119	28	30		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
DCB Decachlorobiphenyl	43		50		28 - 139		
Tetrachloro-m-xylene	46		60		45 - 129		

Calculations are performed before rounding to avoid round-off errors in calculated results.



9737

## Chain of Custody Record

TAL-4142 (0907)

Client		Project Manager		Date		Chain of Custody Number	
ENSAFE Inc		May H. E. F. W.		07/28/09		391596	
Address		Telephone Number (Area Code)/Fax Number		Lab Number		Page	
280 ATHENS WAY		615. 255. 9300		CONN		1 of 1	
City		Site Contact		Analysis (Attach list if more space is needed)		Special Instructions/ Conditions of Receipt	
Nashville TN		N. Wong		Total PCBs		Samples # 4-11 have 2-1 liter Ambers, 1 Amber per Sample is only 1/2 filled.	
State		Carrier/Waybill Number		Containers & Preservatives			
Zip Code				Matrix			
37208 (NY)				Air			
Project Name and Location (State)		Contract/Purchase Order/Quote No.		Time			
WATER SPRAYING ROOF RUNOFF		ENSAFE Job 0888805771, Phase II		Date			
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date		Time			
TR2 LEADER B-9		07/24/09		14:00			
TR2 LEADER H-9							
TR2 LEADER R-7							
TR1 LEADER K-4							
TR1 LEADER J-12							
TR1 LEADER J-19							
TR1 LEADER E-23							
TR1 LEADER H-10							
TR1 LEADER G-6							
TR1 LEADER B-19							
TR1 LEADER C-4							

Possible Hazard Identification		Sample Disposal		QC Requirements (Specify)	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client
Turn Around Time Required		Disposal By Lab		Archive For	
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other
1. Relinquished By		Date		Time	
R. Engle, Sr.		07/28/09		18:00	
2. Relinquished By		Date		Time	
oo					
3. Relinquished By		Date		Time	
Comments		Date		Time	
Precipitation on sample date was 0.31 inches. R.E. 1.20g 1.00g 4.40g gun#1					
DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy		Date		Time	
passed rad screen		Date		Time	

220-9737  
Ensafe-UTC

Air:

Date Received: 7/29/09

Sample #s: 1-11

Locations: CMC

Water: 1-11

[illegible]

## Login Sample Receipt Check List

Client: TestAmerica Connecticut

Job Number: 220-9737-1

SDG Number: 220-9737

**Login Number: 9737**

**List Source: TestAmerica Connecticut**

**Creator: Blocker, Kristina**

**List Number: 1**

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2C,1.0C,4.4C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	#4-11, see coc notes.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

[REDACTED]

**Client**

\_\_\_\_\_

THE LEADER IN ENVIRONMENTAL TESTING

### Comments

Comments Precipitation on sample date was 0.31 inches, R.E.

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

## ANALYTICAL REPORT

Job Number: 220-9851-1

SDG Number: 220-9851

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:

Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221

Attention: Mr. Nelson Wong



Approved for release.  
Jill M Duhancik  
Project Manager I  
8/17/2009 11:21 AM

---

Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
08/17/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

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**Job Narrative**  
**220-J9851-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

Method(s) 608: Surrogate recovery for the following samples was outside of acceptance limits: TR1-C4 (220-9851-2), TR1-G6 (220-9851-4). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

No other analytical or quality issues were noted.

**Organic Prep**

Method(s) 608: Due to the matrix, the following samples could not be concentrated to the final method required volume: TR1-B19 (220-9851-1), TR1-E23 (220-9851-3), TR1-J19 (220-9851-6), TR2-R7 (220-9851-11). The reporting limits (RLs) are elevated proportionately. These samples were brought to a final volume of 10mL for Low Level PCB analysis.

Method(s) 608: Due to the matrix, the following samples could not be concentrated to the final method required volume: TR1-K12 (220-9851-7), TR2-H9 (220-9851-10). The reporting limits (RLs) are elevated proportionately. The samples were brought to a final volume of 25mL for Low Level PCB analysis.

No other analytical or quality issues were noted.

## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-9851-1	TR1-B19	Water	08/09/2009 2220	08/12/2009 1000
220-9851-2	TR1-C4	Water	08/09/2009 2200	08/12/2009 1000
220-9851-3	TR1-E23	Water	08/09/2009 2200	08/12/2009 1000
220-9851-4	TR1-G6	Water	08/09/2009 2200	08/12/2009 1000
220-9851-5	TR1-H10	Water	08/09/2009 2200	08/12/2009 1000
220-9851-6	TR1-J19	Water	08/09/2009 2200	08/12/2009 1000
220-9851-7	TR1-K12	Water	08/09/2009 2200	08/12/2009 1000
220-9851-8	TR1-L4	Water	08/09/2009 2200	08/12/2009 1000
220-9851-9	TR2-B9	Water	08/09/2009 2200	08/12/2009 1000
220-9851-10	TR2-H9	Water	08/09/2009 2200	08/12/2009 1000
220-9851-11	TR2-R7	Water	08/09/2009 2200	08/12/2009 1000



**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR1-B19

Lab Sample ID: 220-9851-1

Date Sampled: 08/09/2009 2220

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1880 mL
Dilution:	1.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	08/14/2009 0114		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.27	U	0.080	0.27
PCB-1221	0.27	U	0.080	0.27
PCB-1232	0.27	U	0.080	0.27
PCB-1242	0.27	U	0.080	0.27
PCB-1248	0.27	U	0.080	0.27
PCB-1254	0.27	U	0.080	0.27
PCB-1260	0.071	J	0.059	0.27

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	20	*	28 - 139
Tetrachloro-m-xylene	42	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR1-C4

Lab Sample ID: 220-9851-2

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1880 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	08/14/2009 0152		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.036	J	0.016	0.053
PCB-1260	0.037	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	18	*	28 - 139
Tetrachloro-m-xylene	41	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR1-E23

Lab Sample ID: 220-9851-3

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1870 mL
Dilution:	1.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	08/14/2009 0211		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.27	U	0.080	0.27
PCB-1221	0.27	U	0.080	0.27
PCB-1232	0.27	U	0.080	0.27
PCB-1242	0.27	U	0.080	0.27
PCB-1248	0.27	U	0.080	0.27
PCB-1254	0.27	U	0.080	0.27
PCB-1260	0.14	J	0.059	0.27

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	15	*	28 - 139
Tetrachloro-m-xylene	46		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID: TR1-G6**

Lab Sample ID: 220-9851-4

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1870 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	08/14/2009 0248		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.015	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	19	*	28 - 139
Tetrachloro-m-xylene	43	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR1-H10

Lab Sample ID: 220-9851-5

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1900 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	08/14/2009 0308		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.042	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	22	*	28 - 139
Tetrachloro-m-xylene	47		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR1-J19

Lab Sample ID: 220-9851-6

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1850 mL
Dilution:	1.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	08/14/2009 0404		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.27	U	0.081	0.27
PCB-1221	0.27	U	0.081	0.27
PCB-1232	0.27	U	0.081	0.27
PCB-1242	0.27	U	0.081	0.27
PCB-1248	0.27	U	0.081	0.27
PCB-1254	0.27	U	0.081	0.27
PCB-1260	0.14	J	0.059	0.27

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	15	*	28 - 139
Tetrachloro-m-xylene	35	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

Client Sample ID: TR1-K12

Lab Sample ID: 220-9851-7

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1840 mL
Dilution:	1.0		Final Weight/Volume:	25.0 mL
Date Analyzed:	08/14/2009 0442		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.68	U	0.20	0.68
PCB-1221	0.68	U	0.20	0.68
PCB-1232	0.68	U	0.20	0.68
PCB-1242	0.68	U	0.20	0.68
PCB-1248	0.68	U	0.20	0.68
PCB-1254	0.42	J	0.20	0.68
PCB-1260	1.4		0.15	0.68

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	25	*	28 - 139
Tetrachloro-m-xylene	31	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR1-L4

Lab Sample ID: 220-9851-8

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	08/14/2009 0520		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	69		28 - 139
Tetrachloro-m-xylene	79		45 - 129



**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR2-B9

Lab Sample ID: 220-9851-9

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1960 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	08/14/2009 0539		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.051	U	0.015	0.051
PCB-1221	0.051	U	0.015	0.051
PCB-1232	0.051	U	0.015	0.051
PCB-1242	0.051	U	0.015	0.051
PCB-1248	0.051	U	0.015	0.051
PCB-1254	0.051	U	0.015	0.051
PCB-1260	0.019	J	0.011	0.051

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	32		28 - 139
Tetrachloro-m-xylene	94		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR2-H9

Lab Sample ID: 220-9851-10

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	25.0 mL
Date Analyzed:	08/14/2009 0558		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.62	U	0.19	0.62
PCB-1221	0.62	U	0.19	0.62
PCB-1232	0.62	U	0.19	0.62
PCB-1242	0.62	U	0.19	0.62
PCB-1248	0.62	U	0.19	0.62
PCB-1254	0.62	U	0.19	0.62
PCB-1260	0.63		0.14	0.62

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	0	*	28 - 139
Tetrachloro-m-xylene	0	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

**Client Sample ID:** TR2-R7

Lab Sample ID: 220-9851-11

Date Sampled: 08/09/2009 2200

Client Matrix: Water

Date Received: 08/12/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30102	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30006	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	08/14/2009 0636		Injection Volume:	1 uL
Date Prepared:	08/12/2009 1346		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.15	0.50
PCB-1221	0.50	U	0.15	0.50
PCB-1232	0.50	U	0.15	0.50
PCB-1242	0.50	U	0.15	0.50
PCB-1248	0.50	U	0.15	0.50
PCB-1254	0.50	U	0.15	0.50
PCB-1260	0.17	J	0.11	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	34		28 - 139
Tetrachloro-m-xylene	76		45 - 129

## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-9851-1

Sdg Number: 220-9851

Lab Section	Qualifier	Description
GC Semi VOA		
	*	Surrogate exceeds the control limit
	J	Indicates an estimated value.
	U	Analyzed for but not detected.




\_\_\_\_\_

**Client**

\_\_\_\_\_

**THE LEADER IN ENVIRONMENTAL TESTING**

☐ Non-Hazard    ☐ Flammable    ☐ Skin Irritant    ☐ Poison B    ☐ Unknown

☐ Return To Client    ☐ Disposal By Lab    ☐ Archive For \_\_\_\_\_ Months

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☐ 24 Hours    ☐ 48 Hours    ☐ 7 Days    ☐ 14 Days    ☐ 21 Days    ☐ Other \_\_\_\_\_

100

1. Received By	Date	Time
2. Received By	Date	Time

Country	Year	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)	Population growth rate (%)	Urban population growth rate (%)	Population growth rate (%)	Urban population growth rate (%)	Population growth rate (%)	Urban population growth rate (%)
Algeria	1980	10.0	4.0	40.0	100.0	250.0	1.5	2.5	1.5	2.5	1.5	2.5
Algeria	1985	10.5	4.5	42.9	105.0	262.5	1.8	3.0	1.8	3.0	1.8	3.0
Algeria	1990	11.0	5.0	45.5	110.0	275.0	2.1	3.5	2.1	3.5	2.1	3.5
Algeria	1995	11.5	5.5	47.8	115.0	287.5	2.4	4.0	2.4	4.0	2.4	4.0
Algeria	2000	12.0	6.0	50.0	120.0	300.0	2.7	4.5	2.7	4.5	2.7	4.5
Algeria	2005	12.5	6.5	52.0	125.0	312.5	3.0	5.0	3.0	5.0	3.0	5.0
Algeria	2010	13.0	7.0	53.8	130.0	325.0	3.3	5.5	3.3	5.5	3.3	5.5
Algeria	2015	13.5	7.5	55.6	135.0	337.5	3.6	6.0	3.6	6.0	3.6	6.0
Algeria	2020	14.0	8.0	57.1	140.0	350.0	3.9	6.5	3.9	6.5	3.9	6.5
Algeria	2025	14.5	8.5	58.6	145.0	362.5	4.2	7.0	4.2	7.0	4.2	7.0
Algeria	2030	15.0	9.0	60.0	150.0	375.0	4.5	7.5	4.5	7.5	4.5	7.5
Algeria	2035	15.5	9.5	61.3	155.0	387.5	4.8	8.0	4.8	8.0	4.8	8.0
Algeria	2040	16.0	10.0	62.5	160.0	400.0	5.1	8.5	5.1	8.5	5.1	8.5
Algeria	2045	16.5	10.5	63.6	165.0	412.5	5.4	9.0	5.4	9.0	5.4	9.0
Algeria	2050	17.0	11.0	64.7	170.0	425.0	5.7	9.5	5.7	9.5	5.7	9.5
Algeria	2055	17.5	11.5	65.7	175.0	437.5	6.0	10.0	6.0	10.0	6.0	10.0
Algeria	2060	18.0	12.0	66.7	180.0	450.0	6.3	10.5	6.3	10.5	6.3	10.5
Algeria	2065	18.5	12.5	67.6	185.0	462.5	6.6	11.0	6.6	11.0	6.6	11.0
Algeria	2070	19.0	13.0	68.4	190.0	475.0	6.9	11.5	6.9	11.5	6.9	11.5
Algeria	2075	19.5	13.5	69.2	195.0	487.5	7.2	12.0	7.2	12.0	7.2	12.0
Algeria	2080	20.0	14.0	70.0	200.0	500.0	7.5	12.5	7.5	12.5	7.5	12.5
Algeria	2085	20.5	14.5	70.7	205.0	512.5	7.8	13.0	7.8	13.0	7.8	13.0
Algeria	2090	21.0	15.0	71.4	210.0	525.0	8.1	13.5	8.1	13.5	8.1	13.5
Algeria	2095	21.5	15.5	72.1	215.0	537.5	8.4	14.0	8.4	14.0	8.4	14.0
Algeria	2100	22.0	16.0	72.7	220.0	550.0	8.7	14.5	8.7	14.5	8.7	14.5
Algeria	2105	22.5	16.5	73.3	225.0	562.5	9.0	15.0	9.0	15.0	9.0	15.0
Algeria	2110	23.0	17.0	73.9	230.0	575.0	9.3	15.5	9.3	15.5	9.3	15.5
Algeria	2115	23.5	17.5	74.5	235.0	587.5	9.6	16.0	9.6	16.0	9.6	16.0
Algeria	2120	24.0	18.0	75.0	240.0	600.0	9.9	16.5	9.9	16.5	9.9	16.5
Algeria	2125	24.5	18.5	75.5	245.0	612.5	10.2					

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

## ANALYTICAL REPORT

Job Number: 220-9924-1

SDG Number: 220-9924

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:

Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221

Attention: Mr. Nelson Wong



Approved for release.  
Jill M Duhancik  
Project Manager I  
8/24/2009 1:52 PM

---

Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
08/24/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

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## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-9924-1	TR1 B-19	Water	08/18/2009 1600	08/21/2009 0932
220-9924-2	TR1 C-4	Water	08/18/2009 1600	08/21/2009 0932
220-9924-3	TR1 E-23	Water	08/18/2009 1600	08/21/2009 0932
220-9924-4	TR1 G-6	Water	08/18/2009 1600	08/21/2009 0932
220-9924-5	TR1 H-10	Water	08/18/2009 1600	08/21/2009 0932
220-9924-6	TR1 J-19	Water	08/18/2009 1600	08/21/2009 0932
220-9924-7	TR1 K-4	Water	08/18/2009 1600	08/21/2009 0932
220-9924-8	TR1 K-12	Water	08/18/2009 1600	08/21/2009 0932
220-9924-9	TR2 F-4	Water	08/18/2009 1600	08/21/2009 0932
220-9924-10	TR2 H-10	Water	08/18/2009 1600	08/21/2009 0932
220-9924-11	TR2 N-9	Water	08/18/2009 1600	08/21/2009 0932

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR1 B-19

Lab Sample ID: 220-9924-1

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1139		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	12	*	28 - 139
Tetrachloro-m-xylene	47		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR1 C-4

Lab Sample ID: 220-9924-2

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1800 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1158		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.056	U	0.017	0.056
PCB-1221	0.056	U	0.017	0.056
PCB-1232	0.056	U	0.017	0.056
PCB-1242	0.056	U	0.017	0.056
PCB-1248	0.056	U	0.017	0.056
PCB-1254	0.045	J	0.017	0.056
PCB-1260	0.045	J	0.012	0.056

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	16	*	28 - 139
Tetrachloro-m-xylene	48		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR1 E-23

Lab Sample ID: 220-9924-3

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1910 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	08/23/2009 1217		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.26	U	0.079	0.26
PCB-1221	0.26	U	0.079	0.26
PCB-1232	0.26	U	0.079	0.26
PCB-1242	0.26	U	0.079	0.26
PCB-1248	0.26	U	0.079	0.26
PCB-1254	0.26	U	0.079	0.26
PCB-1260	0.26	U	0.058	0.26

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	6	*	28 - 139
Tetrachloro-m-xylene	17	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 G-6

Lab Sample ID: 220-9924-4

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1870 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1236		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.012	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	9	*	28 - 139
Tetrachloro-m-xylene	37	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR1 H-10

Lab Sample ID: 220-9924-5

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	08/23/2009 1255		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.15	0.50
PCB-1221	0.50	U	0.15	0.50
PCB-1232	0.50	U	0.15	0.50
PCB-1242	0.50	U	0.15	0.50
PCB-1248	0.50	U	0.15	0.50
PCB-1254	0.50	U	0.15	0.50
PCB-1260	0.11	J	0.11	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	28		28 - 139
Tetrachloro-m-xylene	55		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR1 J-19

Lab Sample ID: 220-9924-6

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1820 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1314		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.055	U	0.016	0.055
PCB-1221	0.055	U	0.016	0.055
PCB-1232	0.055	U	0.016	0.055
PCB-1242	0.055	U	0.016	0.055
PCB-1248	0.055	U	0.016	0.055
PCB-1254	0.055	U	0.016	0.055
PCB-1260	0.015	J	0.012	0.055

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	9	*	28 - 139
Tetrachloro-m-xylene	35	*	45 - 129



**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 K-4

Lab Sample ID: 220-9924-7

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1700 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1333		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.059	U	0.018	0.059
PCB-1221	0.059	U	0.018	0.059
PCB-1232	0.059	U	0.018	0.059
PCB-1242	0.059	U	0.018	0.059
PCB-1248	0.059	U	0.018	0.059
PCB-1254	0.059	U	0.018	0.059
PCB-1260	0.059	U	0.013	0.059

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	15	*	28 - 139
Tetrachloro-m-xylene	60		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR1 K-12

Lab Sample ID: 220-9924-8

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	08/23/2009 1352		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.25	U	0.075	0.25
PCB-1221	0.25	U	0.075	0.25
PCB-1232	0.25	U	0.075	0.25
PCB-1242	0.25	U	0.075	0.25
PCB-1248	0.25	U	0.075	0.25
PCB-1254	0.25	U	0.075	0.25
PCB-1260	0.13	J	0.055	0.25

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	6	*	28 - 139
Tetrachloro-m-xylene	10	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR2 F-4

Lab Sample ID: 220-9924-9

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1527		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	19	*	28 - 139
Tetrachloro-m-xylene	51		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

**Client Sample ID:** TR2 H-10

Lab Sample ID: 220-9924-10

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1970 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1546		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.051	U	0.015	0.051
PCB-1221	0.051	U	0.015	0.051
PCB-1232	0.051	U	0.015	0.051
PCB-1242	0.051	U	0.015	0.051
PCB-1248	0.051	U	0.015	0.051
PCB-1254	0.051	U	0.015	0.051
PCB-1260	0.051	U	0.011	0.051

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	30		28 - 139
Tetrachloro-m-xylene	71		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR2 N-9

Lab Sample ID: 220-9924-11

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30328	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1605		Injection Volume:	1 uL
Date Prepared:	08/21/2009 2300		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	35		28 - 139
Tetrachloro-m-xylene	103		45 - 129

## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Lab Section	Qualifier	Description
GC Semi VOA		
	*	Surrogate exceeds the control limit
	J	Indicates an estimated value.
	U	Analyzed for but not detected.

## ANALYTICAL REPORT

Job Number: 220-9924-1

SDG Number: 220-9924

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:

Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221

Attention: Mr. Nelson Wong



Approved for release.  
Joan Widomski  
9/3/2009 4:16 PM

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Designee for  
Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
09/03/2009

cc: Mr. Thomas Green  
Ms. May Heflin

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

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**Job Narrative**  
**220-J9924-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

Method(s) 608: Surrogate recovery for the following samples was outside of acceptance limits: TR1 G-6 (220-9924-4), TR1 J-19 (220-9924-6). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

Samples 220-9224-B-3-B, 220-9924-A-5-B and 220-9924-A-8-B also had surrogates out but technically these were diluted since they could not be brought to the routine final volume.

No other analytical or quality issues were noted.

**Organic Prep**

Method(s) 608: Due to the matrix, the following sample(s) could not be concentrated to the final method required volume. Samples were brought to 10mL final volume for PCB\_LL extraction: TR1 E-23 (220-9924-3), TR1 H-10 (220-9924-5), TR1 K-12 (220-9924-8). The reporting limits (RLs) are elevated proportionately.

No other analytical or quality issues were noted.



## EXECUTIVE SUMMARY - Detections

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
<b>220-9924-2</b>	<b>TR1 C-4</b>					
PCB-1254		0.045	J	0.056	ug/L	608
PCB-1260		0.045	J	0.056	ug/L	608
<b>220-9924-4</b>	<b>TR1 G-6</b>					
PCB-1260		0.012	J	0.053	ug/L	608
<b>220-9924-5</b>	<b>TR1 H-10</b>					
PCB-1260		0.11	J	0.50	ug/L	608
<b>220-9924-6</b>	<b>TR1 J-19</b>					
PCB-1260		0.015	J	0.055	ug/L	608
<b>220-9924-8</b>	<b>TR1 K-12</b>					
PCB-1260		0.13	J	0.25	ug/L	608

## METHOD SUMMARY

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Organochlorine Pesticides & PCBs (GC)	TAL CT	40CFR136A 608	
Liquid-Liquid Extraction (Separtory Funnel)	TAL CT		40CFR136A 608

### Lab References:

TAL CT = TestAmerica Connecticut

### Method References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

## METHOD / ANALYST SUMMARY

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Method	Analyst	Analyst ID
40CFR136A 608	Smith, Karli	KS

## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-9924-1	TR1 B-19	Water	08/18/2009 1600	08/21/2009 0932
220-9924-2	TR1 C-4	Water	08/18/2009 1600	08/21/2009 0932
220-9924-3	TR1 E-23	Water	08/18/2009 1600	08/21/2009 0932
220-9924-4	TR1 G-6	Water	08/18/2009 1600	08/21/2009 0932
220-9924-5	TR1 H-10	Water	08/18/2009 1600	08/21/2009 0932
220-9924-6	TR1 J-19	Water	08/18/2009 1600	08/21/2009 0932
220-9924-7	TR1 K-4	Water	08/18/2009 1600	08/21/2009 0932
220-9924-8	TR1 K-12	Water	08/18/2009 1600	08/21/2009 0932
220-9924-9	TR2 F-4	Water	08/18/2009 1600	08/21/2009 0932
220-9924-10	TR2 H-10	Water	08/18/2009 1600	08/21/2009 0932
220-9924-11	TR2 N-9	Water	08/18/2009 1600	08/21/2009 0932

# **SAMPLE RESULTS**

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 B-19

Lab Sample ID: 220-9924-1

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1139		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	12	*	28 - 139
Tetrachloro-m-xylene	47		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 C-4

Lab Sample ID: 220-9924-2

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-30326	Initial Weight/Volume:	1800 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1158			Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.056	U	0.017	0.056
PCB-1221	0.056	U	0.017	0.056
PCB-1232	0.056	U	0.017	0.056
PCB-1242	0.056	U	0.017	0.056
PCB-1248	0.056	U	0.017	0.056
PCB-1254	0.045	J	0.017	0.056
PCB-1260	0.045	J	0.012	0.056

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	16	*	28 - 139
Tetrachloro-m-xylene	48		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 E-23

Lab Sample ID: 220-9924-3

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1910 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	08/23/2009 1217		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.26	U	0.079	0.26
PCB-1221	0.26	U	0.079	0.26
PCB-1232	0.26	U	0.079	0.26
PCB-1242	0.26	U	0.079	0.26
PCB-1248	0.26	U	0.079	0.26
PCB-1254	0.26	U	0.079	0.26
PCB-1260	0.26	U	0.058	0.26

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	6	*	28 - 139
Tetrachloro-m-xylene	17	*	45 - 129



## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 G-6

Lab Sample ID: 220-9924-4

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1870 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1236		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.012	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	9	*	28 - 139
Tetrachloro-m-xylene	37	*	45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 H-10

Lab Sample ID: 220-9924-5

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	08/23/2009 1255		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.15	0.50
PCB-1221	0.50	U	0.15	0.50
PCB-1232	0.50	U	0.15	0.50
PCB-1242	0.50	U	0.15	0.50
PCB-1248	0.50	U	0.15	0.50
PCB-1254	0.50	U	0.15	0.50
PCB-1260	0.11	J	0.11	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	28		28 - 139
Tetrachloro-m-xylene	55		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 J-19

Lab Sample ID: 220-9924-6

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1820 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1314		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.055	U	0.016	0.055
PCB-1221	0.055	U	0.016	0.055
PCB-1232	0.055	U	0.016	0.055
PCB-1242	0.055	U	0.016	0.055
PCB-1248	0.055	U	0.016	0.055
PCB-1254	0.055	U	0.016	0.055
PCB-1260	0.015	J	0.012	0.055

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	9	*	28 - 139
Tetrachloro-m-xylene	35	*	45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 K-4

Lab Sample ID: 220-9924-7

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	1700 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1333		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.059	U	0.018	0.059
PCB-1221	0.059	U	0.018	0.059
PCB-1232	0.059	U	0.018	0.059
PCB-1242	0.059	U	0.018	0.059
PCB-1248	0.059	U	0.018	0.059
PCB-1254	0.059	U	0.018	0.059
PCB-1260	0.059	U	0.013	0.059

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	15	*	28 - 139
Tetrachloro-m-xylene	60		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR1 K-12

Lab Sample ID: 220-9924-8

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-30326	Initial Weight/Volume:	2000 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	08/23/2009 1352			Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.25	U	0.075	0.25
PCB-1221	0.25	U	0.075	0.25
PCB-1232	0.25	U	0.075	0.25
PCB-1242	0.25	U	0.075	0.25
PCB-1248	0.25	U	0.075	0.25
PCB-1254	0.25	U	0.075	0.25
PCB-1260	0.13	J	0.055	0.25

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	6	*	28 - 139
Tetrachloro-m-xylene	10	*	45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR2 F-4

Lab Sample ID: 220-9924-9

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30326	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1527		Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	19	*	28 - 139
Tetrachloro-m-xylene	51		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR2 H-10

Lab Sample ID: 220-9924-10

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch:	220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch:	220-30326	Initial Weight/Volume:	1970 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1546			Injection Volume:	1 uL
Date Prepared:	08/21/2009 1802			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.051	U	0.015	0.051
PCB-1221	0.051	U	0.015	0.051
PCB-1232	0.051	U	0.015	0.051
PCB-1242	0.051	U	0.015	0.051
PCB-1248	0.051	U	0.015	0.051
PCB-1254	0.051	U	0.015	0.051
PCB-1260	0.051	U	0.011	0.051

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	30		28 - 139
Tetrachloro-m-xylene	71		45 - 129

## Analytical Data

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Client Sample ID: TR2 N-9

Lab Sample ID: 220-9924-11

Date Sampled: 08/18/2009 1600

Client Matrix: Water

Date Received: 08/21/2009 0932

### 608 Organochlorine Pesticides & PCBs (GC)

Method:	608	Analysis Batch: 220-30361	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30328	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	08/23/2009 1605		Injection Volume:	1 uL
Date Prepared:	08/21/2009 2300		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	35		28 - 139
Tetrachloro-m-xylene	103		45 - 129



## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	*	Surrogate exceeds the control limit

# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC Semi VOA</b>					
<b>Prep Batch: 220-30326</b>					
LCS 220-30326/2-A	Lab Control Sample	T	Water	608	
MB 220-30326/1-A	Method Blank	T	Water	608	
220-9924-1	TR1 B-19	T	Water	608	
220-9924-2	TR1 C-4	T	Water	608	
220-9924-3	TR1 E-23	T	Water	608	
220-9924-4	TR1 G-6	T	Water	608	
220-9924-5	TR1 H-10	T	Water	608	
220-9924-6	TR1 J-19	T	Water	608	
220-9924-7	TR1 K-4	T	Water	608	
220-9924-8	TR1 K-12	T	Water	608	
220-9924-9	TR2 F-4	T	Water	608	
220-9924-10	TR2 H-10	T	Water	608	
<b>Prep Batch: 220-30328</b>					
LCS 220-30328/2-A	Lab Control Sample	T	Water	608	
MB 220-30328/1-A	Method Blank	T	Water	608	
220-9924-11	TR2 N-9	T	Water	608	
<b>Analysis Batch:220-30361</b>					
LCS 220-30326/2-A	Lab Control Sample	T	Water	608	220-30326
MB 220-30326/1-A	Method Blank	T	Water	608	220-30326
LCS 220-30328/2-A	Lab Control Sample	T	Water	608	220-30328
MB 220-30328/1-A	Method Blank	T	Water	608	220-30328
220-9924-1	TR1 B-19	T	Water	608	220-30326
220-9924-2	TR1 C-4	T	Water	608	220-30326
220-9924-3	TR1 E-23	T	Water	608	220-30326
220-9924-4	TR1 G-6	T	Water	608	220-30326
220-9924-5	TR1 H-10	T	Water	608	220-30326
220-9924-6	TR1 J-19	T	Water	608	220-30326
220-9924-7	TR1 K-4	T	Water	608	220-30326
220-9924-8	TR1 K-12	T	Water	608	220-30326
220-9924-9	TR2 F-4	T	Water	608	220-30326
220-9924-10	TR2 H-10	T	Water	608	220-30326
220-9924-11	TR2 N-9	T	Water	608	220-30328

#### Report Basis

T = Total

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

### Surrogate Recovery Report

#### 608 Organochlorine Pesticides & PCBs (GC)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCB2 %Rec	TCX2 %Rec
220-9924-1	TR1 B-19	12*	47
220-9924-2	TR1 C-4	16*	48
220-9924-3	TR1 E-23	6*	17*
220-9924-4	TR1 G-6	9*	37*
220-9924-5	TR1 H-10	28	55
220-9924-6	TR1 J-19	9*	35*
220-9924-7	TR1 K-4	15*	60
220-9924-8	TR1 K-12	6*	10*
220-9924-9	TR2 F-4	19*	51
220-9924-10	TR2 H-10	30	71
220-9924-11	TR2 N-9	35	103
MB 220-30326/1-A		50	52
MB 220-30328/1-A		72	76
LCS 220-30326/2-A		48	53
LCS 220-30328/2-A		77	88

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	28-139
TCX = Tetrachloro-m-xylene	45-129

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

### Method Blank - Batch: 220-30326

Method: 608

Preparation: 608

Lab Sample ID: MB 220-30326/1-A

Client Matrix: Water

Dilution: 1.0

Date Analyzed: 08/23/2009 1101

Date Prepared: 08/21/2009 1802

Analysis Batch: 220-30361

Prep Batch: 220-30326

Units: ug/L

Instrument ID: HP 6890 dual ECD

Lab File ID: D9047108.D

Initial Weight/Volume: 2000 mL

Final Weight/Volume: 2 mL

Injection Volume: 1 uL

Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	50	28 - 139
Tetrachloro-m-xylene	52	45 - 129

### Lab Control Sample - Batch: 220-30326

Method: 608

Preparation: 608

Lab Sample ID: LCS 220-30326/2-A

Client Matrix: Water

Dilution: 1.0

Date Analyzed: 08/23/2009 1120

Date Prepared: 08/21/2009 1802

Analysis Batch: 220-30361

Prep Batch: 220-30326

Units: ug/L

Instrument ID: HP 6890 dual ECD

Lab File ID: D9047109.D

Initial Weight/Volume: 2000 mL

Final Weight/Volume: 2 mL

Injection Volume: 1 uL

Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	0.500	0.320	64	50 - 114	
PCB-1260	0.500	0.310	62	32 - 119	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	48	28 - 139
Tetrachloro-m-xylene	53	45 - 129

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Carrier Corporation

Job Number: 220-9924-1

Sdg Number: 220-9924

### Method Blank - Batch: 220-30328

Method: 608

Preparation: 608

Lab Sample ID: MB 220-30328/1-A

Client Matrix: Water

Dilution: 1.0

Date Analyzed: 08/23/2009 1449

Date Prepared: 08/21/2009 2300

Analysis Batch: 220-30361

Prep Batch: 220-30328

Units: ug/L

Instrument ID: HP 6890 dual ECD

Lab File ID: D9047120.D

Initial Weight/Volume: 2000 mL

Final Weight/Volume: 2 mL

Injection Volume: 1 uL

Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	72	28 - 139
Tetrachloro-m-xylene	76	45 - 129

### Lab Control Sample - Batch: 220-30328

Method: 608

Preparation: 608

Lab Sample ID: LCS 220-30328/2-A

Client Matrix: Water

Dilution: 1.0

Date Analyzed: 08/23/2009 1508

Date Prepared: 08/21/2009 2300

Analysis Batch: 220-30361

Prep Batch: 220-30328

Units: ug/L

Instrument ID: HP 6890 dual ECD

Lab File ID: D9047121.D

Initial Weight/Volume: 2000 mL

Final Weight/Volume: 2 mL

Injection Volume: 1 uL

Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	0.500	0.470	94	50 - 114	
PCB-1260	0.500	0.422	84	32 - 119	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	77	28 - 139
Tetrachloro-m-xylene	88	45 - 129

Calculations are performed before rounding to avoid round-off errors in calculated results.

9924

## Chain of Custody Record

0.54°C, 1.14°C, 0.34°C Gun #1

TAL-4142 (0907)

Client: **ENSAFE INC** Project Manager: **May Heflin** Chain of Custody Number: **395505**

Address: **220 ATHENS WAY** Telephone Number (Area Code)/Fax Number: **615-825-9300**

City: **Nashville TN 37238** Site Contact: **N. Wong** Lab Contact: **J. Duhanick** Page: **1 of 1**

Project Name and Location (State): **Carrier Rootstop Runoff (NY)**

Contract/Purchase Order/Quote No.: **PO 9141, 508 0888805771, Phase II**

Special Instructions/  
Conditions of Receipt

Sample I.D. No. and Description  
(Containers for each sample may be combined on one line)

Sample I.D. No. and Description	Date	Time	Air	Aqueous	Sed	Soil	Containers & Preservatives	Analysis (Attach list if more space is needed)
TR1 B-19	08-18-09	16:00	X	X			Unpres. H2SO4 HNO3 HCl NaOH ZnAc NaOH	by EPA 608
TR1 C-4			X	X				
TR1 E-23			X	X				
TR1 G-6			X	X				
TR1 H-10			X	X				
TR1 J-19			X	X				
TR1 K-4			X	X				
TR1 K-12			X	X				
TR2 F-4			X	X				
TR2 H-10			X	X				
TR2 N-9			X	X				

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Return To Client ☐ Disposal By Lab ☐ Archive For \_\_\_\_\_ Months

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other \_\_\_\_\_

QC Requirements (Specify): \_\_\_\_\_

1. Relinquished By: **King's L. Syre** Date: **08-30-08 18:00** Time: **18:00**

2. Relinquished By: **King's L. Syre** Date: **08-30-08 18:00** Time: **18:00**

3. Relinquished By: **King's L. Syre** Date: **08-30-08 18:00** Time: **18:00**

Comments: **Precipitation on sample date was 0.11 inches. - Re.**

DISTRIBUTION: WHITE - Returned to Client with Report. CANARY - Stays with the Sample. PINK - Field Copy

220-9924  
Ensafe-Carrier Rooftop Runoff

Oil:

Water: 1-11

Date Received: 8/21/09

Sample #s: 1-11

Locations: Q5E

[illegible]



## Login Sample Receipt Check List

Client: TestAmerica Connecticut

Job Number: 220-9924-1

SDG Number: 220-9924

Login Number: 9924

Creator: Blocker, Kristina

List Number: 1

List Source: TestAmerica Connecticut

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	N/A	

passed rad  
screen

Chain of  
Custody Record

TAL-4142 (0907)

0.54<sup>cc</sup>, 1.14<sup>cc</sup>, 0.34<sup>cc</sup> Gun #1

Project Manager

EVSAFE INC

May Heflin

Date

08-30-08

Chain of Custody Number

395505

Address

250 ATEENWAY

Telephone Number (Area Code)/Fax Number

615.825.9300

Lab Number

ET

Page 1 of 1

City

Nashville

State Zip Code

TN 39338

Site Contact

N. Woods

Lab Contact

J. Duhamelle

Analysis (Attach list if  
more space is needed)

Project Name and Location (State)

Carrier Roostop Runoff (wy)

Special Instructions/  
Conditions of Receipt

Contract/Purchase Order/Quote No.

PO 9141, 508 088805771, Phase II

Sample I.D. No. and Description  
(Containers for each sample may be combined on one line)

1 TR1 B-19 08-18-08 16:00

Matrix

Containers &  
Preservatives

TOTAL PCBs  
by EPA 608

Analysis (Attach list if  
more space is needed)

2 TR1 C-4

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

3 TR1 E-23

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

4 TR1 G-6

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

5 TR1 H-10

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

6 TR1 J-19

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

7 TR1 K-4

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

8 TR1 K-18

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

9 TR1 E-4

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

10 TR1 H-10

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

11 TR1 N-9

Matrix

Containers &  
Preservatives

Analysis (Attach list if  
more space is needed)

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other \_\_\_\_\_

1. Relinquished By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

1. Received By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

2. Relinquished By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

2. Received By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

3. Relinquished By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

3. Received By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Comments

Precipitation on sample date was 0.11 inches. - R.E.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

## ANALYTICAL REPORT

Job Number: 220-10003-1

SDG Number: 220-10003

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:

Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221

Attention: Mr. Nelson Wong



Approved for release.  
Erin A Gaus  
Project Manager I  
9/4/2009 1:44 PM

---

Designee for  
Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
09/04/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

**TestAmerica Laboratories, Inc.**

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 [www.testamericainc.com](http://www.testamericainc.com)



**Job Narrative**  
**220-J10003-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

Method(s) 608: Surrogate recovery for the following samples was outside of acceptance limits: TR1 G-6 (220-10003-5), TR1 K-12 (220-10003-8). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

No other analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
<b>220-10003-1</b>	<b>TR1 B-12</b>					
PCB-1254		0.072		0.053	ug/L	608
PCB-1260		0.12		0.053	ug/L	608
<b>220-10003-3</b>	<b>TR1 C-4</b>					
PCB-1260		0.021	J	0.053	ug/L	608
<b>220-10003-4</b>	<b>TR1 E-23</b>					
PCB-1260		0.030	J	0.051	ug/L	608
<b>220-10003-5</b>	<b>TR1 G-6</b>					
PCB-1260		0.013	J	0.052	ug/L	608
<b>220-10003-7</b>	<b>TR1 J-19</b>					
PCB-1260		0.024	J	0.054	ug/L	608
<b>220-10003-8</b>	<b>TR1 K-12</b>					
PCB-1260		0.26		0.053	ug/L	608
<b>220-10003-10</b>	<b>TR2 F-4</b>					
PCB-1254		0.043	J	0.050	ug/L	608
PCB-1260		0.039	J	0.050	ug/L	608
<b>220-10003-11</b>	<b>TR2 H-10</b>					
PCB-1260		0.24		0.10	ug/L	608
<b>220-10003-12</b>	<b>TR2 N-9</b>					
PCB-1260		0.026	J	0.053	ug/L	608

## METHOD SUMMARY

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Organochlorine Pesticides & PCBs (GC)	TAL CT	40CFR136A 608	
Liquid-Liquid Extraction (Separtory Funnel)	TAL CT		40CFR136A 608

### Lab References:

TAL CT = TestAmerica Connecticut

### Method References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

## METHOD / ANALYST SUMMARY

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

Method	Analyst	Analyst ID
40CFR136A 608	Smith, Karli	KS

## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10003-1	TR1 B-12	Water	08/28/2009 2254	09/01/2009 1020
220-10003-2	TR1 B-19	Water	08/28/2009 2254	09/01/2009 1020
220-10003-3	TR1 C-4	Water	08/28/2009 2254	09/01/2009 1020
220-10003-4	TR1 E-23	Water	08/28/2009 2254	09/01/2009 1020
220-10003-5	TR1 G-6	Water	08/28/2009 2254	09/01/2009 1020
220-10003-6	TR1 H-10	Water	08/28/2009 2254	09/01/2009 1020
220-10003-7	TR1 J-19	Water	08/28/2009 2254	09/01/2009 1020
220-10003-8	TR1 K-12	Water	08/28/2009 2254	09/01/2009 1020
220-10003-9	TR1 L-4	Water	08/28/2009 2254	09/01/2009 1020
220-10003-10	TR2 F-4	Water	08/28/2009 2254	09/01/2009 1020
220-10003-11	TR2 H-10	Water	08/28/2009 2254	09/01/2009 1020
220-10003-12	TR2 N-9	Water	08/28/2009 2254	09/01/2009 1020



**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 B-12

Lab Sample ID: 220-10003-1

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30739	Initial Weight/Volume:	1870 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0205		Injection Volume:	1 uL
Date Prepared:	09/01/2009 1622		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.072		0.016	0.053
PCB-1260	0.12		0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	27	*	28 - 139
Tetrachloro-m-xylene	62		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 B-19

Lab Sample ID: 220-10003-2

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1920 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0224		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.016	0.052
PCB-1221	0.052	U	0.016	0.052
PCB-1232	0.052	U	0.016	0.052
PCB-1242	0.052	U	0.016	0.052
PCB-1248	0.052	U	0.016	0.052
PCB-1254	0.052	U	0.016	0.052
PCB-1260	0.052	U	0.011	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	18	*	28 - 139
Tetrachloro-m-xylene	51		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 C-4

Lab Sample ID: 220-10003-3

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1900 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0243		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.021	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	20	*	28 - 139
Tetrachloro-m-xylene	50		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 E-23

Lab Sample ID: 220-10003-4

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1960 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0302		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.051	U	0.015	0.051
PCB-1221	0.051	U	0.015	0.051
PCB-1232	0.051	U	0.015	0.051
PCB-1242	0.051	U	0.015	0.051
PCB-1248	0.051	U	0.015	0.051
PCB-1254	0.051	U	0.015	0.051
PCB-1260	0.030	J	0.011	0.051

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	23	*	28 - 139
Tetrachloro-m-xylene	52		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 G-6

Lab Sample ID: 220-10003-5

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1920 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0321		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.016	0.052
PCB-1221	0.052	U	0.016	0.052
PCB-1232	0.052	U	0.016	0.052
PCB-1242	0.052	U	0.016	0.052
PCB-1248	0.052	U	0.016	0.052
PCB-1254	0.052	U	0.016	0.052
PCB-1260	0.013	J	0.011	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	14	*	28 - 139
Tetrachloro-m-xylene	44	*	45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 H-10

Lab Sample ID: 220-10003-6

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1810 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0418		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.055	U	0.017	0.055
PCB-1221	0.055	U	0.017	0.055
PCB-1232	0.055	U	0.017	0.055
PCB-1242	0.055	U	0.017	0.055
PCB-1248	0.055	U	0.017	0.055
PCB-1254	0.055	U	0.017	0.055
PCB-1260	0.055	U	0.012	0.055

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	27	*	28 - 139
Tetrachloro-m-xylene	68		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 J-19

Lab Sample ID: 220-10003-7

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1860 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0437		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.054	U	0.016	0.054
PCB-1221	0.054	U	0.016	0.054
PCB-1232	0.054	U	0.016	0.054
PCB-1242	0.054	U	0.016	0.054
PCB-1248	0.054	U	0.016	0.054
PCB-1254	0.054	U	0.016	0.054
PCB-1260	0.024	J	0.012	0.054

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	20	*	28 - 139
Tetrachloro-m-xylene	54		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 K-12

Lab Sample ID: 220-10003-8

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1900 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0456		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.26		0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	18	*	28 - 139
Tetrachloro-m-xylene	28	*	45 - 129



**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR1 L-4

Lab Sample ID: 220-10003-9

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1910 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0515		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.016	0.052
PCB-1221	0.052	U	0.016	0.052
PCB-1232	0.052	U	0.016	0.052
PCB-1242	0.052	U	0.016	0.052
PCB-1248	0.052	U	0.016	0.052
PCB-1254	0.052	U	0.016	0.052
PCB-1260	0.052	U	0.012	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	35		28 - 139
Tetrachloro-m-xylene	98		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR2 F-4

Lab Sample ID: 220-10003-10

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	09/04/2009 0534		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.043	J	0.015	0.050
PCB-1260	0.039	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	53		28 - 139
Tetrachloro-m-xylene	86		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR2 H-10

Lab Sample ID: 220-10003-11

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1000 mL
Dilution:	2.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	09/04/2009 0553		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.10	U	0.030	0.10
PCB-1221	0.10	U	0.030	0.10
PCB-1232	0.10	U	0.030	0.10
PCB-1242	0.10	U	0.030	0.10
PCB-1248	0.10	U	0.030	0.10
PCB-1254	0.10	U	0.030	0.10
PCB-1260	0.24		0.022	0.10

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	59		28 - 139
Tetrachloro-m-xylene	52		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

**Client Sample ID:** TR2 N-9

Lab Sample ID: 220-10003-12

Date Sampled: 08/28/2009 2254

Client Matrix: Water

Date Received: 09/01/2009 1020

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-30852	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-30751	Initial Weight/Volume:	1870 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	09/04/2009 0612		Injection Volume:	1 uL
Date Prepared:	09/02/2009 0930		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.026	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	17	*	28 - 139
Tetrachloro-m-xylene	64		45 - 129

## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-10003-1

Sdg Number: 220-10003

Lab Section	Qualifier	Description
GC Semi VOA		
	*	Surrogate exceeds the control limit
	J	Indicates an estimated value.
	U	Analyzed for but not detected.

# Chain of Custody Record

## THE LEADER IN ENVIRONMENTAL TESTING

Client	Project Manager	Date	Chain of Custody Number
ENSAFE INC	MAY HEFLIN	08-31-09	395535
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page <u>1</u> of <u>1</u>
230 ATHLETIC BLVD	615 225 9300	CT	

<b>City</b>	Nashville	<b>State</b>	TN	<b>Zip Code</b>	37208	<b>Site Contact</b>	N. Wong	<b>Lab Contact</b>	J. Duhanawale	<b>Analysis (Attach list if more space is needed)</b>	
<b>District Name and Location (State)</b>											
<b>Carrier/Waybill Number</b>											

Project Name and Location (State)	Carrier/Waybill Number	Carrier	Container
Carrier Rooftop Runoff (ny)			
Contract/Purchase Order/Quote No.			
PCB # 608			

Contract/Purchase Order/Quote No.	Date	Time	Containers & Preservatives						
			Matrix						
			Air	Aqueous	Sed.	Soil	Unpres.	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>
			HCl	NaOH	ZnO/NaOH				
90. 9/41			TOTAL F by EPA						

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time
	Air	
	Aqueous	
	Sed.	
	Soil	
	Unpres.	
	H <sub>2</sub> SO <sub>4</sub>	
	HNO <sub>3</sub>	
	HCl	
	NaOH	
	ZnAc/ NaOH	
	Lot	
	by	

[illegible]

	Y	X	K	SCREEN
TR1	K-10	(8)	X	X
TR1	L-4	(5)	X	X
TR2	F-4	(10)	X	X
TR2	H-10	(11)	X	X
TR5	N-9	(16)	X	X

☐ Disposal By Lab

☐ Archive For \_\_\_\_\_ Months longer than 1 month

**QC Requirements (Specify)**

☐ 24 Hours    ☐ 48 Hours    ☐ 7 Days    ☐ 14 Days    ☐ 21 Days    ☐ Other \_\_\_\_\_

1. Relinquished By		Date	Time
<i>[Signature]</i>		12-1-2011	12:00

1. Received By		Date	Time
<i>[Signature]</i>		12-1-2011	12:00

	Date	Time
Wendell	8/31/09	12:30
Wendell	8/31/09	12:30

2. Relinquished By	Date	Time	2. Received By	Date	Time
0					

Date	Time	Received By	Date	Time
9/10/2019	10:00			
9/11/2019	10:00			
9/12/2019	10:00			
9/13/2019	10:00			
9/14/2019	10:00			
9/15/2019	10:00			
9/16/2019	10:00			
9/17/2019	10:00			
9/18/2019	10:00			
9/19/2019	10:00			
9/20/2019	10:00			
9/21/2019	10:00			
9/22/2019	10:00			
9/23/2019	10:00			
9/24/2019	10:00			
9/25/2019	10:00			
9/26/2019	10:00			
9/27/2019	10:00			
9/28/2019	10:00			
9/29/2019	10:00			
9/30/2019	10:00			

Date	Time	Received by
04/		Reinquired by

[illegible]

09 CONTINUING

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4  
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## Login Sample Receipt Check List

Client: TestAmerica Connecticut

Job Number: 220-10003-1

SDG Number: 220-10003

Login Number: 10003

List Source: TestAmerica Connecticut

Creator: Dini, Tracy

List Number: 1

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6C,0.4C,3.4C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

## TAL-4142 (0907)

**Client**

THE LEADER IN ENVIRONMENTAL TESTING

Comments Precipitation on sample date was 0.35 in. -PE

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



**Addendum A**

**Building TR-2 Roof Runoff Data from November 3 and 20, 2009**

**Building TR-1 Roof Runoff Data from December 14, 2009**

## ANALYTICAL REPORT

Job Number: 220-10625-1

SDG Number: 220-10625

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:

Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221

Attention: Mr. Nelson Wong



Approved for release.  
Jill M Duhancik  
Project Manager I  
11/11/2009 12:42 PM

---

Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
11/11/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

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**TestAmerica Laboratories, Inc.**

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 [www.testamericainc.com](http://www.testamericainc.com)



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**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

No analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-10625-1

Sdg Number: 220-10625

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10625-1	TR2 Leader R-19	Water	11/03/2009 1845	11/06/2009 1300

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-10625-1

Sdg Number: 220-10625

**Client Sample ID: TR2 Leader R-19**

Lab Sample ID: 220-10625-1

Date Sampled: 11/03/2009 1845

Client Matrix: Water

Date Received: 11/06/2009 1300

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-33200	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-33101	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	11/11/2009 0855		Injection Volume:	1 uL
Date Prepared:	11/09/2009 1032		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.11	p	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	119	p	28 - 139
Tetrachloro-m-xylene	67		45 - 129

## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-10625-1

Sdg Number: 220-10625

Lab Section	Qualifier	Description
GC Semi VOA	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
	U	Analyzed for but not detected.





## ANALYTICAL REPORT

Job Number: 220-10775-1

SDG Number: 220-10775

Job Description: UTC-Carrier, Syracuse, NY

For:

EnSafe, Inc.

220 Athens Way

Suite 410

Nashville, TN 37228

Attention: Ms. May Heflin



Approved for release.  
Jill M Duhancik  
Project Manager I  
11/30/2009 11:34 AM

Jill M Duhancik

Project Manager I

[jill.duhancik@testamericainc.com](mailto:jill.duhancik@testamericainc.com)

11/30/2009

Revision: 1

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**Job Narrative**  
**220-10775-1**

**Comments**

No additional comments.

**Receipt**

The following samples were composited by the laboratory on 11/23/09 as requested on the chain-of-custody: TR2-W7B/W7D Composite (220-10775-2), TR2-W7F/W7H Composite (220-10775-3).

All other samples were received in good condition within temperature requirements.

**GC Semi VOA**

No analytical or quality issues were noted.

**Organic Prep**

Method(s) 608: Due to the matrix, the following sample(s) could not be concentrated to the final method required volume: TR2-RW3 (220-10775-1), TR2-W6S (220-10775-4), TR2-W7B/W7D Composite (220-10775-2), TR2-W7F/W7H Composite (220-10775-3). The reporting limits (RLs) are elevated proportionately. The samples were brought to a final volume of 10mL for LLPCB analysis.

No other analytical or quality issues were noted.

## SAMPLE SUMMARY

Client: EnSafe, Inc.

Job Number: 220-10775-1

Sdg Number: 220-10775

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10775-1	TR2-RW3	Water	11/20/2009 1220	11/21/2009 1030
220-10775-2	TR2-W7B/W7D Composite	Water	11/20/2009 1220	11/21/2009 1030
220-10775-3	TR2-W7F/W7H Composite	Water	11/20/2009 1220	11/21/2009 1030
220-10775-4	TR2-W6S	Water	11/20/2009 1220	11/21/2009 1030

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 220-10775-1

Sdg Number: 220-10775

**Client Sample ID:** TR2-RW3

Lab Sample ID: 220-10775-1

Date Sampled: 11/20/2009 1220

Client Matrix: Water

Date Received: 11/21/2009 1030

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-33689	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-33587	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	11/24/2009 1352		Injection Volume:	1 uL
Date Prepared:	11/23/2009 1406		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.25	U	0.075	0.25
PCB-1221	0.25	U	0.075	0.25
PCB-1232	0.25	U	0.075	0.25
PCB-1242	0.25	U	0.075	0.25
PCB-1248	0.25	U	0.075	0.25
PCB-1254	0.25	U	0.075	0.25
PCB-1260	0.25	U	0.055	0.25

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	60		28 - 139
Tetrachloro-m-xylene	127		45 - 129

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 220-10775-1

Sdg Number: 220-10775

**Client Sample ID:** TR2-W7B/W7D Composite

Lab Sample ID: 220-10775-2

Date Sampled: 11/20/2009 1220

Client Matrix: Water

Date Received: 11/21/2009 1030

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-33689	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-33587	Initial Weight/Volume:	1910 mL
Dilution:	10		Final Weight/Volume:	10.0 mL
Date Analyzed:	11/24/2009 0918		Injection Volume:	1 uL
Date Prepared:	11/23/2009 1406		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	2.6	U	0.79	2.6
PCB-1221	2.6	U	0.79	2.6
PCB-1232	2.6	U	0.79	2.6
PCB-1242	19		0.79	2.6
PCB-1248	2.6	U	0.79	2.6
PCB-1254	13		0.79	2.6
PCB-1260	1.3	J p	0.58	2.6

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	8270	p *	28 - 139
Tetrachloro-m-xylene	1920	p *	45 - 129

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 220-10775-1

Sdg Number: 220-10775

**Client Sample ID: TR2-W7F/W7H Composite**

Lab Sample ID: 220-10775-3

Date Sampled: 11/20/2009 1220

Client Matrix: Water

Date Received: 11/21/2009 1030

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-33758	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-33587	Initial Weight/Volume:	1940 mL
Dilution:	5.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	11/27/2009 1931		Injection Volume:	1 uL
Date Prepared:	11/23/2009 1406		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	1.3	U	0.39	1.3
PCB-1221	1.3	U	0.39	1.3
PCB-1232	1.3	U	0.39	1.3
PCB-1242	2.0		0.39	1.3
PCB-1248	1.3	U	0.39	1.3
PCB-1254	0.55	J	0.39	1.3
PCB-1260	1.3	U	0.28	1.3

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	4250	*	28 - 139
Tetrachloro-m-xylene	177	*	45 - 129

**Analytical Data**

Client: EnSafe, Inc.

Job Number: 220-10775-1

Sdg Number: 220-10775

**Client Sample ID: TR2-W6S**

Lab Sample ID: 220-10775-4

Date Sampled: 11/20/2009 1220

Client Matrix: Water

Date Received: 11/21/2009 1030

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-33689	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-33587	Initial Weight/Volume:	2000 mL
Dilution:	2.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	11/24/2009 1430		Injection Volume:	1 uL
Date Prepared:	11/23/2009 1406		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.15	0.50
PCB-1221	0.50	U	0.15	0.50
PCB-1232	0.50	U	0.15	0.50
PCB-1242	1.4		0.15	0.50
PCB-1248	0.50	U	0.15	0.50
PCB-1254	1.3		0.15	0.50
PCB-1260	0.20	J p	0.11	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	6650	*	28 - 139
Tetrachloro-m-xylene	131	p *	45 - 129



## DATA REPORTING QUALIFIERS

Client: EnSafe, Inc.

Job Number: 220-10775-1

Sdg Number: 220-10775

Lab Section	Qualifier	Description
GC Semi VOA		
	*	Surrogate exceeds the control limit
	J	Indicates an estimated value.
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
	U	Analyzed for but not detected.

10775

Client <b>ENSAFE, Inc.</b>		Project Manager <b>May Heeun</b>		Date <b>4/30/09</b>		Chain of Custody Number <b>395761</b>	
Address <b>230 ATHENS WAY</b>		Telephone Number (Area Code/Fax Number) <b>615.555.9300</b>		Lab Number <b>CT</b>		Page <b>1</b> of <b>1</b>	
City <b>Klaskville</b>		Site Contact <b>X. Wang</b>		Lab Contact <b>J. Duhancik</b>		Analysis (Attach list if more space is needed)	
State <b>TN</b>		Zip Code <b>37058</b>		Carrier/Waybill Number		Special Instructions/ Conditions of Receipt <b>Please composite</b>	
Project Name and Location (State) <b>UTC Carrier Sur (ny) Rooftop</b>		Contract/Purchase Order/Quote No. <b>PO 9141</b>					

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	
			Air	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH								
TR2 - RW3 ①	4/23/09	10:30	X																
TR2 - W7B ②			X																
TR2 - W7D ③			X																
TR2 - W7F ④			X																
TR2 - W7H ⑤			X																
TR2 - W6S ⑥			X																

Special Instructions/  
Conditions of Receipt  
**W7B with W7D and W7F with W7H AT LAB.**

Possible Hazard Identification		Sample Disposal		QC Requirements (Specify)	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	<input type="checkbox"/> Months
Turn Around Time Required		Disposal By Lab		(A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other

1. Relinquished By	Date	Time
<b>Reinglish, Sur</b>	<b>4/23/09</b>	<b>18:00</b>
2. Relinquished By	Date	Time
3. Relinquished By	Date	Time

1. Received By	Date	Time
<b>h Blackman</b>	<b>4/21/09</b>	<b>1030</b>
2. Received By	Date	Time
3. Received By	Date	Time

Comments  
**Precip. in 54 hours prior to samples was 1.5 in. - Re**

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

## ANALYTICAL REPORT

Job Number: 220-11048-1

Job Description: UTC-Carrier: Roof Runoff, Phase II

For:  
Carrier Corporation  
Carrier Parkway; BDG TR-7  
PO BOX 4808  
Syracuse, NY 13221  
Attention: Mr. Nelson Wong



Approved for release.  
Jill M Duhancik  
Project Manager I  
12/21/2009 10:50 AM

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Jill M Duhancik  
Project Manager I  
jill.duhancik@testamericainc.com  
12/21/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

**TestAmerica Laboratories, Inc.**

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484  
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**Job Narrative**  
**220-11048-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

No analytical or quality issues were noted.

**Organic Prep**

Method(s) 608: Due to the matrix, the following samples could not be concentrated to the final method required volume: The following low level PCB aqueous samples were brought to a final volume of 10mL. TR-1 B-10 (220-11048-1), TR-1 L-13 (220-11048-9). The reporting limits (RLs) are elevated proportionately.

No other analytical or quality issues were noted.

## SAMPLE SUMMARY

Client: Carrier Corporation

Job Number: 220-11048-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-11048-1	TR-1 B-10	Water	12/14/2009 1500	12/15/2009 1000
220-11048-2	TR-1 B-13	Water	12/14/2009 1500	12/15/2009 1000
220-11048-3	TR-1 C-10	Water	12/14/2009 1500	12/15/2009 1000
220-11048-4	TR-1 C-13	Water	12/14/2009 1500	12/15/2009 1000
220-11048-5	TR-1 F-13	Water	12/14/2009 1500	12/15/2009 1000
220-11048-6	TR-1 J-10	Water	12/14/2009 1500	12/15/2009 1000
220-11048-7	TR-1 J-13	Water	12/14/2009 1500	12/15/2009 1000
220-11048-8	TR-1 L-10	Water	12/14/2009 1500	12/15/2009 1000
220-11048-9	TR-1 L-13	Water	12/14/2009 1500	12/15/2009 1000

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 B-10

Lab Sample ID: 220-11048-1

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	1910 mL
Dilution:	1.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	12/16/2009 1215		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.26	U	0.079	0.26
PCB-1221	0.26	U	0.079	0.26
PCB-1232	0.26	U	0.079	0.26
PCB-1242	0.26	U	0.079	0.26
PCB-1248	0.26	U	0.079	0.26
PCB-1254	0.42		0.079	0.26
PCB-1260	0.59		0.058	0.26

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	60		28 - 139
Tetrachloro-m-xylene	64		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 B-13

Lab Sample ID: 220-11048-2

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	1870 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/16/2009 1234		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.053	U	0.016	0.053
PCB-1221	0.053	U	0.016	0.053
PCB-1232	0.053	U	0.016	0.053
PCB-1242	0.053	U	0.016	0.053
PCB-1248	0.053	U	0.016	0.053
PCB-1254	0.053	U	0.016	0.053
PCB-1260	0.014	J	0.012	0.053

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	24	*	28 - 139
Tetrachloro-m-xylene	81		45 - 129



**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 C-10

Lab Sample ID: 220-11048-3

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	12/16/2009 1253		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.050	U	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	53		28 - 139
Tetrachloro-m-xylene	84		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 C-13

Lab Sample ID: 220-11048-4

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	1940 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/16/2009 1312		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.052	U	0.015	0.052
PCB-1221	0.052	U	0.015	0.052
PCB-1232	0.052	U	0.015	0.052
PCB-1242	0.052	U	0.015	0.052
PCB-1248	0.052	U	0.015	0.052
PCB-1254	0.052	U	0.015	0.052
PCB-1260	0.052	U	0.011	0.052

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	26	*	28 - 139
Tetrachloro-m-xylene	68		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

Client Sample ID: TR-1 F-13

Lab Sample ID: 220-11048-5

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/16/2009 1331		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.037	J	0.015	0.050
PCB-1260	0.11		0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	25	*	28 - 139
Tetrachloro-m-xylene	66		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 J-10

Lab Sample ID: 220-11048-6

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	2000 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/16/2009 1350		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.023	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	20	*	28 - 139
Tetrachloro-m-xylene	63		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 J-13

Lab Sample ID: 220-11048-7

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	1810 mL
Dilution:	1.0		Final Weight/Volume:	2.0 mL
Date Analyzed:	12/16/2009 1409		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.055	U	0.017	0.055
PCB-1221	0.055	U	0.017	0.055
PCB-1232	0.055	U	0.017	0.055
PCB-1242	0.055	U	0.017	0.055
PCB-1248	0.055	U	0.017	0.055
PCB-1254	0.049	J	0.017	0.055
PCB-1260	0.097		0.012	0.055

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	25	*	28 - 139
Tetrachloro-m-xylene	86		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 L-10

Lab Sample ID: 220-11048-8

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34370	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	1.0 mL
Date Analyzed:	12/16/2009 1428		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.050	U	0.015	0.050
PCB-1221	0.050	U	0.015	0.050
PCB-1232	0.050	U	0.015	0.050
PCB-1242	0.050	U	0.015	0.050
PCB-1248	0.050	U	0.015	0.050
PCB-1254	0.050	U	0.015	0.050
PCB-1260	0.013	J	0.011	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	52		28 - 139
Tetrachloro-m-xylene	90		45 - 129

**Analytical Data**

Client: Carrier Corporation

Job Number: 220-11048-1

**Client Sample ID:** TR-1 L-13

Lab Sample ID: 220-11048-9

Date Sampled: 12/14/2009 1500

Client Matrix: Water

Date Received: 12/15/2009 1000

**608 Organochlorine Pesticides & PCBs (GC)**

Method:	608	Analysis Batch: 220-34460	Instrument ID:	GC9
Preparation:	608	Prep Batch: 220-34284	Initial Weight/Volume:	1000 mL
Dilution:	1.0		Final Weight/Volume:	10.0 mL
Date Analyzed:	12/19/2009 1139		Injection Volume:	1 uL
Date Prepared:	12/15/2009 1123		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	0.50	U	0.15	0.50
PCB-1221	0.50	U	0.15	0.50
PCB-1232	0.50	U	0.15	0.50
PCB-1242	0.50	U	0.15	0.50
PCB-1248	0.50	U	0.15	0.50
PCB-1254	0.79		0.15	0.50
PCB-1260	1.3		0.11	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	63		28 - 139
Tetrachloro-m-xylene	88		45 - 129

## DATA REPORTING QUALIFIERS

Client: Carrier Corporation

Job Number: 220-11048-1

Lab Section	Qualifier	Description
GC Semi VOA		
	*	Surrogate exceeds the control limit
	J	Indicates an estimated value.
	U	Analyzed for but not detected.



1048

THE LEADER IN ENVIRONMENTAL TESTING

12/21/2009

Chain of Custody Number	125425
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Page 1 of 1

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**Special Instructions/  
Conditions of Receipt**

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