# ATTACHMENT C

# LOWER NEPONSET RIVER PCBS SAMPLE DESCRIPTION AND RATIONALE TABLES Samples Collected from 13 to 17 November 2017 and 4 to 6 September 2018

- Table 1
   START Sediment/Source Sample Descriptions (November 2017)
- Table 2
   START Aqueous Quality Assurance/Quality Control Samples
- Table 3
   START Performance Evaluation Samples
- Table 4
   START Sediment/Source Sample Descriptions (September 2018)

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
SD-01	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition and emergent wetland area along the northern bank of the Neponset River, upstream of the Baker Dam. The source sample was collected from within the surface water impoundment area, approximately 200 feet upstream of the Baker Dam to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.27072 North Latitude 71.069635 West Longitude		10-20	D35204/A41G7	11/15/2017 9:00	PCBs Percent Solids TOC Grain Size	Sample was collected using a Vibe-core Mini on 11/14/17 at 1130 hours in 4' of water. Core length 60", recovery 20". Material described as dark gray silt and very fine sand, trace roots and clay. Specific conductance ( $\mu$ S/cm) = 354; Temp. (°C) = 3.86; Turbidity (NTU) = 1.95; pH = 7.00; DO (mg/L) = 7.94; PID = 0, water had a slight sheen.
SD-02	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area, adjacent an emergent wetland area. The sample is collected along the southern bank of the Neponset River, within the surface water impoundment area, approximately 60 feet upstream of the Baker Dam, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.270543 North Latitude 71.068988 West Longitude		8-16	D35205/A41G8	11/15/2017 10:15	PCBs Percent Solids TOC Grain Size	Sample was collected using a Vibe-core Mini on 11/14/17 at 0916 hours in 8-10' of water. Core length 60", recovery 16". Material described as dark gray silt, little coarse gravel, trace roots, and twigs. Specific conductance ( $\mu$ S/cm) = 344; Temp. (°C) = 3.83; Turbidity (NTU) = 4.52; pH = 7.03; DO (mg/L) = 14.01; PID = 0, water had a slight sheen.
SD-03	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area along the southern bank of the Neponset River, upstream of the Baker Dam. The source sample collected from within the surface water impoundment area, approximately 150 feet upstream of the Baker Dam, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.270495 North Latitude 71.069288 West Longitude		11-22	D35208/A41H1	11/15/2017 9:15	PCBs Percent Solids TOC Grain Size	Sample was collected using a percussion corer on 11/14/17 at 1030 hours in 5' of water. Core length 48", recovery 22". Material described as gray silt and very fine sand, trace roots and clay, slight petroleum odor. Specific conductance ( $\mu$ S/cm) = 348; Temp. (°C) = 3.61; Turbidity (NTU) = NR; pH = 7.03; DO (mg/L) = 8.63; PID = 0.

	Location Description/Rationale Sediment/Source	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
SD-04	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area along the northern bank of the Neponset River, within an emergent wetland area upstream of the Baker Dam. The source sample collected from within the surface water impoundment area, approximately 300 feet upstream of the Baker Da, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.270708 North Latitude 71.069901 West Longitude		12-24	D35209/A41H2	11/15/2017 9:30	PCBs Percent Solids TOC Grain Size	Sample was collected using a percussion corer on 11/14/17 at 1116 hours in 6' of water. Core length 48", recovery 24". Material described as dark gray silt and very fine sand, trace roots, clay and coarse gravel, slight petroleum odor. Specific conductance ( $\mu$ S/cm) = 350; Temp. (°C) = 3.91; Turbidity (NTU) = NR; pH = 6.92; DO (mg/L) = 15.48; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
	Grab sediment samples collected using a hand auger, from an upstream area located within the Pine Tree Brook channel. Sample collected upstream of the Neponset Riverwalk Trail and the Railroad Bridge and downstream of the Eliot Street SD-05 Bridge, to determine the presence of any Aroclor substances within this tributary to the Lower Neponset River and to document upstream reference/background levels for comparison purposes. 42.269934 North Latitude 71.072812 West Longitude	Α	6-12		11/13/2017 10:52		Sample was collected using a hand auger. Material described as brown and orange brown very coarse-to-medium sand and coarse-to-fine gravel (rocks and glass fragments), trace silt, wet. PID = 0. Sample interval not collected for analysis.
SD-05			12-24	D35210/A41H3	11/13/2017 11:08	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger. Material described as brown coarse-to-fine gravel and very coarse-to-medium sand, trace silt, wet. Specific conductance ( $\mu$ S/cm) = 159.4 Temp. (°C) = 5.9; Turbidity (NTU) = 1.39; pH = 6.44; DO (mg/L)= NR; PID = 0.
SD-06	Grab sediment samples collected using a hand auger, from a fluvial deposition area on the downstream side of the most- downstream island adjacent to a wetland area within the braided channel segment of the Neponset River, to determine the presence and level of any hazardous	A	6-12		11/13/2017 11:35		Sample was collected using a hand auger. Material described as dark brown, very fine sand, some leaves and twigs, wet, spongy. PID = 0. Sample interval not collected for analysis.
	Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.270231 North Latitude 71.075337 West Longitude		12-24	D35211/A41H4	11/13/2017 11:45	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 4- 6" of water. Material described as dark gray, fine sand, little organics (twigs, leaves and roots), petroleum odor and an organic-decay odor, wet. PID = $0$ .

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
SD-07	Grab sediment samples collected using a hand auger from a fluvial deposition area along the northeastern side of a large island covered with wetland vegetation. Sample collected from adjacent to the main river channel on the downstream side of the island within the braided channel segment of the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.270299 North Latitude 71.077002 West Longitude		6-24	D35212/A41H5	11/13/2017 12:00	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 6- 8" of water. Material described as gray very coarse to fine gravel & cobble, silt and clay, some medium to coarse sand, trace roots, leaves, and twigs, wet. PID = 0.
SD-08	Grab sediment samples collected using a hand auger, from a fluvial deposition area along the northwestern side of a large island covered with wetland vegetation. Sample collected from adjacent to the main river channel on the upstream side of the island within the braided channel segment of the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the		0-6		11/13/2017 12:12		Sample interval not sampled nor classified.
	Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.269934 North Latitude	А	6-30	D35275/A41P0	11/13/2017 12:15	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 12-14" of water. Material described as dark brown silt, trace clay and fine sand, roots, organic (spongy), little gravel. PID = $0$ .
	71.077754 West Longitude		30-52	D35213/A41H6	11/13/2017 12:46	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 12-14" of water. Material described as brown medium-to-coarse sand, trace fine-to-coarse gravel, wet. PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
	Grab sediment samples collected using a hand auger, from a fluvial deposition within an emergent wetland area along the west-southwestern side of a large island covered with wetland vegetation. Sample		0-12		11/13/2017 14:35		Sample was collected using a hand auger. Sample interval not collected for analysis nor classified.
SD-09	collected from within a sub-channel leading to the adjacent to the main river channel on the upstream side of the island within the braided channel segment of the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset		12-24		11/13/2017 14:43		Sample was collected using a hand auger. Sample interval not collected for analysis nor classified.
	River for waste source and observed release evaluations, as well as document ecological impacts. 42.269764 North Latitude 71.079771 West Longitude		24-36	D35214/A41H7	11/13/2017 15:15	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 14' of water. Material described as dark gray fine sand, little coarse-to-fine gravel. Specific conductance ( $\mu$ S/cm) = 690; Temp. (°C) = 4.8; Turbidity (NTU) = NR; pH = 6.35; DO = NR; PID = 0.
	Grab sediment samples collected using a hand auger, from a fluvial deposition and emergent wetland area. Sample collected along the west-northwestern side of a large island covered with wetland vegetation.		6-18		11/14/2017 8:55		Sample was collected using a hand auger. Sample interval not collected for analysis nor classified.
SD-10	Sample collected from within a sub- channel, along the north side of the island, leading to the main river channel on the downstream side of the island within the		18-30		11/14/2017 8:59		Sample was collected using a hand auger. Sample interval not collected for analysis nor classified.
F r e 4	substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.269102 North Latitude 71.082110 West Longitude		30-38	D35215/A41H8	11/14/2017 9:04	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 12' of water. Material described as dark gray silt, little clay, trace fine gravel and roots, wet, oily odor. Specific conductance ( $\mu$ S/cm) = 630; Temp. (°C) = 4.88; Turbidity (NTU) = 0; pH = 5.745; DO = 12.82; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source		-			1	
SD-11	Grab sediment samples collected using a hand auger, from a fluvial deposition and emergent wetland area. This sample location is along the north-eastern portion of a large island covered with wetland vegetation. Sample collected from within a wetland area, surrounded by cattails (Bulrush) vegetation, along the north side of the island, on the downstream side of the island within the braided channel segment of the Lower Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.269427 North Latitude 71.080812 West Longitude		6-24	D35216/A41H9	11/14/2017 9:35	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in <4" of water. Material described as light gray to brown silt and very fine sand, trace clay and roots, slight petroleum odor, wet. Slight chemical-like odor smelling like naphthalene (mothball odor). PID = 0.
	Grab sediment samples collected using a hand auger, from a fluvial deposition and emergent wetland area along the north- eastern edge of the most-upstream island within the braided channel segment of the Lower Neponset River, to determine the	А	6-18	D35276/A41P1	11/14/2017 10:05	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in <12" of water. Material described as dark gray and brown silt and very fine sand, trace roots, wet, oily/petroleum odor. PID = NR.
SD-12	Presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.268474 North Latitude 71.08267 West Longitude		18-30	D35219/A41J2	11/14/2017 10:10	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in <12" of water. Material described as dark gray and brown silt, trace clay and coarse gravel and roots, oily/petroleum odor. PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
	Grab sediment samples collected using a hand auger, from pa fluvial deposition area along the north-western edge of the most-upstream island within the braided channel segment of the Lower Neponset River. The island is covered by wetland vegetation and debris. Sample collected from within an emergent wetland area, along the north side of the island, on the		6-18		11/14/2017 10:29		Sample was collected using a hand auger in <1" of water. Sample interval not sampled for analysis nor classified.
SD-13	upstream side of the island within the braided channel segment of the Lower Neponset River, approximately 300 feet downstream of the Neponset River Reservation Riverwalk Trail Bridge near Ryan's Playground (a.k.a. Harvest River Bridge), to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.268506 North Latitude 71.083752 West Longitude		18-36	D35220/A41J3	11/14/2017 10:44	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in <1" of water. Material described as gray silt and very fine sand, trace coarse gravel, roots and clay. PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area along the southern shoreline bank of the Neponset River	А	0-12	D35223/A41J6	11/15/2017 14:25	PCBs Percent Solids TOC Grain Size	Sample collect using a Vibe-core Mini on 11/15/17 at 0950 hours in 6" of water. Core length 60", recovery 38". Material described as follows:
0	<ul> <li>shoreline bank of the Neponset River, approximately 65 feet upstream of the Tileston &amp; Hollingsworth Dam. The sample was collected within an emergent</li> <li>wetland area in the surface water impoundment of the Da, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations.</li> <li>42.26081625 North Latitude 71.1106296 West Longitude</li> </ul>	В	12-25	D35222/A41J5	11/15/2017 14:15	PCBs Percent Solids TOC Grain Size	<ul> <li>0-12" - Dark brown silt, trace clay and roots, slight petroleum odor.</li> <li>12-25" - Dark brown and gray silt and very fine sand, trace clay and roots, slight petroleum odor.</li> <li>25-38" - Dark gray silt, little clay, trace very fine sand and roots, slight petroleum odor,</li> </ul>
			25-38	D35221/A41J4	11/15/2017 14:10	PCBs Percent Solids TOC Grain Size	wet. Specific conductance ( $\mu$ S/cm) = 605; Temp. (°C) = 5.47; Turbidity (NTU) = 0; pH = 5.9; DO (mg/L) = 8.07; PID = 0; slight sheen.
SD-15	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area along the northern shoreline of the Neponset River. The sample was collected within an emergent wetland area approximately 75 feet upstream Tileston & Hollingsworth Dam surface water impoundment, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.2611603 North Latitude 71.1108382 West Longitude		12-24	D35224/A41J7	11/15/2017 14:55	PCBs Percent Solids TOC Grain Size	Sample collected using a Vibe-core Mini on 11/15/17 at 1020 hours in 4' of water. Core length 60", recovery 24". Material described as dark gray silt, little clay, trace very fine sand and wood, slight petroleum odor. Specific conductance ( $\mu$ S/cm) = NR; Temp. (°C) = 5.59; Turbidity (NTU) = 0; pH = 5.67; DO (mg/L) = 11.20; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
SD-16	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area approximately 10 feet off the northern bank of the Neponset River, within an emergent wetland area in the Tileston & Hollingsworth Dam surface water impoundment. The sample was collected approximately 350 feet upstream of the Dam, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document eccological impacts. 42.2607710 North Latitude 71.1116432 West Longitude		0-15	D35225/A41J8	11/15/2017 15:10	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on $11/15/17$ at 1130 hours in 10' of water. Core length 48", recovery 15". Material described as dark brown silt, some clay, trace roots, slight petroleum odor. Specific conductance ( $\mu$ S/cm) = 609; Temp. (°C) = 5.78; Turbidity (NTU) = 0; pH = 5.888; DO (mg/L) = 16.21; PID = 0.
SD-17	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area along the southern shoreline of the Neponset River, within an emergent wetland area upstream of the Tileston & Hollingsworth Dam. The sample was collected approximately 200 feet upstream Tileston & Hollingsworth Dam, within an emergent wetland area in the surface water impoundment of the dam and downstream of the confluence of Mother Brook and the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. 42.2607566 North Latitude 71.1109988 West Longitude		0-17	D35225/A41J9	11/15/2017 14:40	PCBs Percent Solids TOC Grain Size	Sample collected using a Vibe-core Mini on $11/15/17$ at 1010 hours in 16-18" of water. Core length 60", recovery 17". Material described as dark gray fine sand and silt, trace roots and leaves. Specific conductance ( $\mu$ S/cm) = 620; Temp. (°C) = 5.38; Turbidity (NTU) = 6.0; pH = 5.64; DO (mg/L) = 10.34; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source			÷		·	
	Grab sediment samples collected using a percussion corer sampler, from from a fluvial deposition area along the northern bank of the Neponset River, approximately 450 to 500 feet upstream of the Tileston & Hollingsworth Dam. Sample SD-18 collected from in an emergent wetland area within the surface water impoundment area of the dam and downstream of the confluence of Mother Brook and the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.2603297 North Latitude 71.1120111 West Longitude		13.5-27	D35226/A41K0	11/13/1715:25	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on $11/15/17$ at 1230 hours in 15' of water. Core length 48", recovery 27". Material described as gray silt, little very fine sand and clay, slight petroleum odor. Specific conductance ( $\mu$ S/cm) = 606; Temp. (°C) = 5.66; Turbidity (NTU) = 0; pH = 5.9; DO (mg/L) = 10.14; PID = 0.
SD-19	Grab sediment samples collected using a hand auger, from a fluvial deposition area downstream of the confluence of Mother Brook and the Neponset River, adjacent to the downstream side of the Dana Street Bridge pier (pillar) and cutwater. A cutwater is the footer designed to ease the flow of the water around the bridge, reducing the damage caused by erosion or collisions with flood-borne debris and downstream of the confluence of Mother Brook and the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.251926 North Latitude 71.12277 West Longitude		6-22	D35227/A41K1	11/15/2017 10:55	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger in 34" of water. Material described as dark gray fine sand and silt, some coarse gravel, little organic material (leaves, twigs). Specific conductance ( $\mu$ S/cm) = 311; Temp. (°C) = 4.47; Turbidity (NTU) = 0; pH = 7.07; DO (mg/L) = 15.07; PID = 0.

	Location Description/Rationale Sediment/Source	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
SD-20	Grab sediment samples collected using a Piston Corer, Macro Core, or Vibe-core Mini sampler, from a location along Mother Brook immediately upstream of the confluence of Mother Brook and the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations.			Sample location not col	llected due to river bo	ottom being armored.	
SD-21	Grab sediment samples collected using a hand auger and a Vibe-core Mini sampler, from a fluvial deposition area approximately 400 feet upstream of the confluence of Mother Brook and the Neponset River, along the northern bank of the Neponset River. The depositional area is located along the northwestern	A	0-20	D35280/A41Q3	11/15/2017 10:53	PCBs Percent Solids TOC Grain Size	Sample collected using a Vibe-core Mini in 16" of water. Material described as dark gray very fine sand and silt, trace leaves and twigs. Specific conductance ( $\mu$ S/cm) = 343; Temp. (°C) = 4.49; Turbidity (NTU) = NR; pH = 7.11; DO (mg/L) = 9.70; PID = NR.
50-21	bank of the Neponset River within an emergent wetland area in a slake-water area, to determine the presence of any Aroclor substances in the Upper Neponset River and to document upstream reference/background levels for comparison purposes. 42.250687 North Latitude 71.123595 West Longitude		20-40	D35230/A41K3	11/15/2017 11:00	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger (hand auger inserted into Vibe-core Mini boring) in 16" of water. Material described as dark gray silt and very fine sand, trace clay and twigs.

Location Description/Rationale Sediment/Source	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
Grab sediment samples collected using a hand auger, from a fluvial deposition/emergent wetland area approximately 500 feet downstream of the Neponset River Canoe Launch at Martini Playground/Shell Park and approximately 150 downstream of the MBTA railroad bridge over the Neponset River. The depositional area is located along the eastern bank of the Neponset River, west	А	6-24	D35283/A41Q6	11/15/2017 14:17	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger in 8" of water. Material described as brown fine-to-medium sand, trace silt, roots and leaves. Specific conductance ( $\mu$ S/cm) = 330; Temp. (°C) = 4.72; Turbidity (NTU) = NR; pH = 7.11; DO (mg/L) = 8.48; PID = 0.
of the MBTA Railroad tracks and northeast of a Hot Mix Asphalt/Sand Batching operation, located at 1586 Hyde Park Avenue, to determine the presence of any Aroclor substances in the Upper Neponset River and to document upstream reference/background levels for comparison purposes. 42.245364 North Latitude 71.127638 West Longitude		24-48	D35231/A41K4	11/15/2017 14:23	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger in 8" of water. Material described as dark gray very fine-to-fine sand and silt, trace twigs. PID = 0.

	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source		-				
	Grab sediment samples collected using a hand auger, from a fluvial deposition/emergent wetland area approximately 550 feet upstream of the Neponset River Canoe Launch at Martini Playground/Shell Park. The depositional	Α	12-16	D35282/A41Q5	11/15/2017 13:40	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger in 8" of water. Material described as brown very fine sand, little silt, trace roots. Specific conductance ( $\mu$ S/cm) = 330; Temp. (°C) = 4.58; Turbidity (NTU) = NR; pH = 7.16; DO (mg/L) = 11.02; PID = 0.
SD-23	area is located along the eastern bank of the Lower Neponset River, west of the Truman Park Plaza (1025 Truman Parkway)/behind the Stop & Shop building parking lot, and north of the MTBA Railroad Operations Readville Maintenance Facility/Railway Yard (located along Walcott Court) and a scrap recycling and transfer station (also located along Walcott Court), to determine the	В	16-30	D35281/A41Q4	11/15/2017 13:48	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger in 8" of water. Material described as dark brown fine sand, little silt, trace roots. PID = 0.
	presence and concentration levels of any Aroclor substances in the Upper Neponset River and to document upstream ecological sediment reference/background levels for comparison purposes. 42.242709 North Latitude 71.127929 West Longitude		30-48	D35232/A41K5	11/15/2017 13:51	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger in 8" of water. Material described as dark gray silt, little very fine-to-fine sand, trace clay, slight oily/petroleum odor. PID = 0.
	Grab sediment samples collected using a hand auger, from a fluvial deposition area approximately 120 feet upstream of Paul's Bridge/Neponset Valley Parkway Bridge. The depositional area is located along the southern/eastern bank of the Lower Neponset River, within a PSS/PFO etal area in the Fowl Meadow wetland area, to determine the presence of any Aroclor substances in the Upper Neponset River and to document upstream reference/background levels for		0-18	D35233/A41K6	11/16/2017 8:15	PCBs Percent Solids TOC Grain Size	Sample collected using a hand auger in 14" of water. Material described as dark brown medium-to-very coarse sand, trace coarse-to-fine gravel, silt, and leaves. Specific conductance ( $\mu$ S/cm) = 606; Temp. (°C) = 5.71; Turbidity (NTU) = 0; pH = 6.12; DO (mg/L) = 15.65; PID = 0.
		В		D35234/A41K7			Interval not sampled.
	comparison purposes. 42.234167 North Latitude 71.123047 West Longitude	А		D35235/A41K8			Interval not sampled.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description				
MATRIX:	TRIX: Sediment/Source										
SD-25	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area approximately 0.3 miles (1,600 feet) upstream of Paul's Bridge (Neponset Valley Parkway Bridge) and approximately 0.3 miles downstream of sediment sample location SD-26. The depositional area is located along the southern/eastern bank of the Lower Neponset River, within a PEM-PSS wetland area within the Fowl Meadow wetland area, to determine the presence and concentration levels of any Aroclor substances in the Upper Neponset River and to document upstream ecological sediment reference/background levels for comparison purposes. 42.231769 North Latitude 71.125731 West Longitude		19-38	D35236/A41K9	11/16/2017 13:00	PCBs Percent Solids TOC Grain Size	Sample collected using a Vibe-core Mini on $11/16/17$ at 1113 hours in 8-12" of water. Core length 48", recovery 38". Material described as greenish-gray fine-to-very fine sand, trace silt, clay, and roots. Specific conductance ( $\mu$ S/cm) = 602; Temp. (°C) = 5.91; Turbidity (NTU) = 6.4; pH = 6.03; DO (mg/L) = 13.89; PID = 0.				

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source			÷			
	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area approximately 0.6 miles (3,200 feet) upstream of Paul's Bridge/Neponset Valley Parkway Bridge.	A	0-15	D35284/A41Q7	11/16/2017 12:35	PCBs Percent Solids TOC Grain Size	Sample collected using a Vibe-core Mini on 11/16/17 at 0950 hours in 10" of water. Core length 45", recovery 45". Material described
SD-26	The SD-26 sample location is a depositional area is located along the southern/eastern bank of the Lower Neponset River, within a PEM-PSS wetland area within the Fowl Meadow wetland, to determine the presence and concentration levels of any Aroclor substances in the Upper Neponset River	В	15-30	D35285/A41Q8	11/16/2017 12:40	PCBs Percent Solids TOC Grain Size	as follows: 0-15" - Dark gray silt, some very fine sand, trace clay and roots. 15-30" - Dark gray silt, little clay, trace very fine sand and twigs, slight petroleum odor. 30-45" - Brownish-gray very fine sand, some silt, trace clay, slight petroleum odor.
	and to document upstream ecological sediment reference/background levels for comparison purposes. 42.228704 North Latitude 71.129871 West Longitude		30-45	D35237/A41L0	11/16/2017 12:45	PCBs Percent Solids TOC Grain Size	Specific conductance (μS/cm) = 605; Temp. (°C) = 5.60; Turbidity (NTU) = 14.2; pH = 6.04; DO (mg/L) = 12.83; PID = 0.
SD-27	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area within the central channel of Mother Brook, adjacent an emergent wetland area upstream of the Westinghouse Dam and River Street Bridge. The sample collected from within Mother Brook, approximately 1,300 to	А	0-9	D35240/A41L3	11/16/2017 9:50	PCBs Percent Solids TOC Grain Size	Two co-located sediment sample cores collected using a percussion corer on 11/15/17 at 1456 hours in 6-7' of water. Core length 48", recovery 18". Material described as follows: 0-9" - Dark gray-ish brown silt, some clay,
50-27	1,400 feet upstream of the Westinghouse Dam, to determine the presence of any Aroclor substances in Mother Brook and to document upstream reference/background levels for comparison purposes. 42.245070 North Latitude 71.137900 West Longitude		9-18	D35238/A41L1	11/16/2017 10:00	PCBs Percent Solids TOC Grain Size	0-9" - Dark gray-1sh brown silt, some clay, trace roots. 9-18" - Dark gray silt, some clay, trace roots. Specific conductance ( $\mu$ S/cm) = 562; Temp. (°C) = 6.41; Turbidity (NTU) = 6.8; pH = 5.98; DO (mg/L) = 12.84; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area along the northern bank of Mother Brook, within an emergent wetland area upstream of the Westinghouse Dam and the River Street Bridge. The sample collected from Mother Brook, approximately 2,100 feet upstream of the Westinghouse Dam, to determine the presence of any Aroclor substances in Mother Brook and to document upstream reference/background levels for comparison purposes. 42.2445303 North Latitude 71.1407906 West Longitude		0-11				Sample collected using percussion corer. Sample interval not collected for analysis nor classified.
			11-22	D35241/A41L4	11/16/2017 10:15	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on $11/15/17$ at 1530 hours in 2-3' of water. Core length 48", recovery 22". Sample described as dark gray silt, some clay, trace roots (twigs). Specific conductance (µS/cm) = 569 Temp. (°C) = 5.72; Turbidity (NTU) = 9.0; pH = 5.97; DO (mg/L) = 11.57; PID = 0.
	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area along the northern bank of Mother Brook, within an emergent wetland area approximately 2,000 feet upstream of the Westinghouse Dam, to		0-8.5				Sample collected using percussion corer. Sample interval not collected for analysis nor classified.
	determine the presence and concentration levels of any Aroclor substances in Mother Brook and to document upstream reference/background levels for comparison purposes. 42.244478 North Latitude 71.139812 West Longitude		8.5-17	D35242/A41L5	11/16/2017 10:50	PCBs Percent Solids TOC Grain Size	Sample collected using percussion corer on $11/16/17$ at 0825 hours in 1.5' of water. Core length 48", recovery 17". Sample described as dark gray and brown silt, trace clay and roots. Specific conductance ( $\mu$ S/cm) = 293; Temp. (°C) = 4.52; Turbidity (NTU) = 11.22; pH = 7.188; DO (mg/L) = NR; PID = 0.

	Location Description/Rationale Sediment/Source	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
SD-30	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area, along the northern bank of Mother Brook, within an emergent wetland area approximately 3,000 feet upstream of the Westinghouse Dam, to determine the presence and concentration levels of any Aroclor substances in Mother Brook and to document upstream ecological sediment reference/background levels for comparison purposes. 42.244925 North Latitude 71.143106 West Longitude		11-22	D35243/A41L6	11/16/2015 11:00	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on 11/16/17 at 0901 hours in 3" of water. Core length 48", recovery 22". Material described as brown very fine sand, trace coarse gravel, wood debris, and silt. No water quality parameters recorded, PID = 0.
SD-31	Grab sediment samples collected using a Piston Corer, Macro Core, or Vibe-core Mini sampler, from a wetland area within Mother Brook, located adjacent/upstream of the Fairview Cemetery (45 Fairview Ave., Boston MA) and upstream of the Westinghouse Dam area, to determine the presence and concentration levels of any Aroclor substances in Mother Brook and to document upstream ecological sediment reference/background levels for comparison purposes.			N/A			Not sampled due to shift in locations upstream of Westinghouse Dam.

	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX SD-32	Sediment/Source Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area along the southern bank of Mother Brook, within the dam impoundment upstream of the Centennial Dam. The sample collected from within Mother Brook, approximately 220 feet		10-20	D35245/A41L8	11/16/2017 14:15	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on 11/16/17 at 1150 hours in 5' of water. Core length 48", recovery 20". Material described as follows: 0-10" - Dark gray-to-black silt, trace clay and twigs/roots.
	(west-northwest) upstream of the Centennial Dam, to determine the presence of any Aroclor substances in Mother Brook and to document upstream reference/background levels for comparison purposes. 42.245863 North Latitude 71.151872 West Longitude	A	0-10	D35247/A41M0	11/16/2017 14:20	PCBs Percent Solids TOC Grain Size	10-20" - Dark brown silt and very fine sand, trace coarse gravel and roots. Specific conductance ( $\mu$ S/cm) = 285; Temp. (°C) = 4.232; Turbidity (NTU) = 6.09; pH = 6.97; DO (mg/L) = NR; PID = 0.
SD-33	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area along the northern bank of Mother Brook, approximately 150 feet upstream of the Centennial Dam, to determine the presence of any Aroclor substances in Mother Brook and to document upstream reference/background levels for comparison purposes. 42.246252 North Latitude 71.150848 West Longitude		10.5-21	D35248/A41M1	11/16/2017 13:50	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on $11/16/17$ at 1220 hours in 5' of water. Core length 48", recovery 21". Material described as brown and dark gray silt, little coarse gravel (rocks, glass), trace roots and clay. Specific conductance ( $\mu$ S/cm) = 285; Temp. (°C) = 4.67; Turbidity (NTU) = 6.1; pH = 7.53; DO (mg/L) = 14.9; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
SD-34	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area within a PEM wetland area approximately 400 feet upstream of Sawmill Lane Bridge over Mother Brook (Dedham, MA). The depositional area is located along the northeastern bank of the Mother Brook, within the Stone Mill Dam impoundment area. Sample location is within the wetland to the west of 85 Emmett Avenue, to determine the presence and concentration levels of any Aroclor substances in Mother Brook and to document upstream ecological sediment reference/background levels for comparison purposes. 42.249143 North Latitude 71.152853 West Longitude		5-17	D35249/A41M2	11/16/2017 15:15	PCBs Percent Solids TOC Grain Size	Sample collected using a Vibe-core Mini on $11/16/17$ at 1345 hours. Core length 60", recovery 30". Material described as dark gray silt, some very fine sand, trace clay and roots. Specific conductance ( $\mu$ S/cm) = 500; Temp. (°C) = 6.75; Turbidity (NTU) = 162; pH = 6.08; DO (mg/L) = 13.37; PID = 0.
SD-35	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area within a PEM wetland area approximately 420 feet upstream of Sawmill Lane Bridge over Mother Brook (Dedham, MA) and approximately 110 feet west of START sediment sample location SD-35. The depositional area is located along the southeastern perimeter of a PEM wetland along the northwestern bank of the Mother Brook, within the Stone Mill Dam impoundment area. Sample location is along a peninsula covered by wetlands to the west of 85 Emmett Avenue, and northeast of Dedham Ladder 2/Engine 3 fire house at 230 Bussey Street Dedham MA, to determine the presence and concentration levels of any Aroclor substances in Mother Brook and to document upstream ecological sediment reference/background levels for comparison purposes. 42.249164 North Latitude 71.153253 West Longitude		0-16	D35250/A41M3	11/16/2017 15:35	PCBs Percent Solids TOC Grain Size	Sample collected using a Vibe-core Mini on 11/16/17 at 1411 hours in 10-12" of water. Core length 60", recovery 18". Material described as dark brown silt and very fine sand, trace roots and clay. No water quality parameters were recorded, PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition /emergent wetland area along the west side of Bussey Street extension and bridge crossing over Mother Brook,	A	0-12	D35286/A41Q9	11/16/2017 16:40	PCBs Percent Solids TOC Grain Size	Two co-located sediment sample cores collected using a percussion corer on 11/16/17
SD-36	within the surface water impoundment for Colburn Dam. The sample collected from within Mother Brook, approximately 30 feet west of Bussey Street and 400 feet upstream of the Colburn Dam, to determine the presence of any Aroclor substances in Mother Brook and to	В	12-24	D35287/A41R0	11/16/2017 16:35	PCBs Percent Solids TOC Grain Size	at 1345 hours in 10' of water. Core length 48", recovery 35". Material described as follows: 0-12" - Dark gray silt and clay, trace roots. 12-14" - Dark gray silt, some clay, trace roots. 14-35" - Dark gray silt, trace roots (peat-like). Specific conductance (µS/cm) = 274; Temp.
	substances in Monter Brook and to document upstream reference/background levels for comparison purposes. 42.250466 North Latitude 71.155826 West Longitude		24-35	D35251/A41M4	11/16/2017 16:30	PCBs Percent Solids TOC Grain Size	(°C) = 4.66; Turbidity (NTU) = 0; pH = 7.23; DO (mg/L) = 14.83; PID = 0.
SD-37	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition/ emergent wetland area along the west side of Bussey Street extension and bridge crossing over Mother Brook, within the surface water impoundment for Colburn Dam. The sample collected from within Mother Brook, approximately 35 feet southwest of sediment sample location SD-36; 55 feet west of Bussey Street and 430 feet upstream of the Colburn Dam, to determine the presence and concentration levels of any Aroclor substances in Mother Brook and to document upstream ecological sediment reference/background levels for comparison purposes. 42.25043634 North Latitude 71.1559292 West Longitude		11-22	D35252/A41M5	11/16/2017 16:05	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on $11/16/17$ at 1310 hrs in 10' of water. Core length 40", recovery 22". Material described as dark gray silt, trace coarse gravel and clay and roots. Specific conductance ( $\mu$ S/cm) = 162; Temp. (°C) = 4.45; Turbidity (NTU) = 24.4; pH = 7.33; DO (mg/L) = 11.29; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source						
SD-38	Grab sediment samples collected using a percussion corer sampler, from a fluvial deposition area along the northern bank of Mother Brook, within an emergent wetland area upstream of the Colburn Dam. The sample collected from within Mother Brook, approximately 900 feet west of Bussey Street Bridge and 1,200 feet upstream of the Colburn Dam, to determine the presence of any Aroclor substances in Mother Brook and to document upstream reference/background levels for comparison purposes. 42.24931 North Latitude 71.158526 West Longitude		10-20	D35253/A41M6	11/16/2017 16:06	PCBs Percent Solids TOC Grain Size	Sample collected using a percussion corer on $11/16/17$ at 1455 hrs in 4' of water. Core length 48", recovery 20". Material described as dark gray silt, trace clay. Specific conductance ( $\mu$ S/cm) = 280; Temp. (°C) = 4.46; Turbidity (NTU) = 3.1; pH = 7.58; DO (mg/L) = 15.26; PID = 0.
SD-39	Field duplicate of SD-06, collected for quality control.		12-24	D35254/A41M7	11/13/2017 11:45	PCBs Percent Solids TOC Grain Size	See SD-06.
SD-40	Field duplicate of SD-21A, collected for quality control.	A	0-18	D35255/A41M8	11/15/2017 10:53	PCBs Percent Solids TOC Grain Size	See SD-21A.
SD-41	Grab sediment samples collected using a hand auger, from a fluvial deposition area along the northern bank of the Lower Neponset River, slightly downstream of the former Lewis Chemical facility and approximately 50-55 ft. upstream of Fairmont Avenue Bridge spanning the river, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.253024 North Latitude 71.119186 West Longitude		0-12	D35256/A41M9	11/14/2017 15:03	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 14-17" of water. Material described as dark gray fine sand, some silt, coarse gravel, cobbles, trace roots and debris (glass). No water quality parameters were recorded, PID = 0.

	Location Description/Rationale Sediment/Source	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
SD-42	Grab sediment samples collected using a hand auger, from a fluvial deposition area along the southern bank of the Lower Neponset River, approximately 150 feet downstream of the pipe discharge (possible raceway) location and approximately 370 feet downstream of the Tileston & Hollingsworth Dam. Sample location in the river slightly north- northwest (approximately 10 ft.) off the line that extents northwest parallel to the eastern wall of the dilapidated former paper mill building, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.261234 North Latitude 71.109095 West Longitude		0-12	D35257/A41N0	11/14/2017 13:26	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 12-14" of water. Material described as dark brown silt, trace clay and coarse gravel, roots, twigs, slight oily odor. No water quality parameters were recorded, PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX:	Sediment/Source			•	•	•	
SD-43	Grab sediment samples collected using a hand auger, from a fluvial deposition area along the southern bank of the Lower Neponset River, immediately downstream of the 24-inch pipe discharge (possible raceway) location and approximately 230 feet downstream of the Tileston & Hollingsworth Dam. Sample location in the Neponset River down gradient the discharge point for the 24 inch pipe running parallel to the bank slope. This is also down gradient of the location where two sections of the former paper mill building meet (3-story and 2-story sections), and several the pipes extend out of the building. It appears that the bank slope beneath this section of the Riverbank has been washed of most of its finer soil particles by the discharge from the pipes, and downstream of the confluence of Mother Brook and the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.26117 North Latitude 71.109601 West Longitude		0-12	D35258/A41N1	11/14/2017 13:46	PCBs Percent Solids TOC Grain Size	Sample was collected using a hand auger in 24" of water. Material described as gray fine sand and silt, some coarse-to-fine gravel, trace roots. No water quality parameters were recorded, PID = 0.
SD-44	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition area along the northern bank of the Lower Neponset River, adjacent/slightly upstream of the former Lewis Chemical facility and approximately 350 ft. upstream of Fairmont Avenue Bridge spanning the river, and downstream of the confluence of Mother Brook and the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. 42.252515 North Latitude 71.119975 West Longitude		13-26	D35259/A41N2	11/15/2017 10:00	PCBs Percent Solids TOC Grain Size	Sample was collected using a Vibe-core Mini on 11/14/17 at 1500 hours in 2' of water. Core length 60", recovery 26". Sample described as gray fine -to-very fine sand, some silt, trace clay and roots, slight petroleum odor. Specific conductance ( $\mu$ S/cm) = 352; Temp. (°C) = 4.69; Turbidity (NTU) = 40.3; pH = 6.97; DO (mg/L) = 9.61; PID = 0, slight petroleum odor and slight sheen when core removed from water.
SD-45	Field duplicate of SD-22, collected for quality control.		24-48	D35260/A41N3	11/15/2017 14:23	PCBs Percent Solids TOC Grain Size	See SD-22.

#### SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS BOSTON/MILTON, MASSACHUSETTS 13 THROUGH 17 NOVEMBER 2017

	Location Description/Rationale Sediment/Source	Sub-location	Sample Depth* (inches)	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment samples collected using a Vibe-core Mini sampler, from a fluvial deposition and emergent wetland area along the southern bank of the Neponset Biver, unstream of the Beker Dam. The	А	0-6	D35277/A41P2	11/14/2017 14:20	PCBs Percent Solids TOC Grain Size	Sample was collected using a Vibe-core Mini in 18-24" of water. Core length 60", recovery 32". Sample described as follows:
SD-100	Baker Dam, to determine the presence and level of any hazardous Aroclor substances	В	12-22	D35278/A41P3	11/14/2017 14:23	PCBs Percent Solids TOC Grain Size	0-11" - Gray silt, little leaves, twigs, little gravel, trace clay. 11-22" - Gray silt and very fine sand, trace twigs, roots. 22-32" - Gray silt and very fine sand, trace
	within the Lower Neponset River for waste source and observed release evaluations. 42.270481 North Latitude 71.069031 West Longitude	С	23-32	D35279/A41P4	11/14/2017 14:26	PCBs Percent Solids TOC Grain Size	No water quality parameters recorded, PID = 0, slight petroleum odor.

Temp ( $^{\circ}$ C) = Temperature (degrees Celsius)

Spec. Cond. ( $\mu$ S/cm) = Specific conductance (micro Siemens per centimeter)

NTU = Nephelometric Turbidity Units

CLP = Contract Laboratory Program

DAS = Delivery of Analytical Services

CGI/O2 (LEL/%) = Combustible Gas Indicator/Oxygen Meter (Lower Explosive Limit/Percent)

PID = Photoionization Detector

COC = Chain of Custody

ppm = parts per million

No. = Number

NR = Not Recorded.

\* = Below the sediment/water interface.

" = inches.

' = feet.

Analyses: PCBs = Aroclors by SOM02.3

TOC = Total Organic Carbon (SW-846 9060/Lloyd Kahn) Grain Size = ASTM 422 Grain Size with Hydrometer

# AQUEOUS QUALITY ASSURANCE/QUALITY CONTROL SAMPLES LOWER NEPONSET RIVER PCBS BOSTON/MILTON, MASSACHUSETTS 13 THROUGH 17 NOVEMBER 2017 and 4 THROUGH 6 SEPTEMBER 2018

Station Location	DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX: Aqueo	us QA/QC			
RB-01	D35261/A41N4	11/14/2017 12:25	PCBs TOC	Sediment/Source sampling equipment (hand auger) rinsate blank sample, collected for quality control.
RB-02	D35262/A41N5	11/14/2017 15:40	PCBs TOC	Sediment/Source sampling equipment (hand auger) rinsate blank sample, collected for quality control.
RB-03	D35263/A41N6	11/15/2017 15:00	PCBs TOC	Sediment/Source sampling equipment (hand auger) rinsate blank sample, collected for quality control.
RB-04	D35264/A41N7	11/16/2017 16:30	PCBs TOC	Sediment/Source sampling equipment (hand auger) rinsate blank sample, collected for quality control.
RB-05	D35265/A41N8	11/16/2017 16:15	PCBs TOC	Sediment/Source sampling equipment (percussion corer) rinsate blank sample, collected for quality control.
RB-01	D35487/PA41S5	9/4/2018 17:00	CLP 209 Congeners TOC	Sediment/Source sampling equipment (hand auger) rinsate blank sample, collected for quality control.
RB-02	D35488/PA41S6	9/5/2018 12:00	CLP 209 Congeners TOC	Sediment/Source sampling equipment hand auger) rinsate blank sample, collected for quality control.
RB-03	D35489/PA41S7	9/6/2018 12:00	CLP 209 Congeners TOC	Sediment/Source sampling equipment (hand auger) rinsate blank sample, collected for quality control.

DAS = Delivery of Analytical Services

CLP = Contract Laboratory Program

COC = Chain of Custody

No. = Number

QA/QC = Quality Assurance/Quality Control

Analyses: PCBs = Aroclors by SOM02.3

TOC = Total Organic Carbon (SW-846 9060/Lloyd Kahn)

# PERFORMANCE EVALUATION SAMPLES LOWER NEPONSET RIVER PCBS BOSTON/MILTON, MASSACHUSETTS 13 THROUGH 17 NOVEMBER 2017 and 4 THROUGH 6 SEPTEMBER 2018

Station Location	CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX: Perfo	ormance Evalu	ation Samples		
AS1591	A41Q2	11/15/17 8:30	Aroclors	Solid PE sample for Aroclors (sediment samples).
AS1667	A41P5	11/17/17 9:00	Aroclors	Solid PE sample for Aroclors (sediment samples).
AS1900	A41P6	11/17/17 9:00	Aroclors	Solid PE sample for Aroclors (sediment samples).
C0128	PA41T1	9/7/18 10:30	209 CBCs	Solid PE sample for Congeners (sediment samples).

COC = Chain of Custody No. = Number

Analyses:Aroclors = Aroclors by SOM02.3209 CBCs = Contract Laboratory Program (CLP) 209 Congeners (HRSM01.2 for PCB Congeners)

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
MATRIX: S	Sediment/Source						
	Grab sediment samples collected using a sludge sampler/hand auger, from a fluvial deposition and emergent wetland area	А	0-1	0134LN-0001	9/4/2018 10:05	Field PCBs	Sample was collected using a sludge sampler/hand auger in 6" of water. Material described as:
	along the southern bank of the Neponset River, upstream of the Baker Dam. The source sample was collected from within the surface water impoundment area, approximately 100 feet upstream of the	В	1-2	0134LN-0002	9/4/2018 10:10	Field PCBs	<ul> <li>0-1' brown fine SAND and SILT, some organics (leaves, sticks, roots). PID = 0.</li> <li>1-2' brown fine SAND and SILT, trace organics. PID = 0.</li> <li>2-3' brown fine SAND and SILT.</li> <li>PID = 1, water had a slight oil sheen and odor when augered.</li> <li>3-3.5' brown fine SAND and SILT.</li> <li>PID = 0.</li> <li>Specific conductance (µS/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9.</li> </ul>
	Baker Dam to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release	С	2-3	0134LN-0003	9/4/2018 10:20	Field PCBs PCBs	
	evaluations. North Latitude West Longitude	D	3-3.5	0134LN-0004	9/4/2018 10:25	Field PCBs	
	Grab sediment samples collected using a sludge sampler/hand auger, from a fluvial deposition and emergent wetland area along the southern bank of the Neponset River, upstream of the Baker Dam. The source sample was collected from within the surface water impoundment area, approximately 200 feet upstream of the Baker Dam to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. North Latitude West Longitude	A	0-1	0134LN-0005	9/4/2018 10:45	Field PCBs	Sample was collected using a sludge sampler/hand auger in 6" of water. Material described as: 0-1' brown fine SAND and SILT, some organics (leaves, sticks, roots), trace fine-to- medium gravel. PID = 0.
		В	1-2	0134LN-0006	9/4/2018 10:55	Field PCBs	1-2' brown fine SAND and SILT, trace organics, trace fine-to-medium gravel. Specific conductance (μS/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9; PID = 0.

Station Location	Location Description/Rationale	<b>Sub-location</b>	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment samples collected using a percussion corer, from within a fluvial deposition and emergent wetland area along the northern bank of the Neponset	А	0-1	0134LN-0007	9/4/2018 10:10	Field PCBs	
	River, upstream of the Baker Dam. The source sample was collected from within the surface water impoundment area, adjacent condominium patio area,	В	1-2	0134LN-0008	9/4/2018 10:10	Field PCBs	Sample was collected using a percussion corer in 12" of water. Material described as: 0-3' dark brown organic rich SILT. 3-4' dark brown organic rich SILT and SAND. Specific conductance (μS/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9; PID = 1 ppm.
	WBD-C4 approximately 50 feet upstream of the Baker Dam to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. North Latitude West Longitude	C	2-3	0134LN-0009	9/4/2018 10:10	Field PCBs	
		D	3-4	0134LN-0010	9/4/2018 10:10	Field PCBs	
	Grab sediment samples collected using a hand auger, from a fluvial deposition and emergent wetland area along the northern bank of the Neponset River, upstream of the Baker Dam. The source sample was collected from within the surface water impoundment area, adjacent Condominium Power House area, approximately 200 feet upstream of the Baker Dam to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. North Latitude West Longitude	А	0-1	0134LN-0011	9/4/2018 10:30	Field PCBs	Sample was collected using a hand auger in 18" of water. Material described as:
WBD-C5		В	1-2	0134LN-0012	9/4/2018 10:36	Field PCBs	0-2' dark brown organic rich SILT. 2-3' brown SILT, trace fine-to-coarse sand, fine-to-medium gravel, and debris (metal), saturated. Specific conductance ( $\mu$ S/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9; PID = 0. Oil sheen and petroleum odor noted when augering.
		C (SD-01)	2-3	0134LN-0013/ D35475/ PA41R3/A41R3	9/4/2018 10:45	Field PCBs 209 CBCs TOC % solids	

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
DTR CI	Grab sediment samples collected using a hand auger, from a point bar in an upstream area located within the Pine Tree Brook tributary channel to the Neponset River. Sample collected in the brook, upstream of the Neponset Riverwalk Trail and the Railroad Bridge overpass and downstream of the Elliot Street Bridge/Brook Hill Road, to determine the presence of any Aroclor substances within this tributary to the Lower Neponset River and to document upstream reference/background levels for comparison purposes. North Latitude West Longitude	A (SD-02)	0-1	0134LN-0014/ D35476/ PA41R4/A41R4	9/4/2018 11:35	Field PCBs PCBs 209 CBCs TOC % solids	Sample was collected using a hand auger in <1" of water. Material described as: 0-1' orange-brown medium -to-coarse SAND, some fine-to-medium gravel, little fine-to- medium sand, trace silts, debris (glass, metal), and organics.
TIB-CI		В	1-2	0134LN-0015	9/4/2018 11:38	Field PCBs	metal), and organics. 1-2' Material described as brown-to-yellow brown coarse-to-medium SAND, little fine sand and silt. Specific conductance ( $\mu$ S/cm) = 0.145; Temp. (°C) = 24.9; Turbidity (NTU) = 1.03; pH = 6.65; PID = 0.
BCA-C1	Grab sediment samples collected using a hand auger, from a fluvial deposition area on the downstream side of the most- downstream island adjacent to a wetland area within the braided channel segment of the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. North Latitude West Longitude	A	0-1	0134LN-0016	9/4/2018 14:35	Field PCBs	Sample was collected using a hand auger from along the edge of the island and with emergent wetland vegetation. Material described as: 0-3" brown fine SAND and SILT, little organics (roots, leaves). 3-6" gray medium to coarse SAND and SILT.
BCA-C1 presence Aroclor Nepons observe docume North		В	1-2	0134LN-0017	9/4/2018 14:45	Field PCBs	3-6" gray medium-to-coarse SAND and SILT, some medium gravel. 6"-1.5' gray medium-to-coarse SAND and SILT, some medium-to-coarse gravel. Specific conductance ( $\mu$ S/cm) = 0.73; Temp. (°C) = 26.8; Turbidity (NTU) = 2.59; pH = 7.39; ORP (mV) = -93.9; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment samples collected using a hand auger, from a fluvial deposition area	А	0-1	0134LN-0018	9/4/2018 14:20	Field PCBs	
	in a wetland area, within a dry river channel on the most-downstream island, within the braided channel segment of the Neponset River, to determine the presence	В	1-1.9	0134LN-0019	9/4/2018 14:45	Field PCBs	Sample was collected using a hand auger; no surface water present. Material described as: 0-1.9' brown SILT.
BCA-C2	and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document	C	1.9-3	0134LN-0020	9/4/2018 14:57	Field PCBs	1.9-3.3' gray sandy GRAVEL, little silt. Specific conductance ( $\mu$ S/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9; PID = 0.
	ecological impacts. North Latitude West Longitude	D	3-3.3	0134LN-0021	9/4/2018 15:09	Field PCBs	,, okt (m)) 1155,115 0.
		А	0-1	0134LN-0022	9/4/2018 15:50	Field PCBs	Sample was collected using a hand auger from a wetland area within the central island area, hole backfilled with water Material described as: 0-1' SAND and SILT, trace organics. 1-1.8' brown SILT, little clay, wet. 1.8-3.8' SILT and SAND, wet. Specific conductance ( $\mu$ S/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9; PID = 0.
	Grab sediment samples collected using a hand auger, from a fluvial deposition area	В	1-1.8	0134LN-0023	9/4/2018 15:55	Field PCBs	
BCA-C3	on the downstream southern side of the large central island, within a wetland area within the braided channel segment of the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. North Latitude West Longitude	C (SD-03)	1.8-2.2	0134LN-0024/ D35477/ PA41R5/A41R5	9/4/2018 16:00	Field PCBs PCBs 209 CBCs TOC % solids	
		D	2.2-2.5	0134LN-0025	9/4/2018 16:05	Field PCBs	
		E	2.5-3	0134LN-0026	9/4/2018 16:10	Field PCBs	
		F	3-3.8	0134LN-0027	9/4/2018 16:13	Field PCBs	

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment samples collected using a hand auger, from a fluvial deposition area,	А	0-1	0134LN-0028	9/4/2018 17:05	Field PCBs	
	within a wetland area along the northern side of the river bank on the Large Western Island within the upstream	В	1-2	0134LN-0029	9/4/2018 17:10	Field PCBs PCBs	Sample was collected using a hand auger from a wetland area. Material described as:
BCA-C4	portion of the Braided Channel Area segment of the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the	с	2-2.5	0134LN-0030	9/4/2018 17:15	Field PCBs	<ul> <li>0-2' dark brown fine SAND and SILT.</li> <li>2-2.5' brown and gray fine SAND.</li> <li>2.5-3' gray fine SAND.</li> <li>3-4' dark gray coarse -to-fine SAND.</li> </ul>
	hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. North Latitude West Longitude	D	2.5-3	0134LN-0031	9/4/2018 17:20	Field PCBs	Specific conductance ( $\mu$ S/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9; PID = 0.
		Е	3-4	0134LN-0032	9/4/2018 17:25	Field PCBs	
	Grab sediment samples collected using a	А	0-0.8	0134LN-0033	9/4/2018 17:20	Field PCBs	Sample was collected using a hand auger from a wetland area along the southern side of the large northern island. Material described as: 0-0.8' dark brown fine SAND and SILT, trace organics. 0.8-1.7' light brown-orange fine-to-coarse SAND, moist. 1.7-2.5' brown fine SAND and SILT, wet. 2.5-4' dark brown SILT and fine SAND, trace organics, wet. 4-4.8' SILT and SAND, some gravel, wet. Specific conductance (µS/cm) = 0.83; Temp. (°C) = 24.5; Turbidity (NTU) = 4.01; pH = 7.19; ORP (mV) = -143.9; PID = 0.
	hand auger, from a fluvial deposition area, within a wetland area along the southern side of the Large Western Island within the upstream portion of the Braided	В	0.8-1.7	0134LN-0034	9/4/2018 17:30	Field PCBs	
BCA-C5	Channel Area segment of the Neponset	С	1.7-2.5	0134LN-0035	9/4/2018 17:35	Field PCBs	
		D (SD-04)	2.5-4	0134LN-0036/ D35478/ PA41R6/A41R6	9/4/2018 17:40	Field PCBs 209 CBCs TOC % solids	
		Е	4-4.8	0134LN-0037	9/4/2018 17:45	Field PCBs	

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
		А	0-0.8	0134LN-0038	9/5/2018 17:20	Field PCBs	
		В	0.8-1.7	0134LN-0039	9/5/2018 17:30	Field PCBs	
	Grab sediment samples collected using a hand auger, from a fluvial deposition area,	C	1.7-2.5	0134LN-0040	9/5/2018 17:35	Field PCBs	Sample was collected using a hand auger. Petroleum/oil noted in sediments in hole below 2 feet.
	from within a wetland area on the large central Island, within the braided channel segment of the Neponset River, to	D	2.5-4	0134LN-0041	9/5/2018 17:40	Field PCBs	Material described as: 0-0.8' dark brown fine SAND and SILT, trace organics.
BCA-C6	determine the presence and level of any hazardous Aroclor substances within the	Е	4-4.8	0134LN-0042	9/5/2018 17:45	Field PCBs	0.8-1.7' light brown-orange fine-to-coarse SAND, moist.
	Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts.	F	0.8-1.7	0134LN-0043	9/5/2018 17:30	Field PCBs	<ul> <li>1.7-2.5' brown fine SAND and SILT, wet.</li> <li>2.5-4' dark brown SILT and SAND, wet.</li> <li>4-4.8' SILT and SAND, some gravel, wet.</li> <li>Specific conductance (μS/cm) = 0.83; Temp.</li> <li>(°C) = 24.5; Turbidity (NTU) = 4.01; pH =</li> <li>7.19; ORP (mV) = -143.9; PID = 0.</li> </ul> Sample was collected using a hand auger from a wetland area along the southern side of the large northern island. Material described as: <ul> <li>0-0.8' dark brown fine SAND and SILT, trace organics.</li> <li>0.8-1.7' light brown-orange fine-to-coarse SAND, moist.</li> <li>1.7-2.5' brown fine SAND and SILT, wet.</li> <li>2.5-4' dark brown SILT and fine SAND, wet.</li> <li>4-4.8' SILT and SAND, some gravel, wet.</li> <li>Specific conductance (μS/cm) = 0.83; Temp.</li> <li>(°C) = 24.5; Turbidity (NTU) = 4.01; pH =</li> <li>7.19; ORP (mV) = -143.9; PID = 0.</li> </ul>
	North Latitude West Longitude	G	1.7-2.5	0134LN-0044	9/5/2018 17:35	Field PCBs	
		Н	2.5-4	0134LN-0045	9/5/2018 17:40	Field PCBs	
		Ι	4-4.8	0134LN-0046	9/5/2018 17:45	Field PCBs	
	Grab sediment samples collected using a hand auger, from a fluvial deposition area, within a wetland area along the southern side of the Large Western Island within the upstream portion of the Braided Channel Area segment of the Neponset River, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. North Latitude West Longitude	А	0-1.3	0134LN-0047	9/5/2018 9:25	Field PCBs	
		В	1.3-2	0134LN-0048	9/5/2018 9:30	Field PCBs	
		C	2-3	0134LN-0049	9/5/2018 9:36	Field PCBs	

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
		А	0-1	0134LN-0050	9/5/2018 12:55	Field PCBs	
	Grab sediment samples collected using a	В	1-2	0134LN-0051	9/5/2018 12:58	Field PCBs	Sample was collected using a hand auger from a wetland area along the southern side of the river.
	hand auger, from a fluvial deposition area approximately 10 feet off the southern bank of the Neponset River, within an	С	2-3	0134LN-0052	9/5/2018 13:00	Field PCBs	Material described as: 0-1' brown SAND and SILT, trace organics,
	emergent wetland area in the Tileston & Hollingsworth Dam surface water	D	3-4	0134LN-0053	9/5/2018 13:03	Field PCBs	wet. 1-2' brown SAND and SILT, trace fine gravel, wet.
THD-C1	impoundment. The sample was collected approximately 30 feet upstream of the Dam, to determine the presence and level	E	4-5	0134LN-0054	9/5/2018 13:05	Field PCBs	2-3' brown SILT and SAND wet. 3-4' brown SILT and SAND, wet. 4-5'
	of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document	F (SD-07)	5-6	0134LN-0055/ D35481/ PA41R9/A41R9	9/5/2018 13:10	Field PCBs 209 CBCs TOC % solids	5-6' brown SILT, trace fine-to-coarse sand, fine-to-medium gravel, organics, clay, saturated. 6-6.5 brown SILT, little clay, organics.
	ecological impacts. North Latitude West Longitude	G (SD-05)	6-6.5	0134LN-0056/ D35479/ PA41R7/A41R7	9/5/2018 13:15	Field PCBs 209 CBCs TOC % solids	6.5-7' Specific conductance (μS/cm) = 0.88; Temp. (°C) = 25.5; Turbidity (NTU) = 6.05; pH = 7.04; ORP (mV) = 84.8; PID = 0.
		Н	6.5-7	0134LN-0057	9/5/2018 13:20	Field PCBs	
	Grab sediment samples collected using a hand auger, from a fluvial deposition area approximately 10 feet off the northern	А	0-1	0134LN-0058	9/5/2018 13:35	Field PCBs	Sample was collected using a hand auger from a wetland area along the southern side of the river. Material described as: 0-1' brown SAND and SILT, wet. 1-2' brown SAND and SILT, wet. 2-3' brown SILT and SAND, trace fine gravel, wet. 3-4' brown fine SAND and SILT, medium gravel. Specific conductance ( $\mu$ S/cm) = 0.88; Temp. (°C) = 25.5; Turbidity (NTU) = 6.05; pH = 7.04; ORP (mV) = 84.8; PID = 0.
THD C2	bank of the Neponset River, within an emergent wetland area in the Tileston & Hollingsworth Dam surface water impoundment. The sample was collected approximately 50 feet upstream of the Dam, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations, as well as document ecological impacts. North Latitude West Longitude	В	1-2	0134LN-0059	9/5/2018 13:40	Field PCBs	
IHD-C2		С	2-3	0134LN-0060	9/5/2018 13:45	Field PCBs	
		D	3-4	0134LN-0061	9/5/2018 13:50	Field PCBs	

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment samples collected using a hand auger, from a fluvial deposition area approximately 10 feet off the northern bank of the Neponset River, within an emergent wetland area in the Tileston &	А	0-1	0134LN-0062	9/5/2018 13:05	Field PCBs	Sample was collected using a hand auger from a wetland area along the southern side of the river.
THD-C3	Hollingsworth Dam surface water impoundment. The sample was collected	В	1-2	0134LN-0063	9/5/2018 13:12	Field PCBs	Material described as: 0-1' dark brown-to-gray SAND and SILT, little medium gravel. 1-2.5' dark brown SAND and SILT, medium- to-coarse gravel.
		С	2-2.5	0134LN-0064	9/5/2018 13:16	Field PCBs	Specific conductance (μS/cm) = 0.88; Temp. (°C) = 25.5; Turbidity (NTU) = 6.05; pH = 7.04; ORP (mV) = 84.8; PID = 0.
	Grab sediment samples collected using a hand auger, from a fluvial deposition area along the northern bank of the Lower Neponset River, slightly downstream of the former Lewis Chemical facility and approximately 50-55 ft. upstream of Fairmount Avenue Bridge spanning the	А	0-0.8	0134LN-0065	4LN-0065 9/5/2018 15:40 Field PCBs from a wetland area along the wes the river in approximately 8" of wa Material described as: 0.0 - 0.8' brown-to-dark brown SII	Sample was collected using a hand auger from a wetland area along the western side of the river in approximately 8" of water. Material described as: 0.0 - 0.8' brown-to-dark brown SILT, trace fine-to-medium sand, gravel, clay, and	
	LCA-C1 Fairmount Avenue Bridge spanning the river, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release evaluations. North Latitude West Longitude	В	0-0.8	0134LN-0066	9/5/2018 15:40	Field PCBs	organics. Both samples collected from same interval immediately adjacient locations. Specific conductance ( $\mu$ S/cm) = 0.86; Temp. (°C) = 25.6; Turbidity (NTU) = 7.27; pH = 6.71; ORP (mV) = 125.5; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment samples collected using a	А	0-1	0134LN-0067	9/5/2018 16:20	Field PCBs	Sample was collected using a hand auger from a wetland area along the western side of the river in approximately 8" of water. Material described as:
	hand auger, from a fluvial deposition area along the northern bank of the Lower Neponset River, slightly downstream of the former Lewis Chemical facility and	В	1-2	0134LN-0068	9/5/2018 16:22	Field PCBs	(A) - 0.0 - 1.0' brown-to-dark brown SILT, trace fine-to-medium sand, gravel, clay, and organics. (B) - 1.0 - 2.0' brown-to-dark brown
LCA-C2	approximately 200 ft. upstream of Fairmount Avenue Bridge spanning the river, to determine the presence and level of any hazardous Aroclor substances	С	2-3	0134LN-0069	9/5/2018 16:24	Field PCBs	SILT, trace fine-to-medium sand, gravel, clay, and organics. (C) -2.0 - 3.0' brown-to-dark brown SILT, trace fine-to-medium sand, gravel, and clay. (D) - 3-4' brown-to-dark
	within the Lower Neponset River for waste source and observed release evaluations.	D	3-4	0134LN-0070	9/5/2018 16:26	Field PCBs	<ul> <li>brown SILT, trace fine-to-medium sand and gravel and clay. (E) - 4-5' brown-to-dark brown SILT, trace fine-to-medium sand and gravel and clay.</li> <li>Specific conductance (μS/cm) = 0.86; Temp. (°C) = 25.6; Turbidity (NTU) = 7.27; pH = 6.71; ORP (mV) = 125.5; PID = 0.</li> <li>Sample was coffected using a hand auger from a wetland area along the western side of the river in approximately 8" of water.</li> <li>Material described as:</li> <li>(A) - 0.0 - 1.0' brown-to-dark brown SILT, trace fine-to-medium sand, gravel, clay, and organics. (B) - 1.0 - 2.0' brown-to-dark brown SILT, trace fine-to-medium sand, gravel, clay, and organics. (C) -2.0 - 3.0' brown-to-dark brown SILT, trace fine-to-medium sand, gravel, and gravel, and clay. (D) - 3-4' brown SILT and fine-to-medium SAND, trace coarse sand, fine gravel, clay, and organics.</li> <li>Specific conductance (μS/cm) = 0.86; Temp. (°C) = 25.6; Turbidity (NTU) = 7.27; pH = 6.71; ORP (mV) = 125.5; PID = 0. Slight petroleum odor and sheen on the water when aucering.</li> </ul>
	West Longitude	E (SD-06)	4-5	0134LN-0071/ D35480/ PA41R8/A41R8	9/5/2018 16:28	Field PCBs 209 CBCs TOC % solids	
	Grab sediment samples collected using a hand auger, from a fluvial deposition area	А	0-1	0134LN-0072	9/5/2018 16:15	Field PCBs	
	along the northern bank of the Lower Neponset River, slightly downstream of the former Lewis Chemical facility and approximately 200 ft. upstream of Fairmount Avenue Bridge spanning the river, to determine the presence and level of any hazardous Aroclor substances within the Lower Neponset River for waste source and observed release	В	1-2	0134LN-0073	9/5/2018 16:18	Field PCBs	
		С	2-3	0134LN-0074	9/5/2018 16:20	Field PCBs	
	evaluations. North Latitude West Longitude	D (SD-11)	3-4	0134LN-0075/ D35485/ PA41S3/A41S3	9/5/2018 16:24	Field PCBs 209 CBCs TOC % solids	

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
		А	0-0.5	0134LN-0076	9/5/2018 17:20	Field PCBs	
		В	0.5-1.5	0134LN-0077	9/5/2018 17:20	Field PCBs	Sample was collected using a hand auger. Material described as:
	Grab sediment sample collected from potentially contaminated source area located upstream of the Tileston & Hollingsworth Dam and downstream of the confluence of Mother Brook and the	С	1.5-2.5	0134LN-0078	9/5/2018 17:22	Field PCBs	<ul> <li>0.0-0.5' dark brown, organic rich SILT, little sand, trace fine-to-coarse gravel, and plant debris</li> <li>0.5-1.5' dark brown, organic rich SILT, some</li> </ul>
MBC-C1	Neponset River, approximately 125 feet east of the Dana Ave bridge. Sample collected for PCB Congener analysis to determine the presence and level of any	D	2.5-3	0134LN-0079	9/5/2018 17:25	Field PCBs	sand, trace gravel, . 2.5 -3' light brown sandy SILT and CLAY, trace gravel and organics. 3-3.5' brown SILTY SAND, trace gravel, clay, and organics.
	hazardous PCB substances within the Lower Neponset River for waste source and observed release evaluations. North Latitude West Longitude	E	3-3.5	0134LN-0080	9/5/2018 17:26	Field PCBs	<ul> <li>3.5-4' dark brown, organic rich SILT, some sand, trace gravel.</li> <li>4-5' dark brown, organic rich SILT, little sand, Specific conductance (μS/cm) = 0.86;</li> </ul>
		F	3.5-4	0134LN-0081	9/5/2018 17:28	Field PCBs	Temp. (°C) = 26.2; Turbidity (NTU) = 6.36; pH = 7.26; PID = 0.
		G	4-5	0134LN-0082	9/5/2018 17:32	Field PCBs	

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment sample collected from an area within the Mother Brook upstream of the confluence of Mother Brook and the	А	0-1	0134LN-0086	9/6/2018 9:40	Field PCBs	Sample was collected using a hand auger. Material described as:
UMB-C1	Neponset River, approximately 750 feet upstream of the Westinghouse Dam. Sample collected for PCB Congener analysis to determine the presence and	В	1-2	0134LN-0087	9/6/2018 9:43	Field PCBs	<ul> <li>0-1' black, organic rich SILT, little sand, trace fine-to-coarse gravel.</li> <li>1-2' black organic rich SILT, some sand, trace gravel.</li> <li>2-3' black SILT and CLAY, trace sand and</li> </ul>
	MB-C1 level of any hazardous PCB substances within the Upstream segment of Mother Brook to document upstream reference/background levels for	С	2-3	0134LN-0088	9/6/2018 9:46	Field PCBs	organics. 3-4' black SILTY SAND, trace gravel, clay, and organics. Specific conductance ( $\mu$ S/cm) = 0.86; Temp.
	comparison purposes. North Latitude West Longitude	D	3-3.5	0134LN-0089	9/6/2018 9:55	Field PCBs	(°C) = 26.2; Turbidity (NTU) = 6.36; pH = 7.26; PID = 0.
	Grab sediment sample collected from an area within the Mother Brook upstream of the confluence of Mother Brook and the Neponset River, approximately 1,200 feet	А	0-1	0134LN-0090	9/6/2018 10:52	Field PCBs	Sample was collected using a hand auger collected in 6" of water. Material described as: 0-1' dark brown-to-black organic rich SILT,
	upstream of the Centennial Dam. Sample collected for PCB Congener analysis to determine the presence and level of any hazardous PCB substances within the Upstream segment of Mother Brook to	В	1-2	0134LN-0091	9/6/2018 10:54	Field PCBs	trace clay. 1-2' dark brown-to-black organic rich SILT, some fine-to-coarse sand. 2-3' black organic rich SILT, some fine-to- coarse sand, little clay, trace fine-to-coarse
	document upstream reference/background levels for comparison purposes. North Latitude West Longitude	C (SD-10)	2-3	0134LN-0092/ D35484/ PA41S2/A41S2	9/6/2018 11:02	Field PCBs 209 CBCs TOC % solids	gravel. Specific conductance ( $\mu$ S/cm) = 0.94; Temp. (°C) = 27.4; Turbidity (NTU) = 4.64; pH = 7.05; PID = 0.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment sample collected from an area within the Upper Neponset River, located adjacent to the Martini Playground. Sample collected for PCB	А	0-1	0134LN-0093	9/6/2018 13:00	Field PCBs	Sample was collected using a hand auger collected in 6" of water.
UNR-C1	Congener analysis to determine the presence and level of any hazardous PCB substances within the Upper Neponset River to document upstream	В	1-2	0134LN-0094	9/6/2018 13:10	Field PCBs	Material described as: 0-2' dark gray coarse-to-fine SAND. 2-3' light-to-medium gray coarse-to-fine SAND. Specific conductance (µS/cm) = 0.71; Temp.
	reference/background levels for comparison purposes. North Latitude West Longitude	С	2-3	0134LN-0095	9/6/2018 13:15	Field PCBs	(°C) = 25.8; Turbidity (NTU) = 4.36; pH = 6.74; PID = 0.
	Grab sediment sample collected from an	А	0-1	0134LN-0096	9/6/2018 13:51	Field PCBs	Sample was collected using a hand auger collected in 12" of water. Material described as:
UNID C2	area within the Upper Neponset River, located behind the Stop & Shop. Sample collected for PCB Congener analysis to determine the presence and level of any hazardous PCB substances within the	В	1-2	0134LN-0097	9/6/2018 13:55	Field PCBs	0-1' dark brown SILTY SAND, trace clay and organics. 1-2' dark brown SANDY SILT, trace clay and organics.
	Upper Neponset River to document upstream reference/background levels for comparison purposes. North Latitude	С	2-3	0134LN-0098	9/6/2018 13:58	Field PCBs	<ul> <li>2-3' dark brown SILT, little fine-to-medium sand, trace clay and organics.</li> <li>3-4' dark brown SILT, little fine-to-medium sand, little clay, trace organics.</li> </ul>
	West Longitude	D (SD-08)	3-4	0134LN-0099/ D35482/ PA41S0/A41S0	9/6/2018 14:03	Field PCBs 209 CBCs TOC % solids	Specific conductance (µS/cm) = 0.77; Temp. (°C) = 25.6; Turbidity (NTU) = 4.03; pH = 6.95; PID = 0. Slight petroleum/oily odor.

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
	Grab sediment sample collected from an area within the Unper Nenonset River	A (SD-09)	0-1	0134LN-0100/ D35483/ PA41S1/A41S1	9/6/2018 15:15	Field PCBs 209 CBCs TOC % solids	
UNR-C3	area within the Upper Neponset River, located approximately 1,000 feet upstream of Paul's Bridge. Sample collected for PCB Congener analysis to determine the presence and level of any	В	1-2	0134LN-0101	9/6/2018 15:19	Field PCBs	Sample was collected using a hand auger collected in 18" of water. Material described as: 0-1' brown-to-dark brown SILT, little clay, trace clay and fine-to-medium sand
or the CS	hazardous PCB substances within the Upper Neponset River to document upstream reference/background levels for comparison purposes. North Latitude	С	2-3	0134LN-0102	9/6/2018 15:21	Field PCBs	Specific conductance ( $\mu$ S/cm) = 0.71; Temp. (°C) = 25.6; Turbidity (NTU) = 4.26; pH = 6.75; PID = 0.
	West Longitude	D	3-4	0134LN-0103	9/6/2018 15:28	Field PCBs	
BCA-C103	Field duplicate of BCA-C3D	D	3-3.8	0134LN-0083	9/4/2018 16:13	Field PCBs	See BCA-C1D.

## SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS BOSTON/MILTON, MASSACHUSETTS 4 THROUGH 6 SEPTEMBER 2018

Station Location	Location Description/Rationale	Sub-location	Sample Depth* (feet)	Scribe Sample No/ DAS Sample No./ CLP Sample No.	Date and Time (hours)	Analysis	Sample Description
BCA-C101	Field duplicate of BCA-C1A	А	0-1	0134LN-0084	9/4/2018 14:35	Field PCBs	See BCA-C1A
THD-C101	Field duplicate of THD-C1D	D	3-4	0134LN-0085	9/5/2018 13:03	Field PCBs	See THD-C1D
THD-C102	Field duplicate of THD-C2D	D	2-3	0134LN-0104	9/5/2018 13:45	Field PCBs	See THD-C2D.
BCA-C105D	Field Duplicate of BCA-C5D	D (SD-12)	2.5-4	NA/ D35486/ PA41S4/A41S4	9/4/2018 17:40	Field PCBs 209 CBCs TOC % solids	See BCA-C5D

Temp (°C) = Temperature (degrees Celsius)

Spec. Cond. ( $\mu$ S/cm) = Specific conductance (micro Siemens per centimeter)

NTU = Nephelometric Turbidity Units

ORP (mV) = Oxidation-Reduction Potential (milliVolts)

CLP = Contract Laboratory Program

DAS = Delivery of Analytical Services

CGI/O<sub>2</sub> (LEL/%) = Combustible Gas Indicator/Oxygen Meter (Lower Explosive Limit/Percent)

PID = Photoionization Detector

COC = Chain of Custody

ppm = parts per million

No. = Number

NR = Not Recorded.

\* = Below the sediment/water interface.

" = inches.

'= feet.

NA = Not assigned

Analyses: Field PCBs = Field Screening Polychlorinated biphenyls (EPA Region 1 SOP, EIASOP-FLDPCB3).
 PCBs = PCBs Medium Level in Soils and Sediments (EPA Region 1 SOP, EIASOP-PESTSOIL4)
 209 CBCs = Contract Laboratory Program (CLP) 209 Congeners (HRSM01.2 for PCB Congeners)
 TOC = Total Organic Carbon (SW-846 9060/Lloyd Kahn)
 % solids = Percent solids

## ATTACHMENT D LOWER NEPONSET RIVER PCBS START ANALYTICAL RESULTS TABLES Samples Collected from 13 to 17 November 2017

Table 1	Data Summary Table, Aroclor Sediment Analysis, SDG A41G7
Table 2	Data Summary Table, Aroclor Sediment Analysis, SDG A41H3
Table 3	Data Summary Table, Aroclor Sediment Analysis, SDG A41K4
Table 4	Data Summary Table, Aroclor Sediment Analysis, SDG A41M8
Table 5	Data Summary Table, Total Organic Carbon Sediment Analysis
Table 6	Data Summary Table, Total Organic Carbon Sediment Analysis
Table 7	Data Summary Table, Total Organic Carbon Sediment Analysis

#### DATA SUMMARY TABLE 1 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP SAM	MPLE N	UMBER	A41G7	A41G8	A41H1	A41H2	A41J4	A41J5
	SAMP	PLE IDE	NTIFIER	D35204	D35205	D35208	D35209	D35221	D35222
	STATI	ION LO	CATION	SD-01	SD-02	SD-03	SD-04	SD-14	SD-14B
	LABORAT	TORY N	UMBER	l6545-01	16545-02	16545-03	16545-04	16545-05	16545-08
COMPOUND	N	MDL	CRQL						
Aroclor-1016		1.7	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1221	:	2.2	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1232	0	0.87	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1242		1.2	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1248		1.6	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1254		1.6	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1260	:	2.2	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1262		1.3	33	64 U	72 UJ <sup>1</sup>	65 U	72 UJ <sup>1</sup>	85 U	97 UJ <sup>1</sup>
Aroclor-1268		1.2	33	64 U	72 UJ1	65 U	72 UJ1	85 U	97 UJ'
	DILU	UTION F	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	D	DATE SA	AMPLED	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017
	DAT	TE EXTR	RACTED	11/20/2017	11/20/2017	11/20/2017	11/20/2017	11/20/2017	11/20/2017
	DA	ATE AN	ALYZED	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017
	SAMPLE WE	EIGHT (	GRAMS)	30.0	30.1	30.1	30.1	30.1	30.1
		9	% SOLID	51.7	45.8	50.9	46.0	38.8	33.9

S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-Detect results are estimated due to surrogate recoveries below the lower recovery limit.

J+<sup>2</sup> = Positve detect results are estimated with a high bias (J+) due to surrogate recoveries exceeding the upper recovery limit.

 $J^3$  = %D between dual-column results was  $\ge 25$ .

Values bolded and shaded exceed the sample adjusted CRQL.

#### NOTES:

Results are reported in micrograms per kilogram (µg/kg).

MDL = Method Detection Limit

CRQL = Contract Required Quantitation Limit

#### DATA SUMMARY TABLE 1 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP \$	SAMPLE	NUMBER	A41J6	A41J7	A41J8	A41J9	A41K0	A41K1
	SA	MPLE ID	ENTIFIER	D35223	D35224	D35225	D35226	D35227	D35228
	ST	ATION L	OCATION	SD-14A	SD-15	SD-16	SD-17	SD-18	SD-19
	LABOR	RATORY	NUMBER	16545-09	I6545-10	l6545-11	l6545-12	l6545-13	l6545-14
COMPOUND		MDL	CRQL						
Aroclor-1016		1.7	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 U	58 U
Aroclor-1221		2.2	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 U	58 U
Aroclor-1232		0.87	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 U	58 U
Aroclor-1242		1.2	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 U	58 U
Aroclor-1248		1.6	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 U	58 U
Aroclor-1254		1.6	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 U	58 U
Aroclor-1260		2.2	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 J <sup>3</sup>	78 J+ <sup>2</sup>
Aroclor-1262		1.3	33	68 UJ <sup>1</sup>	74 U	69 U	68 U	45 U	58 U
Aroclor-1268		1.2	33	68 UJ1	74 U	69 U	68 U	45 U	58 U
	D	ILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
		DATE S	SAMPLED	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017
	DATE EXTRACTE		RACTED	11/20/2017	11/20/2017	11/20/2017	11/20/2017	11/20/2017	11/20/2017
		DATE A	NALYZED	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017
	SAMPLE	WEIGHT	(GRAMS)	50.1	30.1	30.1	30.0	30.1	30.1
			% SOLID	29.1	44.5	47.8	48.8	72.7	57.1

S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-Detect results are estimated due to surrogate recoveries below the lower recovery limit.

J+<sup>2</sup> = Positve detect results are estimated with a high bias (J+) due to surrogate recoveries exceeding the upper recovery limit.

 $J^3$  = %D between dual-column results was  $\ge 25$ .

Values bolded and shaded exceed the sample adjusted CRQL.

#### NOTES:

Results are reported in micrograms per kilogram (µg/kg).

MDL = Method Detection Limit

CRQL = Contract Required Quantitation Limit

#### DATA SUMMARY TABLE 1 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP SAMPLE	NUMBER	A41K3	A41K5	A41K6	A41K9	A41L0	A41L1
	SAMPLE ID	ENTIFIER	D35230	D35232	D35233	D35236	D35237	D35238
	STATION L	OCATION	SD-21	SD-23	SD-24	SD-25	SD-26	SD-27
	LABORATORY	NUMBER	l6545-15	l6545-16	l6545-17	l6545-18	l6545-19	16545-20
COMPOUND	MDL	CRQL						
Aroclor-1016	1.7	33	58 U	56 U	42 U	45 U	54 UJ <sup>1</sup>	84 U
Aroclor-1221	2.2	33	58 U	56 U	42 U	45 U	54 UJ <sup>1</sup>	84 U
Aroclor-1232	0.87	33	58 U	56 U	42 U	45 U	54 UJ <sup>1</sup>	84 U
Aroclor-1242	1.2	33	58 U	56 U	42 U	45 U	54 UJ <sup>1</sup>	84 U
Aroclor-1248	1.6	33	58 U	56 U	42 U	45 U	54 UJ <sup>1</sup>	84 U
Aroclor-1254	1.6	33	49 J <sup>3</sup>	70 J <sup>3</sup>	42 U	46 J <sup>3</sup>	54 UJ <sup>1</sup>	84 U
Aroclor-1260	2.2	33	58 U	56 U	42 U	45 U	54 UJ <sup>1</sup>	84 U
Aroclor-1262	1.3	33	58 U	56 U	42 U	45 U	54 UJ <sup>1</sup>	84 U
Aroclor-1268	1.2	33	58 U	56 U	42 U	45 U	54 UJ1	84 U
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATES	SAMPLED	11/15/2017	11/15/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017
	DATE EXTRACTED		11/20/2017	11/20/2017	11/20/2017	11/20/2017	11/20/2017	11/20/2017
	DATE A	NALYZED	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017
S	SAMPLE WEIGHT (GRAMS)		30.1	30.0	30.0	30.1	30.1	30.0
		% SOLID	56.4	59.5	79.2	73.9	61.0	39.5

S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-Detect results are estimated due to surrogate recoveries below the lower recovery limit.

J+<sup>2</sup> = Positve detect results are estimated with a high bias (J+) due to surrogate recoveries exceeding the upper recovery limit.

 $J^3 = \%D$  between dual-column results was  $\ge 25$ .

Values bolded and shaded exceed the sample adjusted CRQL.

#### NOTES:

Results are reported in micrograms per kilogram (µg/kg).

MDL = Method Detection Limit

CRQL = Contract Required Quantitation Limit

#### DATA SUMMARY TABLE 1 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP SAMPLE	NUMBER	A41L3	A41M3		
	SAMPLE ID	ENTIFIER	D35240	D35250		
	STATION LOCATION		SD-27A	SD-35		
	LABORATORY NUMBER		l6545-21	16545-22		
COMPOUND	MDL	CRQL				
Aroclor-1016	1.7	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1221	2.2	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1232	0.87	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1242	1.2	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1248	1.6	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1254	1.6	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1260	2.2	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1262	1.3	33	100 UJ <sup>1</sup>	57 UJ <sup>1</sup>		
Aroclor-1268	1.2	33	100 UJ <sup>1</sup>	57 UJ1		
	DILUTION	FACTOR	1.0	1.0		
	DATES	SAMPLED	11/16/2017	11/16/2017		
	DATE EX	TRACTED	11/20/2017	11/20/2017		
	DATE A	NALYZED	11/27/2017	11/27/2017		
S	AMPLE WEIGHT	(GRAMS)	50.1	30.1		
		% SOLID	19.5	58.2		

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-Detect results are estimated due to surrogate recoveries below the lower recovery limit.

J+<sup>2</sup> = Positve detect results are estimated with a high bias (J+) due to surrogate recoveries exceeding the upper recovery limit.

 $J^3 = \%D$  between dual-column results was  $\ge 25$ .

Values bolded and shaded exceed the sample adjusted CRQL.

### NOTES:

Results are reported in micrograms per kilogram (µg/kg).

MDL = Method Detection Limit

CRQL = Contract Required Quantitation Limit

#### DATA SUMMARY TABLE 2 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP SAM	PLE NUMBER	A41H3	A41H4	A41H5	A41H6	A41H7	A41H8
	SAMPL	E IDENTIFIEF	D35210	D35211	D35212	D35213	D35214	D35215
	STATIO	ON LOCATION	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10
	LABORATORY NUMBE		l6502-01	16505-02	16505-05	16505-06	16505-07	16505-08
COMPOUND	М	DL CRQL						
Aroclor-1016	1.	.7 33	39 U	81 U	39 U	40 U	45 UJ <sup>1</sup>	60 U
Aroclor-1221	2	.2 33	39 U	81 U	39 U	40 U	45 UJ <sup>1</sup>	60 U
Aroclor-1232	0.87 33		39 U	81 U	39 U	40 U	45 UJ <sup>1</sup>	60 U
Aroclor-1242	1.	.2 33	39 U	81 U	39 U	40 U	45 UJ <sup>1</sup>	60 U
Aroclor-1248	1.	.6 33	39 U	2100 * J <sup>2</sup>	13 J	57	150 J- <sup>1</sup>	260
Aroclor-1254	1.	.6 33	39 U	81 UJ <sup>3</sup>	39 U	40 U	45 UJ <sup>1</sup>	60 U
Aroclor-1260	2	.2 33	39 U	81 U	39 U	40 U	45 UJ <sup>1</sup>	60 U
Aroclor-1262	1.	.3 33	39 U	81 U	39 U	40 U	45 UJ <sup>1</sup>	60 U
Aroclor-1268	1.	.2 33	39 U	81 U	39 U	40 U	45 UJ <sup>1</sup>	60 U
	DILU	TION FACTOR	R 1	1 / 5*	1.0	1	1.0	1.0
	DA	TE SAMPLED	11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/14/2017
	DATE	EEXTRACTED	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017
	DA	TE ANALYZED	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017
	SAMPLE WEI	GHT (GRAMS	) 30.1	30.1	30.1	30.1	30.2	30.0
		% SOLIE	84.2	40.8	84.5	83.0	73.0	55.0

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

J<sup>1</sup> = Positive and non-detect results are estimated (J-/UJ) due to surrogate recoveries below the lower recovery limit.

 $J^2$  = Positve field duplicate results are estimated (J) due to RPD greater than 50%.  $J^3$  =Positve and non-detect field duplicate results are estimated (J/UJ) since one result was non-detected and one result was greater than 2X the CRQL.

Results are reported in micrograms per kilogram ( $\mu$ g/kg). J<sup>3</sup>=Pos

MDL = Method Detection Limit

NOTES:

Values bolded and shaded exceed the sample adjusted CRQL.

 $J^4$  = %D between dual-column results was ≥25.

CRQL = Contract Required Quantitation Limit All results are reported on a Dry Weight Basis.

#### DATA SUMMARY TABLE 2 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP SA	AMPLE	NUMBER	A41H9	A41J2	A41J3	A41M7	A41M9	A41N0
	SAM	IPLE IDE	ENTIFIER	D35216	D35219	D35220	D35254	D35256	D35257
	STA	TION LO	OCATION	SD-11	SD-12	SD-13	SD-39	SD-41	SD-42
	LABORATORY NUMB		NUMBER	16505-09	16505-10	l6505-11	l6505-12	l6505-13	l6505-14
COMPOUND		MDL	CRQL						
Aroclor-1016		1.7	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	74 U	40 U	72 UJ <sup>1</sup>
Aroclor-1221		2.2	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	74 U	40 U	72 UJ <sup>1</sup>
Aroclor-1232		0.87	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	74 U	40 U	72 UJ <sup>1</sup>
Aroclor-1242		1.2	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	74 U	40 U	72 UJ <sup>1</sup>
Aroclor-1248		1.6	33	1500 *J <sup>4</sup>	300 J- <sup>1</sup>	370 J- <sup>1</sup>	630 J <sup>2,4</sup>	530 *	200 J- <sup>1</sup>
Aroclor-1254		1.6	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	330 J <sup>3</sup>	40 U	72 UJ <sup>1</sup>
Aroclor-1260		2.2	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	74 U	40 U	72 UJ <sup>1</sup>
Aroclor-1262		1.3	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	74 U	40 U	72 UJ <sup>1</sup>
Aroclor-1268		1.2	33	54 U	56 UJ <sup>1</sup>	48 UJ <sup>1</sup>	74 U	40 U	72 UJ <sup>1</sup>
	DIL	LUTION	FACTOR	1 / 4*	1.0	1.0	1.0	1 / 2*	1.0
		DATE S	AMPLED	11/14/2017	11/14/2017	11/14/2017	11/13/2017	11/14/2017	11/14/2017
	DA	TE EXT	RACTED	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017
	D		NALYZED	12/4/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017
	SAMPLE W	EIGHT	(GRAMS)	30.1	30.1	30.0	30.1	30.1	30.0
			% SOLID	61.1	58.7	68.5	44.4	82.0	45.9

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

J<sup>1</sup> = Positive and non-detect results are estimated (J-/UJ) due to surrogate recoveries below the lower recovery limit.

 $J^2$  = Positve field duplicate results are estimated (J) due to RPD greater than 50%.  $J^3$  =Positve and non-detect field duplicate results are estimated (J/UJ) since one result was non-detected and one result was greater than 2X the CRQL.

Results are reported in micrograms per kilogram ( $\mu$ g/kg).  $J^3$  =

MDL = Method Detection Limit

NOTES:

Values bolded and shaded exceed the sample adjusted CRQL.

 $J^4$  = %D between dual-column results was ≥25.

CRQL = Contract Required Quantitation Limit All results are reported on a Dry Weight Basis.

#### DATA SUMMARY TABLE 2 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP SAMPL	E NUMBER	A41N1	A41P0	A41P1	A41P2	A41P3	A41P4
	SAMPLE	IDENTIFIER	D35258	D35275	D35276	D35277	D35278	D35279
	STATION	LOCATION	SD-43	SD-08A	SD-12A	SD-100A	SD-100B	SD-100C
	LABORATOF	Y NUMBER	l6505-15	l6505-18	l6505-19	16505-20	16505-21	16505-22
COMPOUND	MDL	CRQL						
Aroclor-1016	1.7	33	38 U	58 U	60 U	79 UJ <sup>1</sup>	93 U	82 U
Aroclor-1221	2.2	33	38 U	58 U	60 U	79 UJ <sup>1</sup>	93 U	82 U
Aroclor-1232	0.87	33	38 U	58 U	60 U	79 UJ <sup>1</sup>	93 U	82 U
Aroclor-1242	1.2	33	38 U	58 U	60 U	79 UJ <sup>1</sup>	93 U	82 U
Aroclor-1248	1.6	33	180	270	1000 *	200 J- <sup>1</sup>	260	82 U
Aroclor-1254	1.6	33	38 U	58 U	60 U	69 J- <sup>1,4</sup>	93 U	82 U
Aroclor-1260	2.2	33	38 U	58 U	60 U	79 UJ <sup>1</sup>	93 U	31 J <sup>4</sup>
Aroclor-1262	1.3	33	38 U	58 U	60 U	79 UJ <sup>1</sup>	93 U	82 U
Aroclor-1268	1.2	33	38 U	58 U	60 U	79 UJ <sup>1</sup>	93 U	82 U
	DILUTIO	ON FACTOR	1.0	1.0	1 / 4*	1.0	1.0	1.0
	DATI	SAMPLED	11/14/2017	11/13/2017	11/14/2017	11/14/2017	11/14/2017	11/14/2017
	DATE E	XTRACTED	11/16/2017	11/16/2017	11/16/2017	11/22/2017	11/16/2017	11/16/2017
	DATE	ANALYZED	11/21/2017	11/21/2017	12/4/2017	11/27/2017	11/21/2017	11/21/2017
	SAMPLE WEIGH	IT (GRAMS)	30.1	30.1	30.0	30.1	30.1	30.1
		% SOLID	86.3	56.8	55.3	41.8	35.3	40.0

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

J<sup>1</sup> = Positive and non-detect results are estimated (J-/UJ) due to surrogate recoveries below the lower recovery limit.

 $J^2$  = Positve field duplicate results are estimated (J) due to RPD greater than 50%.  $J^3$  =Positve and non-detect field duplicate results are estimated (J/UJ) since one result was non-detected and one result was greater than 2X the CRQL.

Results are reported in micrograms per kilogram ( $\mu$ g/kg).  $J^3 = Pc$ 

MDL = Method Detection Limit

NOTES:

Values bolded and shaded exceed the sample adjusted CRQL.

 $J^4$  = %D between dual-column results was ≥25.

CRQL = Contract Required Quantitation Limit All results are reported on a Dry Weight Basis.

#### DATA SUMMARY TABLE 3 AROCLOR SEDIMENT ANALYSIS **NOVEMBER 2017**

	CLP	SAMPLE	NUMBER	A41K4	A41L4	A41L5	A41L6	A41L8	A41M0
	SA	MPLE ID	ENTIFIER	D35231	D35241	D35242	D35243	D35245	D35247
	ST	TATION L	OCATION	SD-22	SD-28	SD-29	SD-30	SD-32	SD-32A
	LABO	RATORY	NUMBER	l6547-01	16547-02	16547-03	16547-04	16547-05	16547-06
COMPOUND		MDL	CRQL						
Aroclor-1016		1.7	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
Aroclor-1221		2.2	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
Aroclor-1232		0.87	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
Aroclor-1242		1.2	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
Aroclor-1248		1.6	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
Aroclor-1254		1.6	33	63 J <sup>4,5</sup>	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	51 J <sup>5</sup>	100 UJ <sup>1</sup>
Aroclor-1260		2.2	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
Aroclor-1262		1.3	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
Aroclor-1268		1.2	33	58 U	94 U	140 UJ <sup>1,6</sup>	47 UJ <sup>1</sup>	86 U	100 UJ <sup>1</sup>
		DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
		DATE S	SAMPLED	11/15/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017
	0	DATE EX	TRACTED	11/21/2017	11/27/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017
		DATE A	NALYZED	11/22/2017	11/27/2017	11/22/2017	11/22/2017	11/22/2017	11/22/2017
	SAMPLE	WEIGHT	(GRAMS)	30.0	50.0	30.1	30.1	30.1	30.0
			% SOLID	56.5	21.0	22.9	69.5	38.3	32.9

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-detect results are estimated due to surrogate recoveries below the lower recovery limit.

## J-<sup>2</sup> = Positve results are estimated with a low bias (J-) due to surrogate recoveries below the lower recovery limit.

Results are reported in micrograms per kilogram (µg/kg). R<sup>3</sup> = Non-detect results are rejected (R) due to Matrix Spike/Matrix Spike Duplicate recovery below the lower limit for Aroclor-1260.

 $J^4$  = Positve results are estimated (J) due to the field duplicate RPD exceeding the upper limit.

 $J^6$  = Non-detect results are estimated (UJ) due to percent solids > 10% but <30%. The amount of soil extracted was not increased. Values bolded and shaded exceed the sample adjusted CRQL.

### NOTES:

MDL = Method Detection Limit CRQL = Contract Required Quantitation Limit

 $J^5 = \%D$  between dual-column results was  $\ge 25$ .

All results are reported on a Dry Weight Basis.

#### DATA SUMMARY TABLE 3 AROCLOR SEDIMENT ANALYSIS **NOVEMBER 2017**

	CLP SAMPLE	NUMBER	A41M1	A41M2	A41M4	A41M5	A41M6	A41N2
	SAMPLE II	DENTIFIER	D35248	D35249	D35251	D35252	D35253	D35259
	STATION	LOCATION	SD-33	SD-34	SD-36	SD-37	SD-38	SD-44
	LABORATOR	NUMBER	16547-07	16547-08	16547-09	l6547-10	l6547-11	16547-12
COMPOUND	MDL	CRQL						
Aroclor-1016	1.7	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
Aroclor-1221	2.2	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
Aroclor-1232	0.87	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
Aroclor-1242	1.2	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
Aroclor-1248	1.6	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
Aroclor-1254	1.6	33	59 U	59 J- <sup>2,5</sup>	140 UJ <sup>1</sup>	100 U	100 J- <sup>2,5</sup>	2100 *
Aroclor-1260	2.2	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
Aroclor-1262	1.3	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
Aroclor-1268	1.2	33	59 U	100 UJ <sup>1</sup>	140 UJ <sup>1</sup>	100 U	100 UJ <sup>1</sup>	43 U
	DILUTIO	N FACTOR	1.0	1.0	1.0	1.0	1.0	1.0 / 5.0*
	DATE	SAMPLED	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/15/2017
	DATE EX	TRACTED	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017
	DATE A	NALYZED	11/22/2017	11/22/2017	11/22/2017	11/22/2017	11/22/2017	11/22/2017
	SAMPLE WEIGH	(GRAMS)	30.1	30.0	50.0	30.1	30.1	30.1
		% SOLID	55.7	31.5	14.4	31.9	31.6	75.9

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-detect results are estimated due to surrogate recoveries below the lower recovery limit.

## J-<sup>2</sup> = Positve results are estimated with a low bias (J-) due to surrogate recoveries below the lower recovery limit.

Results are reported in micrograms per kilogram (µg/kg). R<sup>3</sup> = Non-detect results are rejected (R) due to Matrix Spike/Matrix Spike Duplicate recovery below the lower limit for Aroclor-1260.

 $J^4$  = Positve results are estimated (J) due to the field duplicate RPD exceeding the upper limit.

 $J^5 = \%D$  between dual-column results was  $\ge 25$ .

 $J^6$  = Non-detect results are estimated (UJ) due to percent solids > 10% but <30%. The amount of soil extracted was not increased. Values bolded and shaded exceed the sample adjusted CRQL.

#### NOTES:

MDL = Method Detection Limit

CRQL = Contract Required Quantitation Limit

All results are reported on a Dry Weight Basis.

#### DATA SUMMARY TABLE 3 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

	CLP SAM	MPLE NUME	ER A41N3	A41Q3	A41Q4	A41Q5	A41Q6	A41Q7
	SAMP	LE IDENTIF	ER D35260	D35280	D35281	D35282	D35283	D35284
	STATI	ION LOCAT	ON SD-45	SD-21A	SD-23B	SD-23A	SD-22A	SD-26A
	LABORAT	FORY NUME	ER 16547-13	16547-16	l6547-17	l6547-18	l6547-19	16547-22
COMPOUND	M	IDL CR	۱					
Aroclor-1016	1	1.7 33	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 U	68 UJ <sup>1</sup>
Aroclor-1221	2	2.2 3	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 U	68 UJ <sup>1</sup>
Aroclor-1232	0	.87 33	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 U	68 UJ <sup>1</sup>
Aroclor-1242	1	1.2 3	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 U	68 UJ <sup>1</sup>
Aroclor-1248	1	1.6 33	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 U	68 UJ <sup>1</sup>
Aroclor-1254	1	1.6 33	460 J <sup>4</sup>	45 J- <sup>2,5</sup>	38 J- <sup>2,5</sup>	100 J- <sup>2,5</sup>	29 J	35 J- <sup>2,5</sup>
Aroclor-1260	2	2.2 33	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 R <sup>3</sup>	68 UJ <sup>1</sup>
Aroclor-1262	1	1.3 3	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 U	68 UJ <sup>1</sup>
Aroclor-1268	1	1.2 33	71 U	55 UJ <sup>1</sup>	45 UJ <sup>1</sup>	60 UJ <sup>1</sup>	42 U	68 UJ <sup>1</sup>
	DILU	JTION FACT	<b>OR</b> 1.0	1.0	1.0	1.0	1.0	1.0
	D	ATE SAMP	ED 11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/16/2017
	DAT	E EXTRAC	ED 11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017
	DA	TE ANALY	ED 11/22/2017	11/22/2017	11/22/2017	11/22/2017	11/22/2017	11/22/2017
	SAMPLE WE	IGHT (GRA	<b>AS)</b> 30.1	30.0	30.0	30.1	30.0	50.1
		% SC	LID 46.4	59.8	73.5	54.9	78.2	29.1

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-detect results are estimated due to surrogate recoveries below the lower recovery limit.

J-<sup>2</sup> = Positve results are estimated with a low bias (J-) due to surrogate recoveries below the lower recovery limit.

Results are reported in micrograms per kilogram (µg/kg). R<sup>3</sup> = Non-detect results are rejected (R) due to Matrix Spike/Matrix Spike Duplicate recovery below the lower limit for Aroclor-1260.

 $J^4$  = Positve results are estimated (J) due to the field duplicate RPD exceeding the upper limit.

CRQL = Contract Required Quantitation Limit  $J^5 = 9$ 

All results are reported on a Dry Weight Basis. J<sup>6</sup>

\* Reported value is from diluted analysis.

MDL = Method Detection Limit

NOTES:

J<sup>5</sup> = %D between dual-column results was ≥25.

 $J^6$  = Non-detect results are estimated (UJ) due to percent solids > 10% but <30%. The amount of soil extracted was not increased. Values bolded and shaded exceed the sample adjusted CRQL.

#### DATA SUMMARY TABLE 4 AROCLOR SEDIMENT ANALYSIS NOVEMBER 2017

CLP	SAMPLE	NUMBER	A41M8	A41Q8	A41Q9	A41R0
s	AMPLE ID	ENTIFIER	D35255	D35285	D35286	D35287
S	TATION L	OCATION	SD-40A	SD-26B	SD-36A	SD-36B
LABO	ORATORY	NUMBER	16549-01	16549-07	16549-08	16549-09
COMPOUND	MDL	CRQL				
Aroclor-1016	1.7	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1221	2.2	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1232	0.87	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1242	1.2	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1248	1.6	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1254	1.6	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1260	2.2	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1262	1.3	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
Aroclor-1268	1.2	33	55 U	110 UJ <sup>1</sup>	90 UJ <sup>1</sup>	130 UJ <sup>1,2</sup>
	DILUTION	FACTOR	1.0	1.0	1.0	1.0
	DATE S	SAMPLED	11/15/2017	11/16/2017	11/16/2017	11/16/2017
	DATE EXT	RACTED	11/22/2017	11/22/2017	11/22/2017	11/22/2017
	DATE A	NALYZED	11/28/2017	11/28/2017	11/28/2017	11/28/2017
SAMPLE	E WEIGHT	(GRAMS)	30.1	30.0	30.1	30.0
		% SOLID	59.5	30.1	36.5	24.6

#### S3VEM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

UJ<sup>1</sup> = Non-detect results are estimated due to surrogate recoveries below the lower recovery limit.

#### NOTES:

Results are reported in micrograms per kilogram (µg/kg).

MDL = Method Detection Limit

CRQL = Contract Required Quantitation Limit

All results are reported on a Dry Weight Basis.

\* Reported value is from diluted analysis.

 $J^2$  = Non-detect results are estimated (UJ) due to percent solids > 10% but <30%. The amount of soil extracted was not increased. Values bolded and shaded exceed the sample adjusted CRQL.

### DATA SUMMARY TABLE 5 TOTAL ORGANIC CARBON SEDIMENT ANALYSIS

	SAMPLE	NUMBER	D35204	D35205	D35208	D35209	D35221	D35222
	STATION L	OCATION	SD-01	SD-02	SD-03	SD-04	SD-14	SD-14B
	LABORATORY NUMBER MDL CRQL		180-72665-1	180-72665-2	180-72665-3	180-72665-4	180-72665-5	180-72665-6
COMPOUND								
Total Organic Carbon (TOC)	746	1,000	160,000 J <sup>2</sup>	100,000 J <sup>2</sup>	98,000 J <sup>2</sup>	74,000 J <sup>2</sup>	95,000 J <sup>2</sup>	97,000 J <sup>2</sup>
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATES	SAMPLED	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017
	DATE ANALYZED		11/28/2017	11/28/2017	11/28/2017	11/28/2017	11/28/2017	11/28/2017
	% SOLIE			28.1	49.3	47.3	37.9	50

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

 $J^1$  = Result is estimated (J) due to analysis out of holding time.

 $J^2$  = Result is estimated (J) due to laboratory duplicate RPD greater than 20%.

NOTES:

### DATA SUMMARY TABLE 5 TOTAL ORGANIC CARBON SEDIMENT ANALYSIS

	SAMPLE	NUMBER	D35223	D35224	D35225	D35226	D35227	D35228
	STATION L	OCATION	SD-14A	SD-15	SD-16	SD-17	SD-18	SD-19
	LABORATORY NUMB			180-72665-8	180-72665-9	180-72665-10	180-72665-11	180-72665-12
COMPOUND							29,000 J <sup>2</sup>	
Total Organic Carbon (TOC)			120,000 J <sup>2</sup>	80,000 J <sup>2</sup>	43,000 J <sup>2</sup>	7,800 J <sup>2</sup>		21,000 J <sup>2</sup>
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE	SAMPLED	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017
	DATE ANALYZED		11/28/2017	11/29/2017	11/28/2017	11/29/2017	11/28/2017	11/28/2017
	% SOLI			43.2	57.6	59.5	56.2	56.7

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

 $J^1$  = Result is estimated (J) due to analysis out of holding time.

 $J^2$  = Result is estimated (J) due to laboratory duplicate RPD greater than 20%.

NOTES:

### DATA SUMMARY TABLE 5 TOTAL ORGANIC CARBON SEDIMENT ANALYSIS

	SAMPLE	NUMBER	D35230	D35232	D35233	D35236	D35237	D35238
	STATION L	OCATION	SD-21	SD-23	SD-24	SD-25	SD-26	SD-27
	LABORATORY	NUMBER	180-72665-13	180-72665-14	180-72665-15	180-72665-16	180-72665-17	180-72665-18
COMPOUND								
Total Organic Carbon (TOC)			34,000 J <sup>2</sup>	63,000 J <sup>2</sup>	4,900 J <sup>2</sup>	95,000 J <sup>2</sup>	44,000 J <sup>2</sup>	92,000 J <sup>2</sup>
	DILUTION	I FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATES	SAMPLED	11/15/2017	11/15/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017
	DATE ANALYZED		11/28/2017	11/28/2017	11/30/2017	11/30/2017	11/30/2017	11/30/2017
	% SOLID			51.5	79.2	43.3	65.2	29.2

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

 $J^1$  = Result is estimated (J) due to analysis out of holding time.

 $J^2$  = Result is estimated (J) due to laboratory duplicate RPD greater than 20%.

NOTES:

### DATA SUMMARY TABLE 5 TOTAL ORGANIC CARBON SEDIMENT ANALYSIS

	SAMPLE STATION L		D35240 SD-27A	D35250 SD-35	D35255 SD-40A
	LABORATORY	NUMBER	180-72665-19	180-72665-20	180-72665-21
COMPOUND	MDL	CRQL			
Total Organic Carbon (TOC)	746	1,000	190,000 J <sup>1,2</sup>	44,000 J <sup>2</sup>	61,000 J <sup>2</sup>
	DILUTION	I FACTOR	1.0	1.0	1.0
	DATES	SAMPLED	11/16/2017	11/16/2017	11/15/2017
	DATE A	NALYZED	12/1/2017	11/30/2017	11/28/2017
		% SOLID	18.9	53.4	42.1

## S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work. J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

 $J^1$  = Result is estimated (J) due to analysis out of holding time.

 $J^2$  = Result is estimated (J) due to laboratory duplicate RPD greater than 20%.

NOTES:

Results are reported in milligrams per kilogram (mg/kg). MDL = Method Detection Limit. RL = Reporting Limit Limit.

	SAMPLE	NUMBER	D35210	D35211	D35212	D35213	D35214	D35215
	STATION L	OCATION	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10
L	ABORATORY	NUMBER	180-72573-4	180-72573-5	180-72573-6	180-72573-7	180-72573-8	180-72573-9
COMPOUND	MDL CRQL							
Total Organic Carbon (TOC)	746	1,000	11,000 J <sup>1,2</sup>	160,000 J <sup>1,2</sup>	9,000 J <sup>1,2</sup>	6,700 J <sup>1,2</sup>	14,000 J <sup>1,2</sup>	61,000 J <sup>1,2</sup>
		-						
	DILUTION	I FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE SAMPLEI		11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/14/2017
	DATE ANALYZE		11/24/2017	11/22/2017	11/24/2017	11/24/2017	11/24/2017	11/27/2017
	% SOLI		81.2	38.4	83.4	78.9	73.3	50.7

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

 $J^1$  = Result is estimated (J) due to poor matrix spike recovery.

 $J^2$  = Result is estimated (J) due to field duplicate RPD greater than 50%.

NOTES:

	SAMPLE	NUMBER	D35216	D35219	D35220	D35254	D35256	D35257
	STATION L	OCATION	SD-11	SD-12	SD-13	SD-39	SD-41	SD-42
	LABORATORY	NUMBER	180-72573-10	180-72573-11	180-72573-12	180-72573-13	180-72573-14	180-72573-15
COMPOUND	MDL CRQL							
Total Organic Carbon (TOC)	746	1,000	42,000 J <sup>1,2</sup>	50,000 J <sup>1,2</sup>	43,000 J <sup>1,2</sup>	74,000 J <sup>1,2</sup>	13,000 J <sup>1,2</sup>	170,000 J <sup>1,2</sup>
		-						
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE SAMPLEI		11/14/2017	11/14/2017	11/14/2017	11/13/2017	11/14/2017	11/14/2017
	DATE ANALYZE		11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017
	% SOL			61	69.8	46.4	71.1	34.7

### S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

 $J^1$  = Result is estimated (J) due to poor matrix spike recovery.

 $J^2$  = Result is estimated (J) due to field duplicate RPD greater than 50%.

NOTES:

	SAMPLE	NUMBER	D35258	D35275	D35276	D35277	D35278	D35279
	STATION L	OCATION	SD-43	SD-08A	SD-12A	SD-100A	SD-100B	SD-100C
I	LABORATORY	NUMBER	180-72573-16	180-72573-19	180-72573-20	180-72573-1	180-72573-2	180-72573-3
COMPOUND	MDL CRQL							
Total Organic Carbon (TOC)	746	1,000	3,400 J <sup>1,2</sup>	66,000 J <sup>1,2</sup>	40,000 J <sup>1,2</sup>	93,000 J <sup>1,2</sup>	110,000 J <sup>1,2</sup>	120,000 J <sup>1,2</sup>
		-						
	DILUTION	<b>FACTOR</b>	1.0	1.0	1.0	1.0	1.0	1.0
	DATE SAMPLEI		11/14/2017	11/13/2017	11/14/2017	11/14/2017	11/14/2017	11/14/2017
	DATE ANALYZE		11/27/2017	11/24/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017
	% SOLI		80.5	56.5	55.2	44.5	36.8	44.7

### S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Values not detected above the MDL are reported at the sample adjusted CRQL with a "U" flag, per the CLP Statement of Work.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

 $J^1$  = Result is estimated (J) due to poor matrix spike recovery.

 $J^2$  = Result is estimated (J) due to field duplicate RPD greater than 50%.

NOTES:

	SAMPLE	NUMBER	D35231	D35241	D35242	D35243	D35245	D35247
	STATION L	OCATION	SD-22	SD-28	SD-29	SD-30	SD-32	SD-32A
LA	BORATORY	NUMBER	180-72664-1	180-72664-2	180-72664-3	180-72664-4	180-72664-5	180-72664-6
COMPOUND	IPOUND MDL CR							
Total Organic Carbon (TOC)	otal Organic Carbon (TOC) 746 1,00		42,000	320,000	290,000	45,000	150,000	120,000
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE S	SAMPLED	11/15/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017
DATE ANALYZE		NALYZED	11/27/2017	11/28/2017	11/28/2017	11/30/2017	11/30/2017	11/29/2017
		% SOLID	60.8	24.4	22.5	62.6	44.5	35.3

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Value is non-detected.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

NOTES:

	SAMPLE	NUMBER	D35248	D35249	D35251	D35252	D35253	D35259
	STATION L	OCATION	SD-33	SD-34	SD-36	SD-37	SD-38	SD-44
L	ABORATORY	NUMBER	180-72664-7	180-72664-8	180-72664-9	180-72664-10	180-72664-11	180-72664-12
COMPOUND	MPOUND MDL CF							
Total Organic Carbon (TOC)	otal Organic Carbon (TOC) 746 1,00		75,000	100,000	470,000	90,000	110,000	100,000
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE S	SAMPLED	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/16/2017	11/15/2017
DATE ANALYZE		NALYZED	11/30/2017	11/30/2017	11/30/2017	11/30/2017	11/30/2017	11/27/2017
		% SOLID	51.5	35.1	15.1	36.3	42.2	42.5

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Value is non-detected.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

NOTES:

	SAMPLE	NUMBER	D35260	D35280	D35281	D35282	D35283	D35284
	STATION L	OCATION	SD-45	SD-21A	SD-23B	SD-23A	SD-22A	SD-26A
	LABORATORY	NUMBER	180-72664-13	180-72664-15	180-72664-16	180-72664-17	180-72664-18	180-72664-19
COMPOUND	IPOUND MDL CR							
Total Organic Carbon (TOC)	otal Organic Carbon (TOC) 746 1,00		68,000	65,000	13,000	120,000	16,000	100,000
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE S	SAMPLED	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/16/2017
DATE ANALYZE		NALYZED	11/27/2017	11/27/2017	11/28/2017	11/28/2017	11/28/2017	11/30/2017
% SOLID			68.3	61	59.2	50.7	69	50.8

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Value is non-detected.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

NOTES:

	SAMPLE	NUMBER	D35285	D35286	D35287
	STATION L	OCATION	SD-26B	SD-36A	SD-36B
LAB	ORATORY	NUMBER	180-72664-20	180-72664-21	180-72664-22
COMPOUND	MDL	CRQL			
Total Organic Carbon (TOC)	746	1,000	190,000	110,000	150,000
	DILUTION	FACTOR	1.0	1.0	1.0
	DATE S	SAMPLED	11/16/2017	11/16/2017	11/16/2017
	DATE A	NALYZED	11/30/2017	11/30/2017	11/30/2017
		% SOLID	29.1	32	22.6

S3VM DATA VALIDATION

QUALIFIER COMMENTS: U = Value is non-detected.

J = Results that are greater than the MDL but less than the CRQL are flagged (J) as estimated values with no superscripts.

NOTES:

## ATTACHMENT E LOWER NEPONSET RIVER PCBS START ANALYTICAL RESULTS TABLES Samples Collected from 4 to 6 September 2018

Summary of Polychlorinated Biphenyl Field Screening Results,
Sediment/Source Samples, Lower Neponset River PCBs Site, September 2018
ESAT Generated Data Summary Table – Validated Results, Lower Neponset
River PCBs Site, September 2018
Data Summary Table, Total PCB Congener and WHO Toxic PCB
Homologues Sediment Analysis, September 2018
Summary of Polychlorinated Biphenyl Results, Sediment/Source Samples,
Lower Neponset River PCBs Site, September 2018
Data Summary Table, Total Organic Carbon Sediment Analysis, Lower
Neponset River PCBs Site, September 2018

# SUMMARY OF POLYCHLORINATED BIPHENYL FIELD SCREENING RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Sample Location	Lab Sample ID	Aroclor-1248	Aroclor-1254	Aroclor-1260
WBD-04 A	AB76454	2,300	400	ND (300)
WBD-04 B	AB76455	1,900	400	ND (300)
WBD-04 C	AB76456	300	200	ND (300)
WBD-04 D	AB76457	ND (500)	ND (300)	ND (300)
WBD-C2 A	AB76460	ND (500)	130	ND (300)
WBD-C2 B	AB76461	ND (500)	130	ND (300)
PTB-C1 A	AB76462	ND (500)	ND (300)	ND (300)
PTB-C1 B	AB76463	ND (500)	ND (300)	ND (300)
WBD-C05 A	AB76464	ND (500)	400	ND (300)
WBD-C05 B	AB76465	3,400	1,200	ND (300)
WBD-C05 C	AB76466	12,000	2,500	1,700
WBD-C1 A	AB76467	ND (500)	200	ND (300)
WBD-C1 B	AB76468	1,100	300	ND (300)
WBD-C1 D	AB76469	1,600	500	ND (300)
BCA-C101 A	AB76470	500	200	ND (300)
BCA-C103 A	AB76471	ND (500)	ND (300)	ND (300)
BCA-C01 A	AB76472	400	200	ND (300)
BCA-C01 B	AB76473	400	ND (03)	ND (300)
BCA-C3 A	AB76474	ND (500)	900	ND (300)
BCA-C3 B	AB76475	4,400	700	ND (300)
BCA-C3 C	AB76476	16,000	1,900	ND (300)
BCA-C3 D	AB76477	11,000	1,000	ND (300)
BCA-C3 E	AB76478	900	200	ND (300)
BCA-C3 F	AB76479	ND (500)	ND (300)	ND (300)
BCA-C3 A Lab Dup	AB76480	ND (500)	700	ND (300)
BCA-C02 A	AB76481	500	400	ND (300)
BCA-C02 B	AB76482	8,600	900	ND (300)
BCA-C02 C	AB76483	500	200	ND (300)
BCA-C02 D	AB76484	300	200	ND (300)

# SUMMARY OF POLYCHLORINATED BIPHENYL FIELD SCREENING RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Sample Location	Lab Sample ID	Aroclor-1248	Aroclor-1254	Aroclor-1260
BCA-C02 D Lab Dup	AB76485	400	110	ND (300)
BCA-C4 A	AB76486	1,100	1,000	ND (300)
BCA-C4 B	AB76487	9,600	1,100	ND (300)
BCA-C4 C	AB76488	5,600	600	ND (300)
BCA-C4 D	AB76489	300	ND (300)	ND (300)
BCA-C4 E	AB76490	300	ND (300)	ND (300)
BCA-C5 A	AB76491	1,600	500	ND (300)
BCA-C5 B	AB76492	4,300	800	ND (300)
BCA-C5 C	AB76493	6,300	600	300
BCA-C5 D	AB76494	10,000	800	400
BCA-C5 E	AB76495	3,500	700	200
BCA-C6 A	AB76496	ND (500)	900	ND (300)
BCA-C6 B	AB76497	3,300	800	ND (300)
BCA-C6 C	AB76498	8,200	500	ND (300)
BCA-C6 D	AB76499	5,200	500	ND (300)
BCA-C6 E	AB76500	3,200	300	ND (300)
BCA-C6 F	AB76501	2,100	200	ND (300)
BCA-C6 G	AB76502	1,700	200	ND (300)
WBD-C1 C	AB76503	2,000	300	ND (300)
BCA-C6 H	AB76504	1,800	200	ND (300)
BCA-C6 I	AB76505	1,300	130	ND (300)
BCA-C7 A	AB76506	700	110	ND (300)
BCA-C7 B	AB76507	3,300	400	ND (300)
BCA-C7 C	AB76508	600	ND (300)	ND (300)
THD-C1 A	AB76509	1,700	300	ND (300)
THD-C1 B	AB76510	1,300	400	ND (300)
THD-C1 C	AB76511	1,800	600	ND (300)
THD-C1 D	AB76512	3,900	2,200	1,100
THD-C101 A	AB76513	3,800	1,600	900

# SUMMARY OF POLYCHLORINATED BIPHENYL FIELD SCREENING RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Sample Location	Lab Sample ID	Aroclor-1248	Aroclor-1254	Aroclor-1260
THD-C2 A	AB76514	300	200	ND (300)
THD-C2 B	AB76515	2,600	700	ND (300)
THD-C2 C	AB76516	ND (1,000)	1,900	1,300
THD-C2 D	AB76517	2,200	1,000	700
THD-C3 A	AB76518	ND (500)	ND (300)	ND (300)
THD-C3 B	AB76519	ND (500)	400	ND (300)
THD-C3 C	AB76520	ND (500)	200	ND (300)
THD-C1 E	AB76521	10,000	2,100	1,200
THD-C1 G	AB76522	14,000	3,500	1,300
THD-C1 H	AB76523	1,800	500	ND (300)
THD-C1 F Lab Dup	AB76524	23,000	3,200	2,400
LCA- C1 A	AB76525	ND (500)	300	ND (300)
LCA- C1 B	AB76526	2,300	500	ND (300)
LCA-C2 A	AB76527	18,000	ND (50)	ND (50)
LCA-C2 B	AB76528	10,000	5,200	ND (0.6)
LCA-C2 C	AB76529	26,000	4,500	4,400
LCA-C2 D	AB76530	8,800	2,800	2,200
LCA-C2 E	AB76531	58,000	12,000	6,200
LCA-C3 A	AB76532	18,000	2,400	1,200
LCA-C3 B	AB76533	8,500	3,400	ND (600)
LCA-C3 C	AB76534	30,000	21,000	16,000
LCA-C3 D	AB76535	50,000	8,600	3,200
MBC-C1 A	AB76536	ND (500)	300	ND (300)
MBC-C1 B	AB76537	ND (500)	200	ND (300)
MBC-C1 C	AB76538	ND (500)	400	ND (300)
MBC-C1 D	AB76539	3,700	900	ND (300)
MBC-C1 E	AB76540	2,100	600	ND (300)
MBC-C1 F	AB76541	2,500	400	ND (300)
MBC-C1 G	AB76542	300	ND (300)	ND (300)

# SUMMARY OF POLYCHLORINATED BIPHENYL FIELD SCREENING RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Sample Location	Lab Sample ID	Aroclor-1248	Aroclor-1254	Aroclor-1260
UMB-C1 A	AB76543	400	130	ND (300)
UMB-C1 B	AB76544	ND (500)	400	ND (300)
UMB-C1 C	AB76545	1,100	200	ND (300)
UMB-C1 D	AB76546	ND (500)	200	ND (300)
UMB-C2 A	AB76547	ND (500)	ND (300)	ND (300)
UMB-C2 B	AB76548	1,400	500	300
UMB-C2 C	AB76549	2,700	700	ND (300)
UNR-C1 A	AB76550	ND (500)	ND (300)	ND (300)
UNR-C1 B	AB76551	ND (500)	ND (300)	ND (300)
UNR-C1 C	AB76552	ND (500)	ND (300)	ND (300)
UNR-C2 A	AB76553	ND (500)	300	ND (300)
UNR-C2 B	AB76554	ND (500)	1,000	ND (300)
UNR-C2 C	AB76555	ND (500)	500	ND (300)
UNR-C2 D	AB76556	1,400	800	ND (300)
UNR-C3 A	AB76557	ND (500)	300	ND (300)
UNR-C3 B	AB76558	ND (500)	ND (300)	ND (300)
UNR-C3 C	AB76559	ND (500)	ND (300)	ND (300)
UNR-C3 D	AB76560	ND (500)	ND (300)	ND (300)

## NOTES:

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) Mobile Laboratory using EPA Region I SOP, EIASOP-FLDPCB3, PCB's in Soil Field Method. Lab RLs = Laboratory Reporting Limits.

Results in micrograms per Kilogram ( $\mu$ g/Kg). [Note: Results initially reported in milligrams per Kilograms (mg/Kg) and have been converted.]

Bolded values exceed laboratory RLs.

Lab dup = Laboratory duplicate sample result.

ND = Not detected above laboratory RLs.

## ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congeners

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids:	s D Fiel	A41R3 SD-01 035475 d Samp ediment 1 52.9		Fie	PA41R4 SD-02 D35476 Id Sam Id Sam Id Sam I edimen 1 89.4	ple	I Fiel	A41R5 SD-03 035477 d Samp ediment 1 63.1		r E Fiel	PA41R6 SD-04 D35478 Field Sample Sediment 1 51.9	
	Units:	ng/	kg (dry		ng	/kg (dr		ng	/kg (dry		ng/	'kg (dry	
CL#	Compounds	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*
1	PCB-1	2600000	J <sup>3,6</sup>		12000	$UJ^{1,6}$		43000	J <sup>3,6</sup>		61000	J <sup>3,6</sup>	
1	PCB-2	42000			1100	U		1100	J		12000		
1	PCB-3	620000			1100	$U^1$		15000			21000		
2	PCB-4	13000000	J+ <sup>3</sup>		39000	$U^1$		150000	J+ <sup>3</sup>		720000	J+ <sup>3</sup>	
2	PCB-5	37000	U		1100	U		1600	U		1900	U	
2	PCB-6	920000			4100	U <sup>1</sup>		45000			1500000		
2	PCB-7	150000			1100	U <sup>1</sup>		4500			21000		
2	PCB-8	2800000			26000	U <sup>1</sup>		140000			890000		
2	PCB-9	370000			1100	U		3700			41000		
2	PCB-10	1200000	2		1100	U		30000			38000	2	
2	PCB-11	64000	$EB^2$		650	J EB <sup>2</sup>		24000	$EB^2$		76000	$EB^2$	
2	PCB-12/13	240000			2200	U		97000			200000		
2	PCB-12/15 PCB-14	37000	U		1100	U		1600	U		1900	U	
2	PCB-15	1500000			2900	U <sup>1</sup>		1000000			410000		
3	PCB-16	160000			1100	U <sup>1</sup>		100000			600000		1
3	PCB-17	2900000			9700	U <sup>1</sup>		1000000			1100000		1
5		2700000			7700			1000000			1100000		
3	PCB-18/30	780000			2200	$U^1$		410000			2200000		
3	PCB-19	7900000			5900	$U^1$		890000			430000		
3	PCB-20/28	870000			5800	$U^1$		3100000			3700000		
3	PCB-21/33	66000	$J EB^2$		680	J EB <sup>2</sup>		170000	$EB^2$		250000	$EB^2$	
3	PCB-22	160000	JLD		1100	U <sup>1</sup>		590000	LD		830000	LD	
3	PCB-22	37000	U		1100	U		1600	U		1900	U	
3	PCB-24	37000	Ū		1100	U		1600	U		1900	Ū	
3	PCB-25	1200000			1900	$U^1$		430000			1500000		
						1							
3	PCB-26/29	1500000			2200			780000			2400000		
3	PCB-27	2000000			2800	U <sup>1</sup>		480000			200000		
3	PCB-31	2200000			2500	U <sup>1</sup>		700000			3100000		
3	PCB-32	2800000	1		4700	U <sup>1</sup>		1300000			800000		
3	PCB-34	37000			1100	U		18000			51000		
3	PCB-35 PCB-36	37000 37000	U U		1100 1100	U U		16000 1600	U		22000 1900	U	
3	PCB-37	200000	0		1100	U <sup>1</sup>		580000			530000		1
3	PCB-38	37000	U		1100	U		2300			2300		1
3	PCB-39	10000	J		1100	U		14000			15000		
,	DCD 40/71	710000			2200	$U^1$		1000000			1400000		
4	PCB-40/71 PCB-41	710000 21000	J		2200 1100	U. U		1000000 150000			1400000 130000		+
4	PCB-41 PCB-42	290000	J		1100	$U^1$		650000			870000		1
4	PCB-42 PCB-43	86000			1100	U		130000			170000		
4	PCB-44/47/65	4100000			3400	$U^1$		2400000			2900000		
4	PCB-45/51	1200000			2200	$U^1$		610000			490000		
4	PCB-46	1200000			1100	U		130000			200000		1
4	PCB-48	34000	J		1100	U		240000			210000		
4	PCB-49/69	2200000			2200	$U^1$		1600000			2100000		
4	PCB-50/53	1300000			2200	$U^1$		490000			510000		
4	PCB-52	1800000			1900	$U^1$		2100000			3100000		1

## ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congeners

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	S D Field Se	A41R3 SD-01 035475 d Samp cdiment 1 52.9 kg (dry		Fie S	PA41R4 SD-02 D35476 Eld Sam Gedimen 1 89.4 g/kg (dr	ple t	E Fiel Se	A41R5 SD-03 035477 d Samp ediment 1 63.1 /kg (dry		S D Fiel Se	PA41R6 SD-04 D35478 Field Sample Sediment 1 51.9 ng/kg (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*
4	PCB-54	530000			1100	U		19000			14000		
4	PCB-55	3700	J		1100			29000			20000		
4	PCB-56	30000	$J EB^2$		220	J EB <sup>2</sup>		490000	$EB^2$		310000	$EB^2$	
4	PCB-57	38000			1100			37000			36000		
4	PCB-58	37000	U		1100	U		5900			10000		
4	PCB-59/62/75	130000			3400	U		280000			250000		
4	PCB-60	6500	J		1100			190000			81000		
-		0500			1100	0		190000			01000		
					1000			100000			100000		
4	PCB-61/70/74/76	380000	$EB^2$			J EB <sup>2</sup>		1800000	$EB^2$		1800000	$EB^2$	
4	PCB-63	89000			1100	U		130000			120000		
4	PCB-64	280000			1100			1200000			1200000		
	PCB-66	340000	$EB^2$		650			1100000	$EB^2$		1100000	$EB^2$	
4	PCB-67	29000	J		1100			51000 18000			67000		
4	PCB-68 PCB-72	130000			1100 1100			29000			22000 35000		
	PCB-73	230000			1100	U		41000			37000		
	PCB-77	37000	$\mathrm{U}^{\mathrm{l}}$		1100	$U^1$		160000			140000		
4	PCB-78	37000	U		1100			1600	U		1900	U	
4	PCB-79	37000	$U^1$		1100	U		6000			8800		
4	PCB-80	37000	U		1100	Ū		1600	U		1900	U	
4	PCB-81		U	4000		U	130	5100			2100		
5	PCB-82	37000	$U^1$		1100	U		130000			150000		
5	PCB-83	77000			1100	U		69000			81000		
5	PCB-84	180000	$EB^2$		1100	U		240000	$EB^2$		340000	$EB^2$	
5	PCB-85/116/117	210000			3400	U		190000			220000		
5	PCB-86/87/97/ 109/119/125	310000			6700	U		440000			530000		
5	PCB-88/91	450000			2200	U		190000			220000		
	PCB-89	8800	J		1100			28000			39000		
5	PCB-90/101/113 PCB-92	610000 300000	EB <sup>2</sup>		350 1100	J EB <sup>2</sup> U		460000 150000	EB <sup>2</sup>		530000 170000	EB <sup>2</sup>	
_	DCD 02/100	0.400000			2200			<b>2</b> 00000			<b>0</b> 1000		
5	PCB-93/100 PCB-94	240000 74000			2200			20000 14000			24000 13000		
						1							
5 5	PCB-95 PCB-96	<u>390000</u> 22000	J		1100 1100			520000 17000			630000 20000		
-		22000			1100			17000			20000		
5	PCB-98/102	100000			2200	U		70000			76000		
5	PCB-99	380000	$EB^2$		1100	U		290000	$EB^2$		350000	$EB^2$	
5	PCB-103	62000			1100			9200			10000		
5	PCB-104	16000	J		1100			450	J		550	J	
5	PCB-105	97000	$EB^2$			J EB <sup>2</sup>		250000	$EB^2$		200000	$EB^2$	
5	PCB-106 PCB-107	37000 63000	U		1100 1100			1600 38000	U		1900 42000	U	
5	PCB-107	75000	$\mathrm{U}^1$		2200	U		18000			14000		
5	PCB-110/115	810000			2200	$U^1$		850000			1000000		

## ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congeners

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	g D Fiel Se	A41R3 SD-01 035475 d Samp ediment 1 52.9 /kg (dry		Fie S	PA41R4 SD-02 D35476 Field Sample Sediment 1 89.4 ng/kg (dry)			PA41R5 SD-03 D35477 Field Sample Sediment 1 63.1 ng/kg (dry)			PA41R6 SD-04 D35478 Field Sample Sediment 1 51.9 ng/kg (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*
5	PCB-111	37000	U		1100	U		600	J		540	J	
5	PCB-112	37000	U		1100	U		1600			1900	U	
5	PCB-114	EMPC	J	7400		UM	130	22000			16000		
5	PCB-118	500000			1100	$U^1$		510000			540000		
5	PCB-120	9800	J		1100	U		1700			2000		
5	PCB-121 PCB-122	11000 37000	J U		1100 1100	U U		1600 8600			1900 6400	U	
5 5	PCB-122 PCB-123	37000	UM	6700	1100	UM	200	12000			9300		
5	PCB-126		UM	6400		UM	190	2800			2300		
5	PCB-127	37000	U		1100	U	170	470			1900	U	
6	PCB-128/166	75000			2200	U		42000			35000		
6	PCB-129/138/163	700000	$EB^2$		340	J EB <sup>2</sup>		240000	$EB^{2}$		220000	$EB^2$	
6	PCB-130	38000			1100	U		19000			19000		
6	PCB-131	6600	J		1100	U		4500			4200		
6	PCB-132	190000	$EB^2$		1100	U		95000	EB <sup>2</sup>		96000	$EB^2$	
6	PCB-133	48000			1100	U		4500			5300		
6	PCB-134	78000			1100	U		20000			18000		
	DCD 125/151	200000			150	т		72000			79000		
6	PCB-135/151	280000	<b>DD</b> <sup>2</sup>		150	J		72000			78000	<b></b> 2	
6	PCB-136	86000	EB <sup>2</sup>		1100	U U		29000			32000	$EB^2$	
6	PCB-137	27000	J		1100	0		16000			13000		
6	PCB-139/140	75000	U		2200	U		6000			5700		
6	PCB-141	45000	$EB^2$		1100	U		34000	EB <sup>2</sup>		29000	$EB^2$	
6	PCB-142	37000	U		1100	U		1600			1900	U	
6	PCB-143	37000	U		1100	U		1400			670	J	
6	PCB-144	10000	J		1100	U		9200			9300		
6	PCB-145	37000	U		1100	U		240	J		300	J	
6	PCB-146	130000			1100	U		31000			34000		
6	PCB-147/149	610000			2200	$U^1$		180000			180000		
6	PCB-148	18000	J		1100	U		470	J		690	J	1
6	PCB-150	9200	J		1100	U		470	J		500	J	
6	PCB-152	12000	J		1100	U		780	J		650	J	
6	PCB-153/168	460000			2200	$U^1$		150000			140000		
6	PCB-153/108 PCB-154	480000			1100	U		3300			3800		
6	PCB-155	2400	J		1100	U		1600			130	J	
6	PCB-156/157	78000			2200	U <sup>1</sup>		37000			26000		
6	PCB-158	42000			1100	U		25000			20000		
6	PCB-159	37000	U		1100	U		1600			1900	U	
6	PCB-160	37000	U		1100	U		1600			1900	U	
6	PCB-161	37000	U	ļ	1100	U		1600			1900	U	
6	PCB-162	37000	<u>U</u>		1100	U		960	J		510	J	
6	PCB-164 PCB-165	34000 7000	J 		1100 1100	U U		13000			10000 590	J	
6 6	PCB-165 PCB-167	25000	J		1100	UM	120	11000			8000	J	
6	PCB-169	25000	UM	5300		UM	160	11000	UM	220	0000	UM	260
7	PCB-170	110000	$EB^2$		1100	U		39000	2		38000	$EB^2$	
	DOD 151/155												
7	PCB-171/173	33000	J		2200	U		12000			11000		
7	PCB-172	24000	J		1100	U	<u> </u>	6700	<u> </u>		7100		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.:		A41R3			PA41R4	1		A41R5			A41R6	
	Sample Location:		SD-01			SD-02			SD-03			SD-04	
	Sample Identifier:		35475			D35476			35477			35478	
	Sample Type:		d Sampl	le		ld Sam			d Sampl	le		d Samp	
	Matrix:	Se	diment		S	edimen	t	Se	diment		Se	diment	
	Dilution Factor:		1			1			1			1	
	% Solids:		52.9			89.4			63.1			51.9	
	Units:	ng/	kg (dry)	)	ng	/kg (dr	y)	ng	kg (dry)	)	ng/	kg (dry	)
				EMPC/			EMPC/			EMPC/			EMPC/
CL#	Compounds	Result	Flag	EDL/MDL*	Result	Flag	EDL/MDL*	Result	Flag	EDL/MDL*	Result	Flag	EDL/MDL*
7	PCB-174	75000	$EB^2$		120	$\mathrm{J}\mathrm{EB}^2$		34000	$EB^2$		35000	$EB^2$	
7	PCB-175	4100	J		1100	U		1700			1900		
7	PCB-176	11000	J		1100	U		4700			5600		
7	PCB-177	75000			1100	U		22000			25000		
7	PCB-178	49000			1100	U		7800			9400		
7	PCB-179	51000			58	J		15000			18000		
7	PCB-180/193	240000			2200	$\mathrm{U}^1$		79000			83000		
7	PCB-181	37000	U		1100	U		480	J		310	J	
7	PCB-181 PCB-182	3100	J		1100	U		260	J		340	J	
/	PCD-182	5100	J		1100	U		200	J		540	J	
7	PCB-183/185	58000	$J EB^2$		2200	U		23000	$EB^2$		24000	$EB^2$	
7	PCB-184	37000	U		1100	Ū		1600	U		67	J	
7	PCB-186	37000	U		1100	U		1600	U		1900	U	
7	PCB-187	160000			170	J		42000			48000		
7	PCB-188	4100	J		1100	U		81	J		80	J	
7	PCB-189	8400	J			UM	110	2300			2200		
7	PCB-190	37000	$U^1$		1100	U		8800			8500		
7	PCB-191	37000	$\mathrm{U}^{1}$		1100	U		1600	$U^1$		1900	$U^1$	
7	PCB-192	37000	U		1100	U		1600	U		1900	U	
8	PCB-194	120000			1100	U		24000			30000		
8	PCB-195	38000			1100	U		8900			11000		
8	PCB-196	43000			1100	U		10000			12000		
8	PCB-197/200	75000	$U^1$		2200	U		3100			3700	$U^1$	
8	PCB-198/199	83000	$EB^2$		2200	U		23000	$EB^2$		26000	$EB^2$	
8	PCB-201	8800	J		1100	U		2400			2900		
8	PCB-202	15000	J		1100	U		4600			5100		
8	PCB-203	50000			1100	U		14000			15000		
8	PCB-204	37000	U		1100	U		1600	U		1900	U	
8	PCB-205	37000	$U^1$		1100	U		1600	$U^1$		1900	$U^1$	
9	PCB-206	40000	$EB^2$		1100	U		12000	$EB^2$		13000	$EB^2$	
9	PCB-207	4000	J		1100	U		1200	J		1300	J	
9	PCB-208	6100	J		1100	U		3800			4000		
10	PCB-209	37000	U		1100	U		4900			6600		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congeners

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	g D Fiel Se	A41R3 SD-01 935475 d Samp ediment 1 52.9 /kg (dry)		Fie S	PA41R4 SD-02 D35476 Id Sam edimen 1 89.4 z/kg (dr	ple t	I Fiel Se	A41R5 SD-03 035477 d Samp ediment 1 63.1 /kg (dry)		E Fiel Se	A41R6 SD-04 035478 d Samp ediment 1 51.9 /kg (dry	
CL#	Compounds	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*	Result	Flag	EMPC/ EDL/MDL*
	Total MoCB	3300000	J		ND			59000	J		94000	J	
	Total DiCB	20000000	J		650	J		1500000	J		3900000	J	
	Total TrCB	23000000	J		680	J		11000000	J		18000000	J	
	Total TeCB	14000000	J		1870	J		15000000	J		17000000	J	
	Total PeCB	4900000	J		560	J		4600000	J		5200000	J	
	Total HxCB	3100000	J		490	J		1000000	J		990000	J	
	Total HpCB	910000	J		350	J		300000	J		320000	J	
	Total OcCB	360000	J		ND			90000	J		100000	J	
	Total NoCB	50000	J		ND			17000	J		18000	J	
	DeCB	ND			ND			4900			6600		
	Total PCBs^	70,000,000	J		4,600	J		33,000,000	J		46,000,000	J	
1	Total TEQ#	21	J		0.0063	J		320	J		270	J	

The WHO Toxic congeners are identified by the highlighted background.

\* The values in this column are either the Estimated Detection Limits (EDL), Method Detection Limits (MDL), or the Estimated Maximum Possible Concentration (EMPC). The EMPC results are flagged as "EMPC" in the Result column and are qualified with a "J" since they are estimated values. EMPC results are not included in the Total Homologues.

# The Toxic Equivalent concentrations are calculated with the Toxicity Equivalency Factors (TEFs) found in "The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds, Society of Toxicology, July 7, 2006. The TE values are calculated using the final validated data and include the positive results and estimated values. The TE values are estimated (J) when any individual congener is estimated. The TE calculations do not include RL values.

^ Total PCBs are the sum of the total homologues.

TIER 2/S4VEM DATA VALIDATION QUALIFIER COMMENTS:

J Sample concentrations reported below the laboratory reporting limit are flagged (J) on the Data Summary Table as estimated values with no superscripts.

1 Blank contamination; the positive sample results that are less than the CRQL are reported as non-detects (U) at the CRQL; positive sample sample results greater than the CRQL but less than the blank result are reported as non-detect (U) at the adjusted blank concentration.

2 Equipment blank contamination; detects for the affected compounds are flagged (EB) on the Data Summary Table to indicate the presence of an unknown amount of sampling error as evidenced by the aqueous equipment blank contamination.

3 LCS/LCSD recovery above QC limits; estimate high (J+) all positive results for PCB 1 and PCB 4 in all sediment samples.

4 Congener exceeded the instrument calibration range; estimate (J) the affected analytes in samples PA41R8 and PA41R9.

5 Labeled compound ion abundance ratio criteria not met; estimate (J) positive results for PCB 1 and PCB 2 in sample PA41R9.

6 Field duplicate precision outside criteria; estimate (J, UJ) the positive results and non-detects for PCB 1 in all sediment samples.

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	SI D3 Field Sed 4	41R7 D-05 5479 Sample iment 1 2.9 g (dry)		SD D35 Field S Sedi 55	41R8 06 5480 Sample ment 1 5.5 5 (dry)		PA4 SD- D35 Field S Sedin 1 38 ng/kg	07 481 ample nent .7		S D Field Se	A41S0 SD-08 35482 d Sample diment 1 59.2 kg (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*
1	PCB-1	38000000	J <sup>3,6</sup>		47000000	J <sup>3,6</sup>		140000000	J <sup>3,4,5,6</sup>		38000	J <sup>3,6</sup>	
1	PCB-2	80000			380000			3200000	$J^5$		1200	J	
1	PCB-3	2900000			8900000			10000000	$J^4$		10000		
2	PCB-4	63000000	$J+^3$		20000000	J <sup>3,4</sup>		2500000000	J <sup>3,4</sup>		99000	$J+^3$	
2	PCB-5	27000	J		36000	U		4300000			1600	J	
2	PCB-6	6900000			28000000			30000000	$J^4$		19000		
2	PCB-7	110000			3000000			4900000			3200		
2	PCB-8	28000000			19000000	$\mathbf{J}^4$		160000000	$J^4$		100000		
2	PCB-9	390000			910000			16000000			3300		
2	PCB-10	5600000			12000000			230000000	$J^4$		5900		1
2	PCB-11	440000	$EB^2$		1200000	$EB^2$		23000000	EB <sup>2</sup>		2100	$EB^2$	
-													1
2	PCB-12/13	800000			2200000			38000000			5500		
2	PCB-14	45000	U		36000	U		48000	U		1600	U	
2	PCB-15	2000000			28000000			72000000			39000		
3	PCB-16	920000			3100000	4		14000000	4		41000		
3	PCB-17	15000000			92000000	$J^4$		60000000	J <sup>4</sup>		73000		
3	PCB-18/30	2800000			19000000			89000000			94000		
3	PCB-19	12000000			41000000			39000000	J <sup>4</sup>		24000		
3	rcb-19	12000000			4100000			39000000	J		24000		
3	PCB-20/28	3600000			73000000			130000000			200000		
3	PCB-21/33	180000	$EB^2$		72000	U		97000	U		110000	$EB^2$	
3	PCB-22	710000			1300000			25000000			60000		
3	PCB-23	49000			170000			2200000			310	J	
3	PCB-24	45000	U		36000	U		14000000			1600	U	
3	PCB-25	3500000			21000000			14000000	J <sup>4</sup>		20000		
3	PCB-26/29	6400000			18000000			250000000	$J^4$		34000		
3	PCB-27	6800000			25000000			270000000	J <sup>4</sup>		15000		
	1								J <sup>4</sup>				
3	PCB-31	5900000		-	18000000 48000000			25000000	J J <sup>4</sup>		140000		
3	PCB-32	9900000						40000000	J		42000		
3	PCB-34 PCB-35	460000 14000	J		1000000 110000			16000000 48000	U		2000		
3	PCB-35	45000	U		36000	U		1600000	0		1600	U	
3	PCB-37	320000	-		960000			9200000			53000		
3	PCB-38	45000	U		28000	J		48000	U		1600	U	
3	PCB-39	42000	J		240000			2000000			1100	J	
А	PCB-40/71	2500000			12000000			9000000			49000		
4	PCB-40/71 PCB-41	44000	J		12000000			12000000			6900		
4	PCB-42	1100000	2		4500000			39000000			36000		1
4	PCB-43	990000			3100000			32000000			7200		1
4	PCB-44/47/65	7800000			31000000			280000000			120000		
4	PCB-45/51	2800000			9800000			11000000			22000		
4	PCB-46 PCB-48	300000 99000			1100000 410000			11000000 48000	U		7300		
4	00	22000			410000			40000			23000		
4	PCB-49/69	5600000			23000000			210000000	J <sup>4</sup>		91000		
4	PCB-50/53	3600000			17000000			120000000			18000		
4	PCB-52	5500000			19000000			20000000	$J^4$		140000		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	SI D3 Field Sed 4	41R7 D-05 5479 Sample iment 1 2.9 g (dry)		SD D35 Field S Sedi	11R8 -06 5480 Sample ment 1 5.5 5 (dry)		PA41 SD- D35⁄ Field S: Sedin 1 38. ng/kg	07 481 ample nent 7		S D Field Se	A41S0 6D-08 35482 1 Sample diment 1 59.2 kg (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*
4	PCB-54	230000			810000			7300000			1600	$U^1$	
4	PCB-55	45000	U		50000			48000	U		1400	J	
4	PCB-56	110000	$EB^2$		490000	$EB^2$		1600000	$EB^2$		52000	$EB^2$	
4	PCB-57	290000			1100000			11000000			950	J	
4	PCB-58	45000	U		91000			48000	U		770	J	
	DOD 50/(2/75	700000			2200000			2000000			12000		
4	PCB-59/62/75 PCB-60	790000 20000	J		2200000 150000			2800000	U		12000 3100		
4	РСВ-60	20000	J		150000			48000	U		3100		
4	PCB-61/70/74/76	840000	$EB^2$		5300000	$EB^2$		20000000	$EB^2$		200000	$EB^2$	
4	PCB-63	650000			2900000			28000000			5600		
4	PCB-64	2000000			4800000			8900000			49000		1
4	PCB-66	410000	$EB^2$		2900000	$EB^2$		9500000	$EB^2$		130000	$EB^2$	
4	PCB-67	68000	LD		360000	LD		1800000	ĽĎ		4300	LD	
4	PCB-68	220000			570000			7400000			1600		
4	PCB-72	250000			730000			9300000			2900		
4	PCB-73	45000	U		630000			6400000			1700		
4	PCB-77	100000			540000			2300000			12000		
4	PCB-78	45000	U		36000	U		48000	U		1600	U	
4	PCB-79	45000	$U^1$		36000	$U^1$		48000	U		1600		
4	PCB-80	45000	U		36000	U		48000	U	0.400.00	1600	U	
4	PCB-81	6 4 0 0 0	U	7500	17000	J		1 (00000	U	840000	280	J	
5	PCB-82 PCB-83	64000			200000 930000			1600000 13000000			13000 12000		
5		280000	$EB^2$			$EB^2$			$EB^2$			$EB^2$	
5	PCB-84	660000	EB		1500000	EB		26000000	EB		42000	EB	
5	PCB-85/116/117	250000			830000			9700000			21000		
5	PCB-86/87/97/ 109/119/125	550000			1900000			16000000			94000		
5	PCB-88/91	940000			3000000			41000000			20000		
5	PCB-89	48000			55000			1800000			2000		
	DCD 00/101/110	100000	552			<b>E2</b> <sup>2</sup>		2000000	<b>E2</b> <sup>2</sup>		150000	552	
5	PCB-90/101/113	1200000	EB <sup>2</sup>		3100000	EB <sup>2</sup>		3800000	EB <sup>2</sup>		150000	EB <sup>2</sup>	
5	PCB-92	1000000			2600000			42000000			31000		
5	PCB-93/100	210000			530000			8200000			1600	J	
5	PCB-94	160000			450000			6900000			800	J	1
5	PCB-95	1800000			4100000			67000000			110000		
5	PCB-96	88000			240000			3900000			890	J	<u> </u>
5	PCB-98/102	280000			890000			12000000			5500		
5	PCB-99	680000	$EB^2$		2300000	$EB^2$		21000000	$EB^2$		76000	$EB^2$	
5	PCB-103	110000			280000			4400000			1800		
5	PCB-104	45000	U		16000	J		260000	-		68	J	<u> </u>
5	PCB-105	98000	EB <sup>2</sup>		770000	$EB^2$		1200000	EB <sup>2</sup>		23000	EB <sup>2</sup>	
5	PCB-106	45000	U		36000	U		48000	U		1600	U	
5	PCB-107	98000			430000			3200000			11000		
5	PCB-108/124	91000	$U^1$		72000	$U^1$		97000	U		3900		<u> </u>
5	PCB-110/115	2700000			7400000			110000000			180000		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor:	SI D3 Field Sed	41R7 D-05 5479 Sample iment 1		SD D35 Field S Sedii	1 <b>R8</b> -06 5480 Sample ment 1		PA4 SD- D35- Field S Sedin 1	07 481 ample nent		S D Field Se	A41S0 SD-08 (35482 d Sample diment 1	2
	% Solids:		2.9			5.5		38				59.2	
	Units:	ng/k	g (dry)	EN (D) ()	ng/kg	(ary)	END C/	ng/kg	(ary)	- EMPG/	ng/	kg (dry)	<b>EXE</b>
CL#	Compounds	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*
5	PCB-111	45000	U		19000	J		48000	U		150	J	
5	PCB-112	45000	U		36000	U		48000	U		1600	U	
5	PCB-114	EMPC	J	8200	89000				U	570000	1900		
5	PCB-118	640000			3100000			13000000			160000		
5	PCB-120	17000	J		33000	J		590000			940	J	
5	PCB-121	45000	U		7700	J		48000	U		1600	U	
5	PCB-122	45000	U		22000	J		48000	U		1000	J	
5	PCB-123	15000	UM	8100	38000	Ş		10000	U	520000	1500	J	
5	PCB-125		U	8600	11000	J			U	580000	480	J	
5	PCB-127	45000	U	0000	36000	U		48000	U	500000	280	J	
5	1.00-12/	45000	0		50000	0		40000	0	-	200	J	
6	PCB-128/166	91000	$U^1$		260000			1700000			20000		
6	PCB-129/138/163	730000	$EB^2$		2100000	$EB^2$		21000000	$EB^2$		130000	$EB^2$	
6	PCB-130	83000	LD		150000	LD		2800000	LD		8900	LD	
6	PCB-130	45000	U		24000	J		48000	U		1900		
	1		EB <sup>2</sup>			EB <sup>2</sup>						$EB^2$	
6	PCB-132	340000	EB-		550000	EB-		11000000	$EB^2$		48000	EB-	
6	PCB-133	100000			99000			3500000			1900		
6	PCB-134	110000			320000			2900000			8700		
6	PCB-135/151	620000			1100000			21000000			32000		
6	PCB-136	160000	$EB^2$		330000	$EB^2$		5500000	$EB^2$		14000	$EB^2$	
6	PCB-137	21000	J		100000			48000	U		7500		
6	PCB-139/140	34000	J		59000	J		1100000			2500	J	
6	PCB-141	41000	$J EB^2$		170000	$EB^2$		48000	U		16000	$EB^2$	
6	PCB-142	45000	U		36000	U		48000	U		1600	U	
6	PCB-143	45000	U		11000	J		48000	U		320	J	
6	PCB-145	45000	U		54000	5		48000	U		4100	5	
6	PCB-144	45000	U		36000	U		48000	U		76	J	
6	PCB-145	350000	0		380000	0		11000000	0		16000	J	
0	100-140	550000			580000			1100000			10000		
6	PCB-147/149	820000			1900000			27000000			86000		
6	PCB-148	21000	J		20000	J		840000			170	J	
6	PCB-150	9800	J		28000	J		480000			180	J	
6	PCB-152	12000	J		29000	J		48000	U		180	J	
6	PCB-153/168	530000			1300000			15000000			90000		
6	PCB-153/108	89000		-	120000		++	3100000			1400	J	
6	PCB-155	45000	U		2500	J		48000	U		1400	U	
6	PCB-156/157	91000	U <sup>1</sup>		330000	ĩ		1100000	Ũ		17000	Ŭ	
6	PCB-158	38000	J		180000			680000			11000		
6	PCB-150	45000	U		36000	U		48000	U		1600	U	
6	PCB-160	45000	U	-	36000	U	-	48000	U	<u> </u>	1600	U U	
6	PCB-161	45000	U	-	36000	U	<u>├</u>	48000	U	<u> </u>	1600	U U	
6	PCB-162	5500	J		10000	J	-	48000	U	<u> </u>	1600	U	
6	PCB-164	30000	J	-	110000		-	710000	0	<u> </u>	8800	0	
6	PCB-165	12000	J		12000	J	-	48000	U		1600	U	
6	PCB-167	20000	J		96000	5		+0000	U	460000	6300	0	
6	PCB-169		UM	6400	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	UM	5100		U	370000		UM	230
7	PCB-170	150000	$EB^2$		490000	$EB^2$		5700000	$EB^2$		18000	$EB^2$	
_	DOD 151/152				1 / 00 00 -			100000					
7	PCB-171/173	52000	J		140000			1900000			5800		
7	PCB-172	42000	J		90000			1400000			2900		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	SI D3 Field Sed 4	41R7 D-05 5479 Sample iment 1 2.9 g (dry)	EMPC/	SD D35 Field S Sedii 55	ment l	EMPC/	PA4 SD- D35 Field S Sedin 1 38. ng/kg	07 481 ample nent .7	EMPC/	S D Field Se	A41S0 SD-08 935482 d Sample diment 1 59.2 kg (dry)	
CL#	Compounds	Result	Flag	EMIC/ EDL/ MDL*	Result	Flag	EDL/ MDL*	Result	Flag	EDL/ MDL*	Result	Flag	EDL/ MDL*
7	PCB-174	170000	$EB^2$		370000	$EB^2$		5800000	$EB^2$		16000	$EB^2$	
7	PCB-175	45000	U		20000	J		48000	U		650	J	
7	PCB-176	32000	J		49000			1300000			2100		
7	PCB-177	190000			280000			7200000			9500		
7	PCB-178	110000			130000			3800000			3100		
7	PCB-179	130000			210000			5100000			6200		
7	PCB-180/193	350000			1000000			13000000			36000		
7	PCB-181	45000	U		8400	J		48000	U		330	J	
7	PCB-182	12000	J		5200	J		48000	Ū		180	J	
7	PCB-183/185	89000	$J EB^2$		270000	$EB^2$		3500000	$EB^2$		11000	$EB^2$	
7	PCB-184	45000	U		36000	U		48000	U		1600	U	
7	PCB-186	45000	U		36000	U		48000	U		1600	U	
7	PCB-187	370000	0		580000	0		1400000	0		17000	0	-
7	PCB-188	45000	U		4700	J		48000	U		58	J	
7	PCB-189	12000	J		32000	J		360000	0		960	J	-
7	PCB-190	45000	$U^1$		120000	Ū		1600000			3500	v	
7	PCB-191	45000	U <sup>1</sup>		36000	$U^1$		48000	U		1600	$U^1$	
7	PCB-192	45000	U		36000	U		48000	U		1600	U	
8	PCB-194	200000	-		370000			7300000			8400		
8	PCB-195	66000			140000			2700000			2900		
8	PCB-196	74000			150000			2800000			4400		
8	PCB-197/200	91000	$U^1$		72000	$U^1$		930000			3200	$U^1$	
8	PCB-198/199	190000	$EB^2$		300000	$EB^2$		7200000	$EB^2$		11000	$EB^2$	
8	PCB-201	21000	J		34000	J		680000			1200	J	
8	PCB-202	41000	J		61000			1300000			2500		
8	PCB-203	91000			180000			3800000			6400		
8	PCB-204	45000	U		36000	U		48000	U		1600	U	
8	PCB-205	45000	U		36000	U <sup>1</sup>		510000			1600	U <sup>1</sup>	
9	PCB-206	86000	$EB^2$		130000	$EB^2$		2800000	$EB^2$		6700	$EB^2$	
9	PCB-207	9100	J		15000	J		48000	U		790	J	
9	PCB-208	23000	J		32000	J		880000			2300		
10	PCB-209	45000	$\mathrm{U}^1$		36000	$\mathrm{U}^{1}$		550000			3300		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congeners

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	SI D3 Field Sed	41R7 D-05 55479 Sample liment 1 12.9 g (dry)		SD D35 Field S Sedi 55	41R8 -06 5480 Sample ment 1 5.5 5 (dry)		PA4 SD- D35 Field S Sedin 1 38. ng/kg	07 481 ample nent .7		S D Field Se	A41S0 SD-08 35482 d Sample diment 1 59.2 kg (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*	Result	Flag	EMPC/ EDL/ MDL*
	Total MoCB	41000000	J		56000000	J		150000000	J		49000	J	
	Total DiCB	110000000	J		470000000	J		4700000000	J		280000	J	
	Total TrCB	69000000	J		360000000	J		2600000000	J		910000	J	
	Total TeCB	36000000	J		150000000	J		1300000000	J		1000000	J	
	Total PeCB	12000000	J		35000000	J		440000000	J		970000	J	
	Total HxCB	4200000	J		9800000	J		130000000	J		530000	J	
	Total HpCB	1700000	J		3800000	J		64000000	J		130000	J	
	Total OcCB	680000	J		1200000	J		27000000	J		37000	J	
	Total NoCB	120000	J		180000	J		3700000	J		9800	J	
	DeCB	ND			ND			550000			3300		<u> </u>
	Total PCBs^	270,000,000	J		1,100,000,000	J		11,000,000,000	J		3,900,000	J	<u> </u>
	Total TEQ#	33	J		1300	J		710	J		56	J	

The WHO Toxic congeners are identifed by the highlighted background.

- \* The values in this column are either the Estimated Detection Limits (EDL), Method Detection Limits (MDL), or the Estimated Maximum Possible Concentration (EMPC). The EMPC results are flagged as "EMPC" in the Result column and are qualified with a "J" since they are estimated values. EMPC results are not included in the Total Homologues.
- # The Toxic Equivalent concentrations are calculated with the Toxicity Equivalency Factors (TEFs) found in "The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds, Society of Toxicology, July 7, 2006. The TE values are calculated using the final validated data and include the positive results and estimated values.
- The TE values are estimated (J) when any individual congener is estimated. The TE calculations do not include RL values.

^ Total PCBs are the sum of the total homologues.

### TIER 2/S4VEM DATA VALIDATION QUALIFIER COMMENTS:

- J Sample concentrations reported below the laboratory reporting limit are flagged (J) on the Data Summary Table as estimated values with no superscripts.
- 1 Blank contamination; the positive sample results that are less than the CRQL are reported as non-detects (U) at the CRQL; positive sample sample results greater than the CRQL but less than the blank result are reported as non-detect (U) at the adjusted blank concentration.
- 2 Equipment blank contamination; detects for the affected compounds are flagged (EB) on the Data Summary Table to indicate the presence of an unknown amount of sampling error as evidenced by the aqueous equipment blank contamination.
- 3 LCS/LCSD recovery above QC limits; estimate high (J+) all positive results for PCB 1 and PCB 4 in all sediment samples.
- 4 Congener exceeded the instrument calibration range; estimate (J) the affected analytes in samples PA41R8 and PA41R9.
- 5 Labeled compound ion abundance ratio criteria not met; estimate (J) positive results for PCB 1 and PCB 2 in sample PA41R9.
- 6 Field duplicate precision outside criteria; estimate (J, UJ) the positive results and non-detects for PCB 1 in all sediment samples.

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor:	Fie	PA41S1 SD-09 D35483 Id Samp ediment 1	le	Fie	PA41S2 SD-10 D35484 Id Samp ediment 1	le	SI D3 Field Sed	41S3 D-11 5485 Sample liment 1		S D3 Field I Sec	A41S4 D-12 35486 Duplicat liment 1	te
	% Solids: Units:		53.1 g/kg (dry	、 、		55.0 g/kg (dry	、		59.3 g (dry)			51.9 (dm)	
CL#	Compounds	Result	Flag	EMPC/ EDL/MD	Result	Flag	EMPC/ EDL/MD	Result	Flag	EMPC/ EDL/MD	Result	kg (dry) Flag	EMPC/ EDL/MD
1	PCB-1	43000	J <sup>3,6</sup>	L*	19000	$UJ^{1,6}$	L*	6100000	J <sup>3,6</sup>	L*	130000	J <sup>3,6</sup>	L*
1	PCB-2	260	J		19000	J		39000	J		12000	J	
1	PCB-3	4700	5		1700	U <sup>1</sup>		1100000			26000		-
2	PCB-4	100000	J+ <sup>3</sup>		59000	U <sup>1</sup>		29000000	J+ <sup>3</sup>		840000	J+ <sup>3</sup>	
2	PCB-5	1800	U		1700	U		28000	U		1900	U	
2	PCB-6	11000			1700	$U^1$		4700000			1600000		
2	PCB-7	1800	$U^1$		1700	$U^1$		1000000			23000		
2	PCB-8	60000			39000	$U^1$		23000000			990000		
2	PCB-9	1800	$U^1$		1700	$U^1$		310000			42000		
2	PCB-10	5300			1700	$U^1$		1600000			49000		
2	PCB-11	1500	$J EB^2$		1100	$J EB^2$		310000	$EB^2$		79000	$EB^2$	
			$U^1$		2 40 0	<b>•</b> •1		100000			•••••		
2	PCB-12/13 PCB-14	3700	U. U		3400 1700	$\frac{U^1}{U}$		1000000 28000	U		200000	U	
2	PCB-15	7300	0		4400	U <sup>1</sup>		9300000	0		410000	0	
3	PCB-16	1800	U <sup>1</sup>		1700	U <sup>1</sup>		1300000			640000		-
3	PCB-17	24000	0		15000	U <sup>1</sup>		18000000			1200000		-
5		24000			15000			18000000			1200000		-
3	PCB-18/30	6500			3400	$U^1$		6400000			2300000		
3	PCB-19	16000			9000	$U^1$		7400000			440000		
3	PCB-20/28	16000			8800	$U^1$		24000000			3900000		
3	PCB-21/33	1400	J EB <sup>2</sup>		830	J EB <sup>2</sup>		1600000	$EB^2$		250000	$EB^2$	
3	PCB-22	1800	U <sup>1</sup>		1700	U <sup>1</sup>		2400000	22		840000	22	
3	PCB-23	1800	U		1700	U		30000			1900	U	
3	PCB-24	1800	U		1700	U		28000	U		1900	U	
3	PCB-25	5800			1700	$U^1$		6000000			1600000		
3	PCB-26/29	7600			3400	$\mathrm{U}^1$		6800000			2400000		
3	PCB-27	8000			1700	U <sup>1</sup>		4800000			2400000		
3	PCB-31	9000			3700	U <sup>1</sup>		15000000			3200000		
3	PCB-32	13000			7100	U <sup>1</sup>		9700000			860000		
3	PCB-34	13000	U <sup>1</sup>		1700	U		310000			53000		-
3	PCB-35	1800	U U		1700	U	<u>├</u>	63000			21000		-
3	PCB-36	1800	U		1700	U		28000	U		1900	U	
3	PCB-37	1800	$U^1$		1700	$U^1$		2200000			530000		
3	PCB-38	1800	U		1700	U		28000 77000	U		2100		
3	PCB-39	1800	U		1700	U		//000			15000		
4	PCB-40/71	4900			3400	$U^1$		5400000			1300000		
4	PCB-41	320	J		540	J		160000			140000		
4	PCB-42	2600			1700	U <sup>1</sup>		2900000			840000		
4	PCB-43	1800	$U^1$		1700	$U^1$		910000			160000		
4	PCB-44/47/65	14000			7000			12000000			2900000		
4	PCB-45/51	3900			3400	$U^1$		3100000			520000		
4	PCB-46	880	J		740	J		690000			210000		
4	PCB-48	510	J		310	J		670000			190000		
4	PCB-49/69	11000			4400			9300000			2000000		
4	PCB-50/53	5900			3400	$U^1$		4400000			530000		
4	PCB-52	17000			16000			9900000			3000000		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor:	l Fie	PA41S1 SD-09 D35483 Id Samp ediment 1	le	l Fie	PA41S2 SD-10 D35484 Id Samp ediment		SI D3 Field Sed	41S3 )-11 5485 Sample iment 1		Si D3 Field I Sed	41S4 D-12 35486 Duplicat liment 1	e
	% Solids: Units:	ng	53.1 /kg (dry	)	ng	55.0 /kg (dry	)		9.3 g (dry)			51.9 g (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/MD	Result	Flag	EMPC/ EDL/MD	Result	Flag	EMPC/ EDL/MD	Result	Flag	EMPC/ EDL/MI
4	PCB-54	1800	U <sup>1</sup>	L*	1700	U	L*	190000	1 145	L*	14000	1 145	L*
4	PCB-55	1800	U		1700	U		69000			21000		
4	PCB-56	1200	J EB <sup>2</sup>		1100	J EB <sup>2</sup>		1600000	$EB^2$		300000	$EB^2$	
4	PCB-57	340	J		90	J		220000			34000		
4	PCB-58	1800	U		90	J		37000			8500		
	DCD 50/(2/75	5500	$\mathrm{U}^1$		5100	<b>T</b> T 1		0.40000			250000		
4	PCB-59/62/75 PCB-60	5500 320	J		5100 410	$\frac{U^1}{J}$		940000 350000			250000 80000		
4	PCB-00	320	J		410	J		350000			80000		
4	PCB-61/70/74/76	8600	$EB^2$		7200	$EB^2$		8100000	$EB^2$		1700000	$EB^2$	
4	PCB-63	1800	$U^1$		1700	$U^1$		830000			120000		
4	PCB-64	2800			1700	$U^1$		3600000			1200000		
4	PCB-66	5100	$EB^2$		4500	$EB^2$		5400000	$EB^2$		1100000	$EB^2$	
4	PCB-67	160	J		160	J		160000			64000		
4	PCB-68	440	J		190	J		160000			21000		
4	PCB-72	600	J		310	J		220000			34000		
4	PCB-73	460	J		230	J		28000	U		52000		
4	PCB-77	1800	$U^1$		1700	$\mathrm{U}^{1}$		720000			140000		
4	PCB-78	1800	U		1700	U		28000	U		1900	U	
4	PCB-79	1800	U <sup>1</sup>		1700	U <sup>1</sup>		31000			8700		
4	PCB-80	1800	U U	190	1700	U UM	140	28000	U		1900	U	
4	PCB-81 PCB-82	2500	U	190	6600	UM	140	9700 260000	J		1900		
5 5	PCB-82 PCB-83	3500 3000			3900			340000			160000 86000		
5	PCB-84	12000	$EB^2$		17000	$EB^2$		900000	$EB^2$		350000	$EB^2$	
3	rCD-04	12000	ED		17000	ED		900000	ED		550000	ED	
5	PCB-85/116/117	6800			9300			620000			210000		
5	PCB-86/87/97/ 109/119/125	25000			38000			1300000			540000		
	DCD 00/01			T									
5	PCB-88/91 PCB-89	6800 450	J		7700	J		1100000 61000			220000 39000		
5	1 CD-09	450	J		550	J		01000			39000		
			-			_			-			-	
5	PCB-90/101/113	40000	$EB^2$		55000	$EB^2$		1700000	$EB^2$		540000	$EB^2$	
5	PCB-92	10000			12000			890000		ļ	170000		
-	DCD 02/100	400			200			1 (0000			22000		
5	PCB-93/100 PCB-94	400 390	J 		200	J 		160000			22000		
5			J			J							
5 5	PCB-95 PCB-96	33000	J		51000 1700	U		1800000 92000			650000 21000		
5		200	5		1700	U		72000			21000		
5	PCB-98/102	1800	J		1500	J		330000			78000		
5	PCB-99	20000	$EB^2$		21000	$EB^2$		1300000	$EB^2$		350000	$EB^2$	
5	PCB-103	510	J		360	J		85000			11000		
5	PCB-104	1800	U		1700	U		5600	J		510	J	
5	PCB-105	6400	$EB^2$		EMPC	J EB <sup>2</sup>	13000	740000	$EB^2$		200000	$EB^2$	
5	PCB-106	1800	U		1700	U		28000	U		1900	U	
5	PCB-107	1800	J		1900			230000			41000		
5	PCB-108/124	3700	$U^1$		3400	$U^1$		56000			14000		
		52000			71000			3100000			1000000		

S:\TO1\_16060009\Reports\Final SI Report\Attachments\E 2018 Analytical Results\Table 2\_Case 47773 SDG PA41R3.xlsx

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor:	l Fie	PA41S1 SD-09 D35483 Id Samp ediment 1		l Fie	PA41S2 SD-10 D35484 Id Samp ediment 1		SI D3 Field	.41S3 D-11 55485 Sample liment 1		SI D3 Field I	.4184 D-12 5486 Duplicat iment 1	te
	% Solids: Units:	ng	53.1 /kg (dry		ng	55.0 /kg (dry			59.3 g (dry)			51.9 g (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/ME L*
5	PCB-111	1800	U	L^	1700	U	L^	28000	U	L^	600	J	L^
5	PCB-112	1800	U		1700	U		28000	U		1900	Ū	
5	PCB-114	EMPC	J	340	260	J		64000			16000		
5	PCB-118	28000			37000			2100000			540000		
5	PCB-120	240	J		150	J		11000	J		2100		
5	PCB-121	1800	U		1700	U		28000	U		1900	U	
5	PCB-122	1800	U		510	J		23000	J		6200		
5 5	PCB-123 PCB-126	700	J UM	320	820	J UM	290	33000 6100	J		10000 2200		
5 5	PCB-126 PCB-127	1800	U	520	1700	U	290	28000	U U		1900	U	
5		1000	0		1700	5		20000	0		1700	0	
6	PCB-128/166	10000			12000			130000			34000		
6	PCB-129/138/163	54000	$EB^2$		78000	$EB^2$		840000	$EB^2$		210000	$EB^2$	
6	PCB-130	3800	LD		5200	LD		69000	LD		18000	LD	
6	PCB-131	840	J		1100	J		12000	J		3800		
6	PCB-132	19000	$EB^2$		25000	$EB^2$		270000	$EB^2$		91000	$EB^2$	
6	PCB-133	720	J		930	J		32000			4700		
6	PCB-134	3800			4700			89000			16000		
6	PCB-135/151	11000			20000			340000			75000		
6	PCB-136	5100	$EB^2$		8000	$EB^2$		120000	$EB^2$		31000	$EB^2$	
6	PCB-137	3200			3300			45000			12000		
6	PCB-139/140	1200	J		1200	J		24000	J		5400		
6	PCB-141	6800	$EB^2$		12000	$EB^2$		89000	$EB^2$		28000	$EB^2$	
6	PCB-142	1800	U		1700	U		28000	U		1900	U	
6	PCB-143	180	J		270 2900	J		5900	J		1000 9100	J	
6 6	PCB-144 PCB-145	1700 1800	J U		1700	U		25000 940	J 		250	J	
6	PCB-146	6100	0		9100	0		140000	5		32000	5	
6	PCB-147/149	32000			51000			670000			170000		
6	PCB-148	1800	U		51	J		5400	J		600	J	
	PCB-150	1800	U		51	J		6500	J		440	J	
6	PCB-152	1800	U		59	J		7800	J		600	J	
6	PCB-153/168	34000			53000			510000			140000		
6	PCB-154	500	J		460	J	ļ	33000		ļ	3700		
6	PCB-155	1800	U		1700	U		28000	U		1900	U	
6	PCB-156/157	6000			7700			140000			27000		
6	PCB-158	4900	TT		7100	TT		77000	TT		19000	TT	
6 6	PCB-159 PCB-160	1800 1800	U U		1700 1700	U U		28000 28000	U U		1900 1900	U U	
6	PCB-161	1800	U		1700	U	+	28000	U		1900	U	
6	PCB-162	280	J		1700	U		28000	U		670	J	
6	PCB-164	3500			5400			47000			10000		
6	PCB-165	1800	U		1700	U		3200	J		510	J	
6	PCB-167	2800		0.00	3500		6.10	39000	1	2005	8000		2.5.5
6	PCB-169		UM	260		UM	240		UM	3900	EMPC	J	370
7	PCB-170	6100	EB <sup>2</sup>		22000	EB <sup>2</sup>		180000	EB <sup>2</sup>		41000	EB <sup>2</sup>	
7	PCB-171/173	2000	J		5800			51000	J		12000		
7	PCB-172	900	J		3700			32000			7500		

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congeners Sample No.: PA41S1 **PA41S2 PA41S3** PA41S4 Sample Location: SD-09 SD-10 SD-11 **SD-12** D35483 D35486 Sample Identifier: D35484 D35485 Sample Type: Field Sample Field Sample **Field Sample Field Duplicate** Sediment Sediment Sediment Matrix: Sediment **Dilution Factor:** 1 1 1 1 % Solids: 53.1 55.0 69.3 51.9 ng/kg (dry) ng/kg (dry) Units: ng/kg (dry) ng/kg (dry) EMPC/ EMPC/ EMPC/ EMPC/ EDL/MD EDL/MD EDL/MD EDL/MD CL# Compounds Result Flag Result Flag Result Flag Result Flag L\* L\* L\* L\* PCB-174 4700  $EB^2$ 19000  $EB^2$ 140000  $EB^2$ 38000  $EB^2$ 7 PCB-175 Ĵ 1900 680 7700 7 220 J J 7 PCB-176 600 J 2000 18000 J 5500 PCB-177 2900 11000 100000 27000 7 7 PCB-178 860 J 3200 40000 9300 7 PCB-179 1600 J 6000 67000 18000 PCB-180/193 90000 10000 47000 350000 7 PCB-181 150 J 150 J 2900 J 340 J 7 1800 U 1700 U PCB-182 2000 340 7 J J PCB-183/185 3200 J EB<sup>2</sup> 12000  $EB^2$ 97000  $EB^2$ 26000  $EB^2$ 7 7 PCB-184 1800 U 1700 U 28000 U 1900 U PCB-186 1800 U 1700 U 28000 U 1900 U 7 7 PCB-187 4400 19000 200000 48000 U U U 7 PCB-188 1800 1700 28000 79 J 2300 7 PCB-189 350 1100 11000 J J I PCB-190 1800  $U^1$ 4600 42000 8900 7  $\overline{U^1}$  $U^1$  $U^1$ PCB-191  $U^1$ 1900 7 1800 1700 28000 PCB-192 1800 1700 U U 1900 U 7 U 28000 PCB-194 1800  $U^1$ 14000 110000 30000 8  $U^{\overline{l}}$ PCB-195 1800 5200 41000 11000 8 PCB-196 910 J 6200 47000 13000 8  $U^1$  $U^1$  $U^1$  $U^1$ PCB-197/200 3700 3400 56000 8 3700 J EB<sup>2</sup> PCB-198/199 2300 13000  $EB^2$ 100000  $EB^2$ 27000  $EB^2$ 8 PCB-201 270 1200 11000 2900 8 J J J

1900

7300

1700

1700

6800

730

2500

6400

U

 $U^1$ 

 $EB^2$ 

J

20000

59000

28000

28000

39000

4000

9700

28000

J

U

 $U^1$ 

 $EB^2$ 

J

I

 $U^1$ 

PCB-202

PCB-203

PCB-204

PCB-205

PCB-206

PCB-207

PCB-208

PCB-209

520

1400

1800

1800

1800

230

690

1800

J

J

U

U

J EB<sup>2</sup>

J

I

 $U^1$ 

8

8

8

8

9 9

9

10

5000

15000

1900

1900

13000

1300

4000

6800

U

 $U^1$ 

 $EB^2$ 

J

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	Fie S	PA41S1 SD-09 D35483 Id Samp ediment 1 53.1 t/kg (dry	)	l Fie S	PA41S2 SD-10 D35484 Id Samp ediment 1 55.0 t/kg (dry	)	SI D3 Field Sed 6	41S3 D-11 55485 Sample liment 1 59.3 g (dry)		S Di Field I Sec	A41S4 D-12 35486 Duplicat liment 1 51.9 (dry)	
CL#	Compounds	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MI L*
	Total MoCB	48000	J		100	J		7200000	J		170000	J	
	Total DiCB	190000	J		1100	J		7000000	J		4200000	J	
	Total TrCB	110000	J		830	J		110000000	J		18000000	J	
	Total TeCB	81000	J		43000	J		72000000	J		17000000	J	
	Total PeCB	250000	J		340000	J		17000000	J		5300000	J	
	Total HxCB	210000	J		310000	J		3800000	J		950000	J	
	Total HpCB	38000	J		160000	J		1300000	J		340000	J	
	Total OcCB	5400	J		49000	J		390000	J		100000	J	
	Total NoCB	2700	J		10000	J		53000	J		18000	J	
	DeCB	ND			6400			ND			6800		
	Total PCBs^	930,000	J		920,000	J		280,000,000	J		47,000,000	J	
	Total TEQ#	1.3	J		1.9	J		780	J		270	J	

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congeners

The WHO Toxic congeners are identifed by the highlighted background.

\* The values in this column are either the Estimated Detection Limits (EDL), Method Detection Limits (MDL), or the Estimated Maximum Possible Concentration (EMPC). The EMPC results are flagged as "EMPC" in the Result column and are qualified with a "J" since they are estimated values. EMPC results are not included in the Total Homologues.

# The Toxic Equivalent concentrations are calculated with the Toxicity Equivalency Factors (TEFs) found in "The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds, Society of Toxicology, July 7, 2006. The TE values are calculated using the final validated data and include the positive results and estimated values. The TE values are estimated (J) when any individual congener is estimated. The TE calculations do not include RL values.

^ Total PCBs are the sum of the total homologues.

TIER 2/S4VEM DATA VALIDATION QUALIFIER COMMENTS:

J Sample concentrations reported below the laboratory reporting limit are flagged (J) on the Data Summary Table as estimated values with no superscripts.

1 Blank contamination; the positive sample results that are less than the CRQL are reported as non-detects (U) at the CRQL; positive sample sample results greater than the CRQL but less than the blank result are reported as non-detect (U) at the adjusted blank concentration.

2 Equipment blank contamination; detects for the affected compounds are flagged (EB) on the Data Summary Table to indicate the presence of an unknown amount of sampling error as evidenced by the aqueous equipment blank contamination.

3 LCS/LCSD recovery above QC limits; estimate high (J+) all positive results for PCB 1 and PCB 4 in all sediment samples.

4 Congener exceeded the instrument calibration range; estimate (J) the affected analytes in samples PA41R8 and PA41R9.

5 Labeled compound ion abundance ratio criteria not met; estimate (J) positive results for PCB 1 and PCB 2 in sample PA41R9.

6 Field duplicate precision outside criteria; estimate (J, UJ) the positve results and non-detects for PCB 1 in all sediment samples.

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	Ri	RB-01 D35487 nsate Bl Water 1 N/A pg/L	ank		RB-02 D35488 Isate Bla Water 1 N/A pg/L		Ri	RB-03 D35489 nsate Bl Water 1 N/A pg/L	ank	
CL#	Compounds	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	
1	PCB-1	20	U <sup>1</sup>	Ľ	19	U	L	20	U	L	 
1	PCB-2	20	U		19	U		20	U		
1	PCB-3	20	U <sup>1</sup>		19	U <sup>1</sup>		20	U <sup>1</sup>		 
2	PCB-4	20	U		19	J		20	U		 
2	PCB-4 PCB-5	20	U		14	J U		20	U		 
2	PCB-6	20	U		19	U		20	U		 
2	PCB-7	20	U		19	U		20	U		
2	PCB-8	10	J		19	J		20	U		 
	PCB-8 PCB-9	20	U U		11	U U		20			 
									U		 
2	PCB-10	20	U		19	U		20	<u>U</u>		 
2	PCB-11	42			50			20	U		 
2	PCB-12/13	39	U		38	U		40	U		
	PCB-14	20	U		19	U		20	U		
2	PCB-15	20	U		19	U		20	U		
3	PCB-16	2.6	J		19	U		20	U		
3	PCB-17	3.6	J		19	U		3.3	J		 
		5.0	5		17	0		5.5	5		
3	PCB-18/30	39	U		38	U		40	U		
3	PCB-19	20	U		19	U		20	U		
3	PCB-20/28	39	$\mathrm{U}^1$		38	$U^1$		40	U		
3	PCB-21/33	4.4	J		38	U		4.5	J		 
3	PCB-22	2.8	J		4.6	J		2.5	J		 
3	PCB-23	20	U		19	U		20	U		 
3	PCB-24	20	<u>U</u>		19	<u>U</u>		20	<u>U</u>		 
3	PCB-25	20	U		1.8	J		20	U		 
3	PCB-26/29	2.0	J		3.5	J		40	U		
3	PCB-27	2.0	U		19	U		20	U		
3	PCB-31	20	U <sup>1</sup>		19	U <sup>1</sup>		20	U		 
	PCB-32							2.0			 
		2.4	J		4.4	J			J		 
	PCB-34 PCB-35	20 20	U U		19 19	U U		20	U U		 
	PCB-35 PCB-36	20	U		19	U		20	U		 
	PCB-37	20	U		19	U		20	U		
	PCB-38	20	U		19	U		20	U U		 
	PCB-39	20	Ŭ		19	U		20	U		
									_		
	PCB-40/71	2.9	J		5.4	J		40	U		 
	PCB-41	20	<u>U</u>		19	<u>U</u>		20	<u>U</u>		 
	PCB-42	20	U		19	<u>U</u>		20	U		 
4	PCB-43	20	U		19	U		20	U		 
4	PCB-44/47/65	59	$U^1$		58	$U^1$		60	$U^1$		 
4	PCB-45/51	39	U		38	U		40	U		
4	PCB-46	20	U		19	U		20	U		 
4	PCB-48	20	U		19	U		20	U		
4	PCB-49/69	39	$U^1$		38	$\mathrm{U}^1$		40	U		
4	PCB-50/53 PCB-52	1.6 20	$\frac{J}{U^1}$		2.1 19	J U <sup>1</sup>		40	U U <sup>1</sup>	ļ	 

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	Ri	PA41S5 RB-01 D35487 nsate Bl Water 1 N/A pg/L	ank		PA41S6 RB-02 D35488 Isate Bla Water 1 N/A pg/L	nk	Ri	PA4187 RB-03 D35489 nsate Bl Water 1 N/A pg/L	ank		
CL#	Compounds	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*		
4	PCB-54	20	U		19	U		20	U			
	PCB-55	20	U		19	U		20	U U			
4	PCB-56	2.2	J		3.4	J		20	U			
4	PCB-50	2.2	U		19	U		20	U U			
4	PCB-58	20	U		19	U		20	U			
4	PCB-59/62/75	59	U		58	U		60	U			
4	PCB-60	20	U		19	U		20	U			
4	PCB-61/70/74/76	78	U		12	J		80	U			
4	PCB-63	20	U		19	U		20	U			
4	PCB-64	3.6	J		5.7	J		20	U			1
	PCB-66	3.5	J		7.3	J		20	U			
4	PCB-00 PCB-67	20	U J		/.3	U J		20	U			
4	PCB-68	20	U		19	U		20	U			
4	PCB-72	20	U		19	U		20	U U			
4	PCB-73	20	U		19	U		20	U			1
4	PCB-77		UM	3.5		UM	3.5		UM	3.6		
4	PCB-78	20	U	5.0	19	U	5.0	20	U	5.0		
4	PCB-79	20	U		19	U		20	U			
4	PCB-80	20	U		19	U		20	U U			
	PCB-81		UM	2.6		UM	2.5		UM	2.7		
5	PCB-82	20	U		19	U		20	U			
5	PCB-83	20	Ū		19	Ū		20	Ū			
5	PCB-84	20	U		2.4	J		20	U			
5	PCB-85/116/117	59	U		58	U		60	U			
5	PCB-86/87/97/ 109/119/125	120	$U^1$		120	$U^1$		120	U			
5	PCB-88/91	39	U		38	U		40	U			
	PCB-89	20	U		19	U		20	U			
	102.07		0			0			0			
5	PCB-90/101/113	5.6	J		6.6	J		3.9	J			
5	PCB-92	20	U		19	U		20	U			
5	PCB-93/100	39	U		38	U		40	U			
5	PCB-93/100 PCB-94	20	U		19	U		20	U			
	PCB-94	20	U <sup>1</sup>		19	U <sup>1</sup>		20	U			
5 5	PCB-95 PCB-96	20	U		19	U		20	U			
5	PCB-98/102	39	U		38	U		40	U			
5	PCB-99	2.4	J		19	U		20	U			
5	PCB-103	20	Ŭ		19	U		20	U			
	PCB-104	20	Ū		19	Ū		20	U			
	PCB-105		UM	2.3	3.6	J			UM	2.4		
	PCB-106	20	U		19	U		20	U			
	PCB-107	20	U		19	U		20	U			
	PCB-108/124	39	U		38	U		40	U			
	PCB-110/115	39	U <sup>1</sup>		38	U <sup>1</sup>		40	U <sup>1</sup>			

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.:PA41S5Sample Location:RB-01Sample Identifier:D35487Sample Type:Rinsate BlankMatrix:WaterDilution Factor:1% Solids:N/AUnits:pg/L		ank	PA4186 RB-02 D35488 Rinsate Blank Water 1 N/A pg/L			Ri	PA41S2 RB-03 D35489 nsate Bl Water 1 N/A pg/L	) ank			
				EMPC/ EDL/MD			EMPC/ EDL/MD			EMPC/ EDL/MD		
CL#	Compounds	Result	Flag	L*	Result	Flag	L*	Result	Flag	L*		
5	PCB-111	20	U		19	U		20	U			
5	PCB-112	20	U		19	U		20	U			
5	PCB-114		UM	2.6		UM	2.5		UM	2.7		
5	PCB-118	20	$\mathrm{U}^{1}$		19	$\mathrm{U}^{1}$			UM	3.5		
5	PCB-120	20	U		19	U		20	U			
5	PCB-121	20	U		19	U		20	U			
5	PCB-122	20	U		19	U		20	U			
5	PCB-123		UM	3.7		UM	3.6		UM	3.8		
5	PCB-126		UM	3.5		UM	3.5		UM	3.6		
5	PCB-127	20	U		19	U		20	U			
6	PCB-128/166	39	U		38	U		40	U			
,	PCB-129/138/163	5.9	J		8.2	J		3.9	т			
6	PCB-129/138/103	20	 		8.2 19	U		20	J U			
6	PCB-131	20	U		19	U		20	U			
	PCB-132		J		19			1.9				
6		2.6	U J		19	U			J U			
6	PCB-133	20			19	U		20				
6	PCB-134	20	U		19	U		20	U			
6	PCB-135/151	39	$U^1$		38	$U^1$		40	$U^1$			
6	PCB-136	20	U		1.4	J		20	U			
6	PCB-137	20	U		19	U		20	U			
6	PCB-139/140	39	U		38	U		40	U			
6	PCB-141	20	U		2.0	J		20	U			
6	PCB-142	20	Ū		19	U		20	Ū			
6	PCB-143	20	U		19	U		20	U			
6	PCB-144	20	U		19	U		20	U			
6	PCB-145	20	U		19	U		20	U			
6	PCB-146	20	U		19	U		20	U			
6	PCB-147/149	39	$\mathrm{U}^1$		38	$\mathrm{U}^1$		40	U			
6	PCB-148	20	U		19	U	1	20	U			
6	PCB-150	20	Ū		19	Ū		20	Ū			
6	PCB-152	20	Ū		19	U		20	Ū			
6	PCB-153/168	39	$\mathrm{U}^{1}$		38	$U^1$		40	U			
6	PCB-155/100	20	U		19	U	1	20	U			
6	PCB-155	20	U		19	U		20	U			
6	PCB-156/157	20	UM	3.7	.,	UM	3.6	20	UM	3.8		
6	PCB-158	20	U		19	U		20	U			
6	PCB-159	20	U		19	U		20	U			
6	PCB-160	20	U		19	U		20	U			
6	PCB-161	20	U		19	U		20	U			
6	PCB-162	20	U		19	U		20	U			
6	PCB-164	20	U		19	U		20	U			
6	PCB-165	20	U		19	U		20	U			
6	PCB-167		UM	2.2		UM	2.1		UM	2.2		
6	PCB-169		UM	1.9		UM	1.9		UM	2.0		
7	PCB-170	2.0	J		19	U		20	U			
7	PCB-171/173	39	U		38	U		40	U			
	PCB-172	20	U		19	U		20	U			

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	PA4185 RB-01 D35487 Rinsate Blank Water 1 N/A pg/L EMPC/			PA4186 RB-02 D35488 Rinsate Blank Water 1 N/A pg/L EMPC/			PA41S7 RB-03 D35489 Rinsate Blank Water 1 N/A pg/L EMPC/				
CL#	Compounds	Result	Flag	EMIC/ EDL/MD L*	Result	Flag	EDL/MD L*	Result	Flag	EDL/MD L*		
7	PCB-174	20	U		2.6	J		20	U			
7	PCB-175	20	U		19	U		20	U			
7	PCB-176	20	U		19	U		20	U			
7	PCB-177	20	U		19	U		20	U			
7	PCB-178	20	U		19	U		20	U			
7	PCB-179	20	$U^1$		19	$U^1$		20	U			
7	PCB-180/193	39	$U^1$		38	$U^1$		40	U			
7	PCB-181	20	U		19	U		20	U			
7	PCB-182	20	U		19	U		20	U			
,	100 102	20										
7	PCB-183/185	2.1	J		1.7	J		40	U			
7	PCB-184	20	Ū		19	U		20	Ŭ			
7	PCB-186	20	U		19	U		20	U			
7	PCB-187	20	$U^1$		19	U		20	$U^1$			
7	PCB-188	20	U		19	U		20	U			
7	PCB-189		UM	2.7		UM	2.6		UM	2.7		
7	PCB-190	20	U		19	U		20	U			
7	PCB-191	20	U		19	U		20	U			
7	PCB-192	20	Ū		19	Ū		20	Ŭ			
8	PCB-194	20	U <sup>1</sup>		19	U		20	U			_
8	PCB-195	20	U		19	U		20	U			
8	PCB-195	20	U		19	U		20	U U		 	
8	PCB-197/200	39	U		38	U		40	U			
8	PCB-198/199	39	U		1.9	J		40	U			
8	PCB-201	20	U		19	U		20	U			
8	PCB-202	20	U		19	U		20	U			
8	PCB-203	20	U		19	U		20	U			
8	PCB-204	20	U		19	U		20	U			
8	PCB-205	20	U		19	U		20	U			
9	PCB-206	1.4	J		19	U		20	U			
9	PCB-207	20	U		19	U		20	U			
9	PCB-208	20	U		19	U		20	U			
10	PCB-209	0.53	J		19	U		20	U			

### ESAT GENERATED DATA SUMMARY TABLE - VALIDATED RESULTS LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Site: Lower Neponset River Lab: Cape Fear Analytical Case: 47773 SDG: PA41R3 Method HRSM01.2 Analysis: 209 CB Congener:

	Sample No.: Sample Location: Sample Identifier: Sample Type: Matrix: Dilution Factor: % Solids: Units:	RB-01 D35487 Rinsate Blank Water 1 N/A pg/L		PA4186 RB-02 D35488 Rinsate Blank Water 1 N/A pg/L			PA41S7 RB-03 D35489 Rinsate Blank Water 1 N/A pg/L					
CL#	Compounds	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*	Result	Flag	EMPC/ EDL/MD L*		
	Total MoCB	ND			ND			ND				
	Total DiCB	52	J		75	J		ND				
	Total TrCB	18	J		14	J		12	J			
	Total TeCB	14	J		36	J		ND				
	Total PeCB	8.0	J		13	J		3.9	J			
	Total HxCB	8.5	J		12	J		5.8	J			
	Total HpCB	4.1	J		4.3	J		ND				
	Total OcCB	ND	J		1.9	J		ND				
	Total NoCB	1.4	J		ND			ND				
	DeCB	0.53	J		ND			ND				
	Total PCBs^	110	J		160	J		22	J			
	Total TEQ#	0			0.00011	J		0				

The WHO Toxic congeners are identifed by the highlighted background.

\* The values in this column are either the Estimated Detection Limits (EDL), Method Detection Limits (MDL), or the Estimated Maximum Possible Concentration (EMPC). The EMPC results are flagged as "EMPC" in the Result column and are qualified with a "J" since they are estimated values. EMPC results are not included in the Total Homologues.

# The Toxic Equivalent concentrations are calculated with the Toxicity Equivalency Factors (TEFs) found in "The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds, Society of Toxicology, July 7, 2006. The TE values are calculated using the final validated data and include the positive results and estimated values. The TE values are estimated (J) when any individual congener is estimated. The TE calculations do not include RL values.

^ Total PCBs are the sum of the total homologues.

TIER 2/S4VEM DATA VALIDATION QUALIFIER COMMENTS:

J Sample concentrations reported below the laboratory reporting limit are flagged (J) on the Data Summary Table as estimated values with no superscripts.

1 Blank contamination; the positive sample results that are less than the CRQL are reported as non-detects (U) at the CRQL; positive sample sample results greater than the CRQL but less than the blank result are reported as non-detect (U) at the adjusted blank concentration.

2 Equipment blank contamination; detects for the affected compounds are flagged (EB) on the Data Summary Table to indicate the presence of an unknown amount of sampling error as evidenced by the aqueous equipment blank contamination.

3 LCS/LCSD recovery above QC limits; estimate high (J+) all positive results for PCB 1 and PCB 4 in all sediment samples.

4 Congener exceeded the instrument calibration range; estimate (J) the affected analytes in samples PA41R8 and PA41R9.

5 Labeled compound ion abundance ratio criteria not met; estimate (J) positive results for PCB 1 and PCB 2 in sample PA41R9.

6 Field duplicate precision outside criteria; estimate (J, UJ) the positve results and non-detects for PCB 1 in all sediment samples.

#### DATA SUMMARY TABLE 3 TOTAL PCB CONGENER AND WHO TOXIC PCB HOMOLOGUES SEDIMENT ANALYSIS SEPTEMBER 2018

CLP	SAMPLE NUMBER	PA41R3	PA41R4	PA41R5	PA41R6	PA41R7	PA41R8
SA	MPLE IDENTIFIER	D35475	D35476	D35477	D35478	D35479	D35480
SI	TATION LOCATION	SD-01	SD-02	SD-03	SD-04	SD-05	SD-06
S	AMPLE LOCATION	WBD-C5 C	PTB-C1 A	BCA-C3 C	BCA-C5 D	THD-C1 G	LCA-C2 E
LABO	RATORY NUMBER	13887001	13887002	13887003	13887004	13887005	13887006
COMPOUND	CRQL						
PCB-77	0.002	37 U <sup>1</sup>	1.1 U <sup>1</sup>	160	140	100	540
PCB-81	0.002	4 U	0.13 U	5.1	2.1	7.5 U	17 J
PCB-105	0.002	97 EB <sup>2</sup>	0.21 J EB <sup>2</sup>	250 EB <sup>2</sup>	200 EB <sup>2</sup>	98 EB <sup>2</sup>	770 EB <sup>2</sup>
PCB-114	0.002	7.4 J	0.13 UM	22	16	8 J	89
PCB-118	0.002	500	1.1 U <sup>1</sup>	510	540	640	3100
PCB-123	0.002	6.7 UM	0.2 UM	12	9.3	8.1 UM	38
PCB-126	0.002	6.4 UM	0.19 UM	2.8	2.3	8.6 U	11 J
PCB-156/157	0.002	78	2.2 U <sup>1</sup>	37	26	91 U <sup>1</sup>	330
PCB-167	0.002	25 J	0.12 UM	11	8	20 J	96
PCB-169	0.002	5.3 UM	0.16 UM	0.22 UM	0.26 UM	6.4 UM	5.1 UM
PCB-189	0.002	8.4 J	0.11 UM	2.3	2.2	12 J	32 J
Total MoCB	NA	3300 J	ND	59 J	94 J	41000 J	56000 J
Total DiCB	NA	20000 J	0.65 J	1500 J	3900 J	110000 J	470000 J
Total TrCB	NA	23000 J	0.68 J	11000 J	18000 J	69000 J	360000 J
Total TeCB	NA	14000 J	1.87 J	15000 J	17000 J	36000 J	150000 J
Total PeCB	NA	4900 J	0.56 J	4600 J	5200 J	12000 J	35000 J
Total HxCB	NA	3100 J	0.49 J	1000 J	990 J	4200 J	9800 J
Total HpCB	NA	910 J	0.35 J	300 J	320 J	1700 J	3800 J
Total OcCB	NA	360 J	ND	90 J	100 J	680 J	1200 J
Total NoCB	NA	50 J	ND	17 J	18 J	120 J	180 J
DeCB	NA	ND	ND	4.9	6.6	ND	ND
Total PCB's	NA	70,000	4.6	33,000	46,000	270,000	1,100,000
1	DILUTION FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE SAMPLED	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/5/2018	9/5/2018
1	DATE EXTRACTED	9/24/2018	9/24/2018	9/24/2018	9/24/2018	9/24/2018	9/24/2018
	DATE ANALYZED	9/30/2018	9/28/2018	9/28/2018	9/28/2018	9/30/2018	9/30/2018
SAMPLE	WEIGHT (GRAMS)	0.00101	0.02	0.0204	0.0208	0.00103	0.001
	% SOLID	52.9	89.4	63.1	51.9	42.9	55.5

#### S4VEM DATA VALIDATION ^ Total PCBs are the sum of the total homologues. QUALIFIER COMMENTS:

#### TIER 2/S4VEM DATA VALIDATION QUALIFIER COMMENTS:

#### NOTES: Results are reported in micrograms per kilogram (µg/kg).

CRQL = Contract Required Quantitation Limit

All results are reported on a Dry Weight Basis.

\* Reported value is from diluted analysis.

COMPOUND = WHO Toxic PCB Homologues

WHO = World Health Organization.

with no superscripts. 1 Blank contamination; the positive sample results that are less than the CRQL are reported as non-detects (U) at the CRQL; positive sample sample results greater than the CRQL but less than the blank result are reported as non-detect (U) at the adjusted blank concentration.

J Sample concentrations reported below the laboratory reporting limit are flagged (J) on the Data Summary Table as estimated values

2 Equipment blank contamination; detects for the affected compounds are flagged (EB) on the Data Summary Table to indicate the presence

- of an unknown amount of sampling error as evidenced by the aqueous equipment blank contamination.
- 3 LCS/LCSD recovery above QC limits; estimate high (J+) all positive results for PCB 1 and PCB 4 in all sediment samples.
- 4 Congener exceeded the instrument calibration range; estimate (J) the affected analytes in samples PA41R8 and PA41R9.
- 5 Labeled compound ion abundance ratio criteria not met; estimate (J) positive results for PCB 1 and PCB 2 in sample PA41R9.

6 Field duplicate precision outside criteria; estimate (J, UJ) the positive results and non-detects for PCB 1 in all sediment samples.

#### DATA SUMMARY TABLE 3 TOTAL PCB CONGENER AND WHO TOXIC PCB HOMOLOGUES SEDIMENT ANALYSIS SEPTEMBER 2018

CLP	SAMPLE NUMBER	PA41R9	PA41S0	PA41S1	PA41S2	PA41S3	PA41S4
SA	AMPLE IDENTIFIER	D35481	D35482	D35483	D35484	D35485	D35486
S	TATION LOCATION	SD-07	SD-08	SD-09	SD-10	SD-11	SD-12
S	AMPLE LOCATION	THD-C1 F	UNR-C2 D	UNR-C3 A	UMB-C2 C	LCA-C3 D	BCA-C105 D
LABO	RATORY NUMBER	13887007	13887008	13887009	13887010	13887011	13887012
COMPOUND	CRQL						
PCB-77	0.002	2300	12	1.8 U <sup>1</sup>	1.7 U <sup>1</sup>	720	140
PCB-81	0.002	840 U	0.28 J	0.19 U	0.14 UM	9.7 J	1.9
PCB-105	0.002	1200 EB <sup>2</sup>	23 EB <sup>2</sup>	6.4 EB <sup>2</sup>	13 J EB <sup>2</sup>	740 EB <sup>2</sup>	200 EB <sup>2</sup>
PCB-114	0.002	570 U	1.9	0.34 J	0.26 J	64	16
PCB-118	0.002	13000	160	28	37	2100	540
PCB-123	0.002	520 U	1.5 J	0.7 J	0.82 J	33	10
PCB-126	0.002	580 U	0.48 J	0.32 UM	0.29 UM	6.1 J	2.2
PCB-156/157	0.002	1100	17	6	7.7	140	27
PCB-167	0.002	460 U	6.3	2.8	3.5	39	8
PCB-169	0.002	370 U	0.23 UM	0.26 UM	0.24 UM	3.9 UM	0.37 J
PCB-189	0.002	360	0.96 J	0.35 J	1.1 J	11 J	2.3
Total MoCB	NA	1500000 J	49 J	48 J	0.1 J	7200 J	170 J
Total DiCB	NA	4700000 J	280 J	190 J	1.1 J	70000 J	4200 J
Total TrCB	NA	2600000 J	910 J	110 J	0.83 J	110000 J	18000 J
Total TeCB	NA	1300000 J	1000 J	81 J	43 J	72000 J	17000 J
Total PeCB	NA	440000 J	970 J	250 J	340 J	17000 J	5300 J
Total HxCB	NA	130000 J	530 J	210 J	310 J	3800 J	950 J
Total HpCB	NA	64000 J	130 J	38 J	160 J	1300 J	340 J
Total OcCB	NA	27000 J	37 J	5.4 J	49 J	390 J	100 J
Total NoCB	NA	3700 J	9.8 J	2.7 J	10 J	53 J	18 J
DeCB	NA	550	3.3	ND	6.4	ND	6.8
Total PCB's	NA	11,000,000	3,900	930	920	280,000	47,000
1	DILUTION FACTOR	1.0	1.0	1.0	1.0	1.0	1.0
	DATE SAMPLED	9/5/2018	9/6/2018	9/6/2018	9/6/2018	9/5/2018	9/4/2018
	DATE EXTRACTED	9/24/2018	9/24/2018	9/24/2018	9/24/2018	9/24/2018	9/24/2018
	DATE ANALYZED	10/26/2018	9/29/2018	9/29/2018	9/29/2018	9/30/2018	9/28/2018
SAMPLE	WEIGHT (GRAMS)	0.00107	0.021	0.0204	0.0214	0.00104	0.0206
	% SOLID	38.7	59.2	53.1	55.0	69.3	51.9

SAVEM DATA VALIDATION ^ Total PCBs are the sum of the total homologues.

with no superscripts.

#### QUALIFIER COMMENTS:

#### TIER 2/S4VEM DATA VALIDATION QUALIFIER COMMENTS:

NOTES:

Results are reported in micrograms per kilogram (µg/kg). 1 Blank contamination; the positive sample results that are less than the CRQL are reported as non-detects (U) at the CRQL; positive sample sample results greater than the CRQL but less than the blank result are reported as non-detect (U) at the adjusted blank concentration.

J Sample concentrations reported below the laboratory reporting limit are flagged (J) on the Data Summary Table as estimated values

2 Equipment blank contamination; detects for the affected compounds are flagged (EB) on the Data Summary Table to indicate the presence

- of an unknown amount of sampling error as evidenced by the aqueous equipment blank contamination.
- 3 LCS/LCSD recovery above QC limits; estimate high (J+) all positive results for PCB 1 and PCB 4 in all sediment samples.
- 4 Congener exceeded the instrument calibration range; estimate (J) the affected analytes in samples PA41R8 and PA41R9.
- 5 Labeled compound ion abundance ratio criteria not met; estimate (J) positive results for PCB 1 and PCB 2 in sample PA41R9.

6 Field duplicate precision outside criteria; estimate (J, UJ) the positive results and non-detects for PCB 1 in all sediment samples.

CRQL = Contract Required Quantitation Limit All results are reported on a Dry Weight Basis. \* Reported value is from diluted analysis. WHO = World Health Organization. COMPOUND = WHO Toxic PCB Homologues

# SUMMARY OF POLYCHLORINATED BIPHENYL RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

SAMPLE LOCATION	THD-C102 C		WBD-C1 C		WBD-C5 C		BCA-C3 C		BCA-C4 B	
SAMPLE NUMBER	0134LN-0104	Lab	0134LN-0003	Lab	0134LN-0013	Lab	0134LN-0024	Lab	0134LN-0029	Lab
LAB SAMPLE ID	AB76569	RL	AB76570	RL	AB76571	RL	AB76572	RL	AB76573	RL
COMPOUND										
Aroclor-1016	ND	14,000	ND	1,300	ND	3,900	ND	2,000	ND	4,500
Aroclor-1221	170,000	14,000	ND	1,300	ND	3,900	ND	2,000	ND	4,500
Aroclor-1232	ND	14,000	ND	1,300	34,000	3,900	ND	2,000	ND	4,500
Aroclor-1242	ND	14,000	ND	1,300	ND	3,900	ND	2,000	ND	4,500
Aroclor-1248	ND	14,000	9,800	1,300	ND	3,900	15,000	2,000	21,000	4,500
Aroclor-1254	ND	14,000	ND	1,300	8,300	3,900	ND	2,000	ND	4,500
Aroclor-1260	ND	14,000	ND	1,300	ND	3,900	ND	2,000	ND	4,500
Aroclor-1262	ND	14,000	ND	1,300	ND	3,900	ND	2,000	ND	4,500
Aroclor-1268	ND	14,000	ND	1,300	ND	3,900	ND	2,000	ND	4,500

### NOTES:

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I SOP, EIASOP-PESTSOIL4, PCBs Medium Level in Soils and Sediments.

All Results in micrograms per Kilogram (µg/Kg). (Note: results reported in milligrams per Kilograms (mg/Kg) and have been converted.) Bolded results exceed laboratory Reporting Limits (RLs).

ND = Not Detected above Laboratory Reporting Limits (RLs).

# SUMMARY OF POLYCHLORINATED BIPHENYL RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

SAMPLE LOCATION	BCA-C5 D		BCA-C6 G		BCA-C7 A		THD-C1 B		THD-C1 D	
SAMPLE NUMBER	0134LN-0036	Lab	0134LN-0044	Lab	0134LN-0047	Lab	0134LN-0051	Lab	0134LN-0053	Lab
LAB SAMPLE ID	AB76574	RL	AB76575	RL	AB76576	RL	AB76577	RL	AB76578	RL
COMPOUND										
Aroclor-1016	ND	4,800	ND	590	ND	420	ND	2,700	ND	13,000
Aroclor-1221	ND	4,800	ND	590	ND	420	29,000	2,700	200,000	13,000
Aroclor-1232	ND	4,800	ND	590	5,500	420	ND	2,700	ND	13,000
Aroclor-1242	ND	4,800	ND	590	ND	420	ND	2,700	ND	13,000
Aroclor-1248	12,000 P	4,800	2,600	590	ND	420	ND	2,700	ND	13,000
Aroclor-1254	ND	4,800	ND	590	1,200	420	ND	2,700	ND	13,000
Aroclor-1260	ND	4,800	ND	590	ND	420	ND	2,700	ND	13,000
Aroclor-1262	ND	4,800	ND	590	ND	420	ND	2,700	ND	13,000
Aroclor-1268	ND	4,800	ND	590	ND	420	ND	2,700	ND	13,000

### NOTES:

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I SOP, EIASOP-PESTSOIL4, PCBs Medium Level in Soils and Sediments.

All Results in micrograms per Kilogram (µg/Kg). (Note: Results reported by Laboratory in milligrams per Kilograms (mg/Kg) and have been converted to µg/Kg.)

Bolded results exceed laboratory Reporting Limits (RLs).

ND = Not Detected above Laboratory Reporting Limits (RLs).

# SUMMARY OF POLYCHLORINATED BIPHENYL RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

SAMPLE LOCATION	THD-C1 F		THD-C2 C		LCA-C2 A		LCA-C2 C		LCA-C2 E	
SAMPLE NUMBER	0134LN-0055	Lab	0134LN-0060	Lab	0134LN-0067	Lab	0134LN-0069	Lab	0134LN-0071	Lab
LAB SAMPLE ID	AB76579	RL	AB76580	RL	AB76581	RL	AB76582	RL	AB76583	RL
COMPOUND										
Aroclor-1016	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000
Aroclor-1221	360,000	28,000	140,000	11,000	670,000	64,000	1,600,000	200,000	880,000 P	130,000
Aroclor-1232	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000
Aroclor-1242	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000
Aroclor-1248	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000
Aroclor-1254	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000
Aroclor-1260	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000
Aroclor-1262	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000
Aroclor-1268	ND	28,000	ND	11,000	ND	64,000	ND	200,000	ND	130,000

### NOTES:

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I SOP, EIASOP-PESTSOIL4, PCBs Medium Level in Soils and Sediments.

All Results in micrograms per Kilogram (µg/Kg). (Note: Results reported by Laboratory in milligrams per Kilograms (mg/Kg) and have been converted to µg/Kg.)

Bolded results exceed laboratory Reporting Limits (RLs).

ND = Not Detected above Laboratory Reporting Limits (RLs).

# SUMMARY OF POLYCHLORINATED BIPHENYL RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

SAMPLE LOCATION	LCA-C3 C		MBC-C1 D		UMB-C1 A		UMB-C2 B		UNR-C2 D	
SAMPLE NUMBER	0134LN-0074	Lab	0134LN-0079	Lab	0134LN-0086	Lab	0134LN-0091	Lab	0134LN-0099	Lab
LAB SAMPLE ID	AB76584	RL	AB76585	RL	AB76586	RL	AB76587	RL	AB76588	RL
COMPOUND										
Aroclor-1016	ND	220,000	ND	3,300	ND	100	ND	110	ND	130
Aroclor-1221	2,000,000	220,000	ND	3,300	ND	100	ND	110	ND	130
Aroclor-1232	ND	220,000	42,000	3,300	ND	100	ND	110	ND	130
Aroclor-1242	ND	220,000	ND	3,300	ND	100	ND	110	840	130
Aroclor-1248	ND	220,000	ND	3,300	ND	100	ND	110	ND	130
Aroclor-1254	ND	220,000	ND	3,300	350	100	520	110	710	130
Aroclor-1260	ND	220,000	ND	3,300	ND	100	540	110	180	130
Aroclor-1262	ND	220,000	ND	3,300	ND	100	ND	110	ND	130
Aroclor-1268	ND	220,000	ND	3,300	ND	100	ND	110	ND	130

### NOTES:

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I SOP, EIASOP-PESTSOIL4, PCBs Medium Level in Soils and Sediments.

All Results in micrograms per Kilogram (µg/Kg). (Note: Results initially reported by Laboratory in milligrams per Kilograms (mg/Kg) and have been converted to µg/Kg.)

Bolded results exceed laboratory Reporting Limits (RLs).

ND = Not Detected above Laboratory Reporting Limits (RLs).

# SUMMARY OF POLYCHLORINATED BIPHENYL RESULTS SEDIMENT/SOURCE SAMPLES LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

SAMPLE LOCATION	UNR-C3 C	
SAMPLE NUMBER	0134LN-0102	Lab
LAB SAMPLE ID	AB76589	RL
COMPOUND		
Aroclor-1016	ND	60
Aroclor-1221	ND	60
Aroclor-1232	ND	60
Aroclor-1242	ND	60
Aroclor-1248	ND	60
Aroclor-1254	ND	60
Aroclor-1260	ND	60
Aroclor-1262	ND	60
Aroclor-1268	ND	60

### NOTES:

Samples analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) using EPA Region I SOP, EIASOP-PESTSOIL4, PCBs Medium Level in Soils and Sediments.

All Results in micrograms per Kilogram (µg/Kg). (Note: Results initially reported by Laboratory in milligrams per

Kilograms (mg/Kg) and have been converted to µg/Kg.)

Bolded results exceed laboratory Reporting Limits (RLs).

ND = Not Detected above Laboratory Reporting Limits (RLs).

P = The confirmation value exceeded 35% difference and is less than 100%. The lower

### SITE: LOWER NEPONSET RIVER PCBs CASE: 0914F SDG: D35475 LABORATORY: EARTH TOXICS, INC.

### DATA SUMMARY TABLE 5 TOTAL ORGANIC CARBON SEDIMENT ANALYSIS SEPTEMBER 2018

	SAMPLE	NUMBER	D35475	D35476	D35477	D35478	D35479	D35480
	STATION L	OCATION	WBD-C5 C	PTB-C1 A	BCA-C3 C	BCA-C5 D	THD-C1 G	LCA-C2 E
L	ABORATORY	NUMBER	180-81717-1	180-81717-2	180-81717-3	180-81717-4	180-81717-5	180-81717-6
COMPOUND	MDL	RL						
Total Organic Carbon (TOC)	750	1,000	26,000 J	2,100 J	31,000 J	45,000 J	66,000 J	61,000 J
	DILUTION	<b>FACTOR</b>	1.0	1.0	1.0	1.0	1.0	1.0
	DATE SAMPL			9/4/2018	9/4/2018	9/4/2018	9/5/2018	9/5/2018
	DATE ANALYZE		9/11/2018	9/11/2018	9/11/2018	9/11/2018	9/11/2018	9/11/2018
	% SOLI			88	61.6	52.8	44.2	53.1

S3VM DATA VALIDATION

**QUALIFIER COMMENTS:** U = Value is non-detected.

J = Result is estimated due to exceedance of laboratory duplicate RPD criteria.

NOTES:

Results are reported in milligrams per kilogram (mg/kg). MDL = Method Detection Limit. RL = Reporting Limit Limit. All results are reported on a Dry Weight Basis.

### SITE: LOWER NEPONSET RIVER PCBs CASE: 0914F SDG: D35475 LABORATORY: EARTH TOXICS, INC.

### DATA SUMMARY TABLE 5 TOTAL ORGANIC CARBON SEDIMENT ANALYSIS SEPTEMBER 2018

SAMPLE NUMBER STATION LOCATION LABORATORY NUMBER			D35481 D35482		D35483	D35484	D35485	D35486	
			THD-C1 F	UNR-C2 D	UNR-C3 A	UMB-C2 C	LCA-C3 D	BCA-C105 D	
			180-81717-7	180-81717-8	180-81717-9	180-81717-10	180-81717-11	180-81717-12	
COMPOUND MDL RL		RL							
Total Organic Carbon (TOC)	750	1,000	61,000 J	100,000 J	77,000 J	55,000 J	19,000 J	47,000 J	
	DILUTION	FACTOR	1.0	1.0	1.0	1.0	1.0	1.0	
DATE SAMPLED			9/5/2018	9/6/2018	9/6/2018	9/6/2018	9/5/2018	9/4/2018	
DATE ANALYZED			9/11/2018	9/11/2018	9/11/2018	9/11/2018	9/11/2018	9/11/2018	
		% SOLID	39.4	49.5	41	51.5	63.9	52.8	

S3VM DATA VALIDATION

**QUALIFIER COMMENTS:** U = Value is non-detected.

J = Result is estimated due to exceedance of laboratory duplicate RPD criteria.

NOTES:

Results are reported in milligrams per kilogram (mg/kg). MDL = Method Detection Limit. RL = Reporting Limit Limit. All results are reported on a Dry Weight Basis.

# ATTACHMENT F LOWER NEPONSET RIVER PCBS START ANALYTICAL SUMMARY TABLES Samples Collected from 13 to 17 November 2017 and 4 to 6 September 2018

Table 1	Sediment/Source Sample PCB Aroclor Analytical Summary, Lower
	Neponset River PCBs Site, November 2017
Table 2	Sediment/Source Sample PCB Aroclor Analytical Summary, Lower
	Neponset River PCBs Site, September 2018
Table 3	Sediment/Source Sample Total PCBs (Congener) Analytical Summary,
	Lower Neponset River PCBs Site, September 2018

# SEDIMENT/SOURCE SAMPLE PCB AROCLOR ANALYTICAL SUMMARY LOWER NEPONSET RIVER PCBS SITE NOVEMBER 2017

Sample Location	Compound	Sample Concentration			Background Concentration			Comments		
SD-06	Aroclor-1248	2,100	*J2	µg/Kg	140	UJ	µg/Kg	15	Х	SQL
SD-08A	Aroclor-1248	270		µg/Kg	140	UJ	µg/Kg	1.9	Х	SQL
SD-09	Aroclor-1248	150	J-1	µg/Kg	140	UJ	µg/Kg	1.1	Х	SQL
SD-10	Aroclor-1248	260		µg/Kg	140	UJ	µg/Kg	1.9	Х	SQL
SD-11	Aroclor-1248	1,500	*J4	µg/Kg	140	UJ	µg/Kg	10.7	Х	SQL
SD-12A	Aroclor-1248	1,000	*	µg/Kg	140	UJ	µg/Kg	7.1	Х	SQL
SD-12	Aroclor-1248	300	J-1	µg/Kg	140	UJ	µg/Kg	2.1	Х	SQL
SD-13	Aroclor-1248	370	J-1	µg/Kg	140	UJ	µg/Kg	2.6	Х	SQL
SD-39	Aroclor-1248	630	J2,4	µg/Kg	140	UJ	µg/Kg	4.5	Х	SQL
SD-41	Aroclor-1248	530	*	µg/Kg	140	UJ	µg/Kg	3.8	Х	SQL
SD-42	Aroclor-1248	200	J-1	µg/Kg	140	UJ	µg/Kg	1.4	Х	SQL
SD-43	Aroclor-1248	180		µg/Kg	140	UJ	µg/Kg	1.3	Х	SQL
SD-44	Aroclor-1254	2,100	*	µg/Kg	460	UJ	µg/Kg	4.6	Х	Bac.
SD-100A	Aroclor-1248	200	J-1	µg/Kg	140	UJ	µg/Kg	1.4	Х	SQL
SD-100B	Aroclor-1248	260		µg/Kg	140	UJ	µg/Kg	1.9	Х	SQL

# NOTES:

 $\mu$ g/Kg = micrograms per Kilogram.

SQL = Sample Quantitation Limit.

Bac. = Background

SD-39 is field duplicate of SD-06

Samples SD-36, SD-29, and SD-45 were selected as the background samples. SD-36 and SD-29 were used for the comparison of PCB Aroclor-1248 concentrations. SD-45 was used for the comparison of PCB Aroclor-1254 concentrations.

\* Reported value is from diluted analysis.

J = The associated numerical value is an estimated quantity.

U = The compound or element was analyzed for, but not detected. The associated numerical value is the sample-adjusted SQL.

# SEDIMENT/SOURCE SAMPLE PCB AROCLOR ANALYTICAL SUMMARY LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Sample Location	Compound	Sample	Concen	tration		Background Concentration		Comments		
LCA-C1 C	Aroclor-1221	1,600,000		µg/Kg	130	µg/Kg	12,308	Х	SQL	
LCA-C2 A	Aroclor-1221	670,000		µg/Kg	130	µg/Kg	5,154	Х	SQL	
LCA-C2 E	Aroclor-1221	880,000	Р	µg/Kg	130	µg/Kg	6,769	Х	SQL	
LCA-C3 C	Aroclor-1221	2,000,000		µg/Kg	130	µg/Kg	15,385	Х	SQL	
THD-C1 B	Aroclor-1221	29,000		µg/Kg	130	µg/Kg	223	Х	SQL	
THD-C1 D	Aroclor-1221	200,000		µg/Kg	130	µg/Kg	1,538	Х	SQL	
THD-C1 F	Aroclor-1221	360,000		µg/Kg	130	µg/Kg	2,769	Х	SQL	
THD-C102 C	Aroclor-1221	170,000		µg/Kg	130	µg/Kg	1,308	Х	SQL	
THD-C2 C	Aroclor-1221	140,000		µg/Kg	130	µg/Kg	1,077	Х	SQL	
BCA-C7 A	Aroclor-1232	5,500		µg/Kg	130	µg/Kg	42	Х	SQL	
MBC-C1 D	Aroclor-1232	42,000		µg/Kg	130	µg/Kg	323	Х	SQL	
WBD-C5 C	Aroclor-1232	34,000		µg/Kg	130	µg/Kg	262	Х	SQL	
BCA-C3 C	Aroclor-1248	15,000		µg/Kg	130	µg/Kg	115	Х	SQL	
BCA-C4 B	Aroclor-1248	21,000		µg/Kg	130	µg/Kg	162	Х	SQL	
BCA-C5 D	Aroclor-1248	12,000	Р	µg/Kg	130	µg/Kg	92	Х	SQL	
BCA-C6 G	Aroclor-1248	2,600		µg/Kg	130	µg/Kg	20	Х	SQL	
WBD-C1 C	Aroclor-1248	9,800		µg/Kg	130	µg/Kg	75	Х	SQL	
WBD-C5 C	Aroclor-1254	8,300		µg/Kg	710	µg/Kg	12	Х	Bac.	

# NOTES:

Results in micrograms per Kilogram ( $\mu$ g/Kg). Note: Results initially reported by laboratory in milligrams per Kilogram (mg/Kg) and have been converted to  $\mu$ g/Kg.

SQL = Sample Quantitation Limit.

Bac. = Background

# SEDIMENT/SOURCE SAMPLE TOTAL PCBS (CONGENER) ANALYTICAL SUMMARY LOWER NEPONSET RIVER PCBS SITE SEPTEMBER 2018

Sample Location	Total F Sample Con	Backgı Concen		Comments			
WBD-C5 C	70,000	µg/Kg	3,900	µg/Kg	18	Х	Bac.
BCA-C3 C	33,000	µg/Kg	3,900	µg/Kg	8	Х	Bac.
BCA-C5 D	46,000	µg/Kg	3,900	µg/Kg	12	Х	Bac.
THD-C1 G	270,000	µg/Kg	3,900	µg/Kg	69	Х	Bac.
LCA-C2 E	1,100,000	µg/Kg	3,900	µg/Kg	282	Х	Bac.
THD-C1 F	11,000,000	µg/Kg	3,900	µg/Kg	2,821	Х	Bac.
LCA-C3 D	280,000	µg/Kg	3,900	µg/Kg	72	Х	Bac.
BCA-C105 D	47,000	µg/Kg	3,900	µg/Kg	12	Х	Bac.

# NOTES:

 $\mu$ g/Kg = micrograms per Kilogram.

Total PCBs are the sum of the total homologues via congener analysis.

Bac. = Background

BCA-C105 D is field duplicate of BCA-C5 D

Samples PTB-C1 A, UNR-C2 D, UNR-C3 A, and UMB-C2C were selected as the background samples.

UNR-C2 D was used for comparison of Total PCB concentrations.