

**Day in the Life of the Hudson River 10/16/18 Data
PIER 1 LIGHTHOUSE MUSEUM, STATEN ISLAND**

RIVER MILE: -4.5

Salt Front: ~RM 24

Curtis High School- Edita O'Brien, Dave Scheffler

34 students 11th and 12th grade, 2 adults

Latitude 40.647 N & Longitude – 74.0735 W



1. Sketch your sampling site. Be sure to include a compass rose showing N/S/E/W and locate the River on your sketch, and note your sampling site.



Location: Pier 1 Lighthouse Museum, Staten Island, NY

Area: Pier, parking lot

Surrounding Land Use: 70% Industrial/Commercial; 30% Urban/Residential

Sampling Site: riprap (large rocks) concrete bulkhead, covered in vegetation

Shoreline: Rocky

River Bottom: sandy, rocky

Plants in area: No plants in water area

Water: Calm

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature:</i>	10:50 AM	10 °C	50 °F	
	11:47 AM	11 °C	51 °F	
<i>Wind Speed:</i>	11:51 AM	Beaufort 2	1.5 knots	Northwest
<i>Weather Today:</i>	Mostly cloudy (51-75%)			
<i>Weather Previous:</i>	Rained 2 days ago			
<i>Water Temperature</i>	10:20 AM	18 °C	64.4 °F	
	11:23 AM	20 °C	68 °F	
	11:23 AM	18 °C	64.4 °F	
<i>Turbidity-Long sight tube</i>	11:59 AM	65		cms
		65		cms
		83		cms
	Avg:	71		cms
<i>Chemical</i>				
<i>Salinity- hydrometer</i>	11:23 AM	13 ppt TS	13 ppt TS	
	10:48 AM	14 ppt TS	12 ppt TS	

<i>Dissolved Oxygen –</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>	
	10:31 AM	19 °C	8 ppm	85%	
	10:38 AM	18 °C	7 ppm	60%	
	11:23 AM	18 °C	8 ppm	83%	
	12:57 PM	17 °C	10 ppm	100%	
<i>pH -</i>	10:40 AM	8.3		Test strips, meter	
	11:23 AM	8, 7, 8			
	Avg:	7.7			
<i>Nitrates- strips</i>	11:23 AM	0, 10, 0 ppm			
<i>Phosphates</i>	11:23 AM	0, 10, 10 ppm			
<i>Biological</i>					
<i>Fish – seine</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>		
	2	Striped Bass	16 inch		
	1	Black Fish			
	6	Oyster Toadfish			
	TOTAL: 9	DIVERSITY: 3			
<i>Macroinvertebrates- Seine</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>		
	1	Shore Shrimp			
	1	Mud Crab			
	1	Easter Mud Snail			
	2	Asian Shore Crab			
TOTAL: 5	DIVERSITY: 4				
<i>Tides- dock to water</i>	<i>Time</i>	<i>Rising, Falling, Still</i>	<i>Height (cm)</i>	<i>Rate of Tidal Change (cm/min)</i>	
	10:20 AM	Falling	47		
<i>Currents Flow</i>	<i>Time</i>	<i>Cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
	11:42 AM			North	Flood
	12:57 PM	4.916	0.09556	North	Flood