Day in the Life of the Hudson River 10/20/16 Data
(Saltfront ~ RM 83)
RIVER MILE -5
Bayridge American Veterans' Memorial Pier
N 40. 38'22.-416 , W-74 .2'18.4308
Alicia Smith & International School of Brooklyn
30 Fifth graders, 4 adults

View from the pier. Owl Sewage treatment plant visible in the foreground.

Location: Pier American Veterans' Memorial Pier, by highway, Park, 2 water treatment plants
Area: Pier – bulkhead – mainly concrete & wood. Two parks – Owl's head and Shore Road Park. Water treatment plant <0.5 miles to the NE
Surrounding Land Use: 85% urban/residential, 5% Industrial Commercial, 5% park, 5% highway
Sampling Site: Recreational pier with bulkhead– rocks near the edge, banks altered /riprap, all hard edged, steep wall dividing water from land, pipe entering water from treatment plant
Shoreline: Rocky
Depth: ~ 20 ft.
Plants in area: No plants
Bottom: could not see to tell

ITEM	***Time***	***Readings***		
Physical				
Air Temperature	12:00 PM 12:45 PM	24.5°C 23 °C	76.1°F 73.4°F	
Wind Speed	11:21 AM	Beaufort 3	9 kts	W
Cloud Cover	12:00-12:45 PM	Mostly cloudy	51-75%	cloud cover all day
Weather today	Overcast -> partly cloudy -> overcast		***Water surface***	choppy

Weather recently	Unusually warm temperatures, sunny skies, humid			
Water Temperatures & averages	11:40 AM 12:07 PM 12:30 PM	19, 19, 19°C 20, 19°C 20, 19°C	66.2 X 3 °F 68, 66.2 °F 68, 66.2 °F	**19C/66.2F** **19.5C/67.1F** **19.5C/67.1F**
Turbidity	12:10 PM	96.6 cm 119.2 cm 120 cm		Avg. 111.9 cm
Chemical	**Time**	**ppm**	**Temp**	**% Sat**
DO Drop count kit	12:18 PM	6.4	23°C	74%
pH meter	11:45 PM 12:15 PM 12:30 PM	7.70 7.71 7.77		Avg. 7.71
Salinity - hydrometer	11:45 PM 12:15 PM 12:30 PM	28 ppt 28 ppt 28 ppt		28 ppt
Fish Catch	Time	Species	# caught	Size
****Tides - water depth***	***Time***	****Distance to water***	****Rate of change***	****Flood or Ebb***
Measuring down from pier using a secchi disk	12:00 PM 12:24 PM 12:40 PM	150 cm 200 cm -fall 150 cm - rise	N/A -50 cm +50 cm	 -2.08 cm/m +2.08 cm/m
*For the short period of time it seems as if the 12:24 PM measurement might have been a 'swell' of water moving through the area not a tidal change. We would expect to see a 'still' or 'slack' period of some sort between tidal changes and matching tides to currents we do see that there is a slack period during this timeframe.				
Currents Time	***Cm/30 sec***	***Cm/sec***	***Kts***	***Ebb/Flood N/S***
12:00 PM	304.8	10.16	1.1977kts	NE - flood
12:45 PM	251.46	8.38	0.1631kts	W - slack
Comment noted on the recording sheet: Data was collected from a pier that jets out into the upper NY bay. As tides change, there is a swirl in the bay. The tide data shows that the tides was shifting between 12:00 PM and 1:00 PM which supports a more swirling current.				
Shipping Traffic-Commercial	12:00- 12:20 PM	~ 30 ships	Almost all commercial	1 sailboat
	12:20- 12:45 PM	~ 25 ships	Almost all commercial	1 sailboat
Observations	Observed large flock of birds near the treatment plant floating in water about ½ mile from test site.			