

**Snapshot Day 10/14/10 Data
(Salt Front RM 36)
RIVER MILE 39.5**

George's Island, Montrose, Westchester County

**Susan Grasso, Our Montessori School, Yorktown – 1st-6th grade – 38 students
41.16°N 74.03°W**

Location: Waterfront park in Westchester County Park

Area: Mainly used for boating, fishing and picnics. It had 2 boat launch ramps and was very rocky. Lots of oyster shells & vegetation

Surrounding Land Use: 70% urban/residential, 15% forested, 5% Beach, 10% other

Sampling Site: shoreline is rocky, beach covered in vegetation, banks altered,

Plants in area: 1% poison ivy, 1% poison oak, 40% moss, 1% willow trees, 40% weeds, other trees 17%

Water depth:

River Bottom –muddy, rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	11:00 am	18°C	11:20 AM	20 °C
	11:40 AM	24 °C	12:50 PM	26°C
	1:50 PM	20 °C		
Wind Speed	Beaufort fluctuated between #1 and # 3	1-5 km/hr & 13-19 km/hr		SW until afternoon then South
Cloud Cover	Partly cloudy			
Weather today	Calm in AM	Cloudy and windy in PM	Wind shifted the current & the water was a little choppy	Tide was coming in.
Weather last 3 days	Little sunny, little rainy and a little cloudy			
<i>Water</i>	Calm in AM	Choppy in PM		
<i>Water Temperature</i>	10:55 AM	15 C 65 F	6 ft. depth	
AM sunny warm and still	11:35 am	20 C 70 F	6 ft. depth	
PM breezy, cloudy, cooler w/ rippling waves	12:00 PM	20 C 70 F	6 ft. depth	
<i>Turbidity</i>				
secchi	10:50 AM	51 cm 56 cm 53.5	Murky, smelly, pretty turbid	Avg 53.5 cm
	11:23 AM	63.5 cm 61	Dark, smelly brown water	Avg. 61.5cm

	11:23 AM	63.5 cm 61 60	Dark, smelly brown water	Avg. 61.5cm
	11:51 AM	66 cm 59 66	Murky, brown, can't see bottom	Avg. 63.5cm
	12:55 PM	69 cm 68 69	Water turbid, very brown. Couldn't see bottom even where shallow	Avg. 68.5cm
	1:30 PM	61 cm 59 63	Bottom is brownish. Can't see the bottom. Pretty turbid	Avg. 61 cm
Long site tube	10:50 AM	33 cm		
	11:23 AM	45 cm		
	11:51 AM	35 cm		
	12:55 PM	35 cm		
	1:30 PM	30 cm		
Chlorophyll	10:17 am	0.4		
	11:40 Am	0.1		
	12:00 noon	0.3		
	1:17 PM	0.3		
	1:30 PM	0.2		
Chemical				
DO				
<i>Drop count</i>	8:30 am	16.67C	6 PPM	60 % sat
	10:30 am	16.67C	6 PPM	60 % sat
	11:30 am	20C	8 PPM	90 % sat
pH	10:50 AM	9*		* # seems very high
<i>Colormetric kit</i>	11:24 AM	8.5		high
	12:00 PM	8.0		
	1:00 PM	8.0		
	1:30 PM	8.0		
Salinity <i>Titration strips – low range</i>		Quantab strip 1.0	248 mg/L chloride	355 ppm total salinity
	Note group also used a hydrometer and got readings of 6.0 ppt but there must have been some error since this reading is not in keeping with the other readings on the river for 10/14.			
Fish Catch	Number Caught	Species	Length of largest	Comment
11:00 AM	1	shrimp		Caught no fish which was quite a
	1	crab		
	3	Baby crab		

	2	crabs		
	1	*Dead blue crab		*a possible molt?
1:00 PM	1	Baby shrimp		
1:25 PM	2	crabs		
	2	shrimp		
Tides - Measuring down from a start point				
	10:45 am	45 cm		
	11:27 am	39 cm	rising	
	11:57 am	33 cm	rising	
	1:00 pm	32 cm	rising	
	1:27 pm	29cm	rising	
Currents	CM/60 secs	Cm/Sec	North/South Ebb/Flood/Still	Knots
10:48 am			flood	
11:30 am			Flood	
12:00 PM			Flood	
12:50 AM			Flood	
1:42 AM			Flood	
Core –	Length	Grain Size	Plant Material	Comments
Core #1 – 10:50 AM	18 inches – no layers	Mix fine and large	Lots of plant material	smells like metal/smells bad
Core #2 – 10:50 AM	6 inches	Fine grain	No plant material	smells like sulfur/metal
Core #3 – 11:51 AM	12 inches – 6 inch top and 6 inch bottom	Mix of fine and large grain	Yes plant material	smells like sulfur. First layer was not compacted (cracked) – (dry). Second layer smooth – (wet)
Core #4 12:55 PM	12 inches – 6 inch top and 6 inch bottom	Fine grain	Yes plant material	Sulfur smell, greenish color. You can see shells, different colors make up the sediment
Core #5 1:30 PM	18 inch – 6 inch top and 12 inch bottom	Fine grain	Plant material	smells like sulfur it is brown and black, has

<i>Core #5 1:30 PM</i>	18 inch – 6 inch top and 12 inch bottom	Fine grain	Plant material	smells like sulfur it is brown and black, has plants, smells bad
<i>Shipping</i>	11:25 AM	Hughes – grey and red	Southbound	Full
	1:30 PM	Ferryboat	Northbound	empty
<i>Observations</i>	Footprints and LOTS of trash which most of the student sheets			