

Snapshot Day 10/18/11
(Salt Front RM 35.7)
RIVER MILE 17
Mt. St. Vincent College Campus, NYC
Pat Grove – Mt. St. Vincent College – ~ 5 undergraduate students
Jeannine Brown, Frederick Douglass Academy, 20 students 10th-12th graders
Latitude 40°91282 N Longitude 73°91150 W



Location: Waterfront of Mt. St. Vincent’s College

Area: Forested

Surrounding Land Use: Urban/residential 40%; Forested 50%, Beach 5%; industrial/commercial (RR tracks) 5%

Sampling Site: large riprap on shoreline, drainage pipes in area, beach area, covered in vegetation

Plants in water of sampling area: no plants in the water

Water depth: 38-52 cm

River Bottom – sandy, muddy, rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>		<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>					
Air Temperature	10:15 AM	61°F			
	11:30 AM	64°F			
Wind Speed	Beaufort #1	*230 degrees SW			1.4 kts
Cloud Cover	Partly cloudy				
Weather today	Cool and clear				
Weather recently	Colder than normal overnight				
<i>Water Temperature</i>	10:30 AM	17°C	18 °C	18 °C	17.6 °C AVG
		62.6°F	64.4°F	64.4°F	63.8°F
	11:30 AM	18 °C	18 °C	19 °C	18.3 °C

		64.4°F	64.4°F	66.2°C	65°F
	12:30 PM	20 °C 68°F	20 °C 68°F	20 °C 68°F	20 °C 68°F
Water surface:	calm				
Turbidity (Secchi)	10:30 AM	20 cm 20 cm 20 cm			20 cm
Long site tube	10:30 AM	27.6 cm		276 NTU	
Chlorophyll	12:15PM	2.0			
Chemical					
DO LaMotte kit 7414	10:00 AM	7.2 mg/L		Temp.17° C	70% saturated
pH – LaMotte kit 5858	11:45 AM	7.5 7.3 7.4		7.4 avg.	
Phosphate	1:07 PM	1.0 ppm			
Nitrate	12:55 PM	1.0 ppm			
Alkalinity	1:00 PM	68 ppm		68 ppm	
Salinity - refractometer	12:00 PM	2 ppt 2 ppt 2 ppt		2 ppt	
Fish Catch	Number Caught	Species	CPUE	Minnow Traps	
seine – 30 ft. net	1	Striped Bass			
Macros		Mud crab			
		Shore shrimp			
Tides	10:42 AM	33 cm			
(high tide 1:35 PM per the charts) The recordings are confusing – some with same time and different measures and seem to go up and down?	10:46 AM	40 cm		Should be rising all sampling time	
	11:00 AM	38 cm			
	11:00 AM	45 cm			
	11:15 AM	43 cm			
	11:30 AM	35 cm			
	11:30 AM	72 cm			
	11:45 AM	55 cm			
	11:45 AM	51 cm			
Currents					
Core					
Traffic	11:15 AM	Cargo		Northbound	Light
	11:30 AM	Cargo		Anchored	Loaded/ Containers

	11:24 AM	Garbage Ship 4002	Northbound	Loaded Garbage
	12:45 PM	Speedboat	Southbound	
<i>Other observations</i>				

** To learn more about how oceanographers code wind direction go to the c.o.o.l. project <http://www.coolclassroom.org/pdfs/understandingwinddirection.pdf>*