Day in the Life of the Hudson River 10/22/19 Data
PIER I, 59TH STREET, MANHATTAN
RIVER MILE: 6.8
Salt Front: ~RM 53
Speyer Legacy School, Kimberly Schwab
58 students 38 first graders and 20 seventh graders, 10 adults
GLOBE- City College of New York
Latitude 40.778578 N & Longitude - 73.990636 W

Location: Pier I, 59th Street, Manhattan, NY
Area: Restored former railroad pier and parking lot
Surrounding Land Use: 90% Urban/Residential, 10% Beach
Sampling Site: Sampling took place on Pier I
Shoreline: 10% muddy, 90% rocky. Tiny beach area, shore with concrete bulkhead, riprap, covered with vegetation, old railroad pilings, brick pieces
Water: ~ 160 cm
Plants in area: no plants just leaves
River Bottom: Rocky

ITEM	Time	Reading		Wind		Weather
Physical						
Air Temperature	10:00 AM	^{o}C	^{o}F	5 mph		Overcast, misting
	10:30 AM	15.3	59.6	0.6-3 mph		Overcast, mildly heavy rain
	11:00 AM	12.8	55	2.0		Overcast no rain
	11:30 AM	14.4	58	2.0		Overcast no rain
	12:00 PM	14.4	58	0.6		Overcast, misting
	12:30 PM	14.4	58	0.6		Overcast, misting
	1:00 PM & 1:30 PM	15.6	60	2.5		Overcast, no rain
	2:00 PM	15.6	60	2.0		Overcast, no rain
Water Temperature	Time	^{o}C	^{o}F	^{o}C	^{o}F	Note: Water depth noted at 160.02 cm
	10:00 AM	15		15		*Kimberly noted these readings were taken with a broken thermometer.
	10:30 AM	20		35*		
	11:00 AM	37*		15		

	11:30 AM	37*		16		Appears depth is shallow enough not to impact temperature on this overcast day.
	12:00 PM	40*		16		
	12:30 PM	40*		16		
	1:00 PM	17		17		
	1:30 PM	17		17		
Turbidity -	**Time**	**Top**		**Bottom**		**AVERAGES**
* sheet noted short site tube as well as turbidimeter	10:42 AM	39 cm		31 cm		Top = 40.3 cm
	11:12 AM	41 cm		38 cm		Bottom = 26.5 cm
	11:50 AM	44 cm		18 cm		
	12:25 PM	38 cm		12 cm		
	1:00 PM	35 cm		28 cm		
	1:39 PM	45 cm		32 cm		
Chemical						
Salinity- glass hydrometer	*Time*	*Top*		*Bottom*		
	10:00 AM	10 ppt				
	10:30 AM			12 ppt		
	11:00 AM	8 ppm				
	11:30 AM	11 ppm				
	12:00 PM			17 ppt		
	12:30 PM	13 ppt				
	1:00 PM	17 ppt				
	1:30 PM			13 ppt		
DO – Hach drop count kit	*Time*	*Top/Bottom*		*ppm DO*		*Comments*
	10:00 AM	Top		10 ppm		*% saturation not yet calculated since the temperature was faulty. Need to sort through for accurate results.*
	10:30 AM	Bottom		9 ppm		
	11:00 AM	Top		9 ppm		
	11:30 PM	Bottom		5 ppm		
	12:00 PM	Top		5 ppm		
	12:30 PM	Bottom		6 ppm		
	1:00 PM	Top		2 ppm		
	1:30 PM	Bottom		4 ppm		
pH –	**Time**	**Top**		**Bottom**		**Average**
	10:16 AM	7		7		7
	11:37 AM	6.5		8		7.25
	12:12 PM	8.5		8.5		8.5
	12:48 PM	8		7.5		7.75
	1:16 PM	8		7		7.5
	1:39 PM	8		8		8

TIDES	Time	Rise/Fall/Slack	Height	Change per min	
	9:54	Set	160.02		
	10:24	Rising	167.64	0.254 cm	
	10:54	Rising	175.26	0.254 cm	
	11:24	Rising	193.04	0.593cm	
	11:54	Rising	210.82	0.593 cm	
	12:24	Rising	215.90	0.169 cm	
	12:54	Rising	233.68	0.593 cm	
	1:24	Rising	243.84	0.339 cm	
	1:54	Rising	251.46	0.254 cm	
Current	Time	Cm/sec	South or North	Ebb/Flood	
	10:10 AM	90	South	Ebb	
	10:40 AM	50	South	Ebb	
	11:10 AM	48	South	Ebb	
	11:43 AM	42	South	Ebb	
	12:05 PM	29	South	Ebb	
	12:40 PM	1	North	Flood	
	1:10 PM	24	North	Flood	
	1:38 PM	32	North	Flood	
	2:01 PM	42	North	Flood	
Fish & Macro Data	Time	Species	Sex	Trap	Place
	9:20 AM	Oyster	N/A	Hand	7
	10:56 AM	Oyster Toadfish	Male	Rod	6
	1:05 PM	Comb Jellyfish	N/A	Crab	2
	1:35 PM	Blue Crab	Male	Crab	2
	Throughout Day	Periwinkles	N/A	Trap	1
	Throughout Day	Sea Squirt	N/A	Pole	6
Boats	Time	Name	Color	N/S	Heavy/Light
	10:04 AM	NY Waterway	Blue	S	L
	10:12 AM		Red	N	L
	10:15 AM	Speedway	Blue	S	L
	10:16 AM		Blue	N	H
	10:21 AM		Dark Blue	N	H
	10:48 AM	Manhattan	Brown	S	L
	11:03 AM		White	N	H
	11:04 AM	ML	White Black	N	L
	11:06 AM	Coast	Black, Red, White	S	H
	11:07 AM	NVAA	White	S	L
	11:55 AM	NYC	White	N	L
	11:56 AM		White	N	H
	12:12 PM	Circle Line	Green	S	L
	12:22 PM		White, Black	S	H
	12:52 PM		Blue	N	L
	1:20 PM	NYPD	Gray, Blue	N	H
	1:27 PM	Fenn	White	N	
	1:52 PM		Black	N	
Other Observations	Site was trash free! Saw Pigeons and Seagulls.				