**Day in the Life of the Hudson River 10/20/16 Data**

**Salt Front RM 83)**

**RIVER MILE 9**

**Pier 125**

**N 40, W-73**

**Diane Lennon, Columbia Secondary School, 35 students 12th grade college environmental class, 1 adults**

**Location:** Pier 125, is a pier used for boating and fishing

**Area:** Pier – made of concrete.

**Surrounding Land Use:** 100% Industrial Commercial

**Sampling Site:** Recreational pier – rocks near the edge, banks altered – all hard edged concrete bulkhead.

**Plants in area:** Trees line the area but no plants in the water.

**Water:** Calm

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Readings*** |  |  |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 1:49 PM | | 22.4°C | 72°F |  |
| Wind Speed | 1:56 PM | | Beaufort #2 | 4 mph | North |
| Cloud Cover | 1:50 PM | | Overcast | >75% |  |
| Weather today | Overcast | |  |  |  |
| Weather recently | No rain, unseasonably warm – 70=80 degrees | | | | |
| ***Water Temperature*** | 1:35 PM  1:45 PM | 18°C  17°C | |  | Average 17.5°C |
| ***Turbidity short site tube*** | 1:26 PM | 40 cm | |  | Water was surprisingly clear with only one drop the tap water matched the river water. |
| ***Turbidity short site tube*** | 1:26 PM | 5 JTU | |  |
| ***Chemical*** | **Time** | **ppm** | | **Temp** | **% Sat** |
| DO | 1:40 PM | 6ppm | | 17°C | 60 % - |
| pH  color match kit | 1:30 PM  1:35 PM  1:42 PM  1:47 PM | 7  7  7  7 | |  |  |
| Salinity – hydrometer | 1:55 PM | 25.8 ppt  26.4 ppt  24.3 ppt | | 17 °C |  |
| Nitrates | 1:35 PM | 2.0 ppm | |  |  |
| Phosphates | 1:45 PM | 0 ppm | |  |  |
| Alkalinity | 1:45 PM | 60 ppm | |  |  |
| ***Tides - water depth*** | 1:30 PM  1:45 PM | 233.61 cm  246.38 cm | | 0.85 cm/min |  |
| ***Currents*** | ***Time***  1:36 PM  1:40 PM  1:45 PM | ***cm/30 sec*** | | ***Cm/sec*** | ***Ebb/Flood/still***  Still  Still  Still |
| ***Shipping – Commercial*** | 1:49 PM  1:50 PM  2:00 PM | Tan  White  US Army Corps of Eng. | | Southbound  Northbound  Black/Yellow Southbound | Light  Loaded  Loaded |
| ***Shipping Recreational*** | 1:40 PM | Black | | North | Light |
| ***Observations*** | Power plant nearby & many commercial ships and boats that may impact our sampling.  Saw many seagulls & pigeons | | | | |