**A Day in the Life of the Hudson - Student Salinity Readings**

**10/7/08**

**USGS Salt Front (100 ppm Cl-) RM 63.4**

**INTRODUCTION:** To measure salt content, Day in the Life groups use Quantabs where salinity is likely to be low, and refractometers, hydrometers and meters where it’s likely to be high. Quantabs give results in parts per million [ppm] of chloride [Cl\(^-\)]; the other methods read total salinity. Both units are useful. USGS defines the location of the salt front using chloride. HRECOS and other references give total salinity in practical salinity units [psu], the roughly equal parts per thousand [ppt], and sometimes ppm. To make comparisons easier, we have converted these results to show both chloride and total salinity at all sites.

<table>
<thead>
<tr>
<th>RM FOR GRAPHING</th>
<th>SAMPLING TIME</th>
<th>READINGS AS PPM TOTAL SALINITY:</th>
<th>READINGS AS PPM CHLORIDE (Cl(^-)):</th>
<th>MEASUREMENT TECHNIQUE</th>
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<td>no salinity recorded at all</td>
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# A Day in the Life of the Hudson - Student Salinity Readings

**10/14/10**  
**USGS Salt Front (100 ppm CL-) RM 36**

<table>
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<th>RM FOR GRAPHING</th>
<th>SAMPLING TIME</th>
<th>READINGS AS PPM TOTAL SALINITY:</th>
<th>READINGS AS PPM CHLORIDE (Cl⁻):</th>
<th>MEASUREMENT TECHNIQUE</th>
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<td>153.0</td>
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<td>&lt; 28</td>
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Harlem R: 13.0  
- 11:05 PM  
- 7,400  
- 4,096  
- not recorded

Harlem R: 12.0  
- noon-1:30 PM  
- 14,000  
- 7,750  
- not recorded

Bronx R: 8.5  
- 9-11AM  
- 3,666  
- 2,029  
- not recorded

Bronx R: 8.0  
- 10:45 AM  
- 13,000  
- 7,196  
- not recorded

East RM: 4.5  
- 11:30-1PM  
- 24,500  
- 13,562  
- hydrometer

East RM: 4.0  
- 23,000  
- 12,731  
- hydrometer

East RM: 0.5  
- 11:30 AM  
- 26,000  
- 14,392  
- refractometer