

Operator Quiz Corner  
**Introduction To Turbidity**  
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\_\_Answers\_\_

1. Materials dissolved in water will likely result in a \_\_\_\_\_ turbidity reading whereas materials suspended in water will likely result in a \_\_\_\_\_ turbidity reading.
  - a. higher, lower
  - b. higher, similar
  - c. lower, higher
  - d. lower, similar
  
2. True or false. Air bubbles in a water sample will impact the turbidity reading.
  - a. True
  - b. False
  
3. Which of the following values indicates water that is very clear?
  - a. 0.01 mg/L
  - b. 0.1 NTU
  - c. 10 mg/L
  - d. 100 NTU
  
4. What is the most important reason for a grab sample to be measured in a turbidimeter immediately after the sample is collected?
  - a. Suspended particles will settle out providing a result that is not representative of the water collected at the time of sampling.
  - b. The pH and temperature of the sample water will change and impact the dissolved solids concentration
  - c. The light source in the turbidimeter will fail if the sample is not analyzed immediately after being inserted into the instrument.
  - d. The turbidimeter is only accurate immediately after the instrument has been calibrated.
  - e. All of the above
  
5. A conventional surface water filter plant operates 24/7. It records the combined filter effluent every 4 hours for the entire month of July. According to the Surface Water Treatment Rule how many of the readings must be below the 0.3 NTU limit.
  - a. 19
  - b. 167
  - c. 177
  - d. 186

*Solution:* SWTR requires that 95% of the turbidity readings taken during the month be below 0.3 NTU.

*Number of readings taken in July: (1 reading/4hrs) X (24 hours/1day) x (31 days in July) = 186 Readings.*

*186 readings X .95 = 176.7*