

DISSOLVED OXYGEN

Collection and Treatment of water sample :

1. Rinse water sampling bottle with water sample.
2. Place bottle fully submerged in water and tap sides to remove any air bubbles. When completely full replace cap while bottle is still submerged.

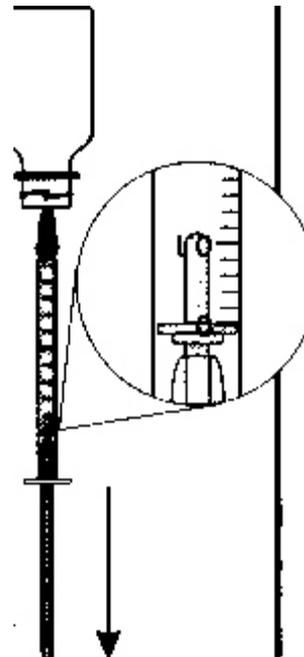
CAUTION : Put on gloves and glasses while adding reagents.

Note the next two steps have to be done A.S.A.P

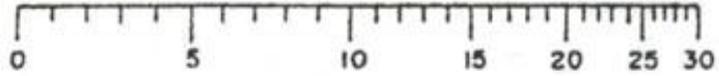
3. Add 8 drops of No.1 (Manganous sulfate) and 8 drops of No.2 (Alkaline Potassium Iodide Azide). Cap and invert several times. A precipitate will form. Allow this to settle below the shoulder of the bottle.
 4. Add 8 drops of No. 3 (Sulfuric Acid). Invert several times so that the precipitate dissolves.
- * Following the completion of step 4, contact between the water sample and the atmosphere will not affect the test result.

Test Procedure :

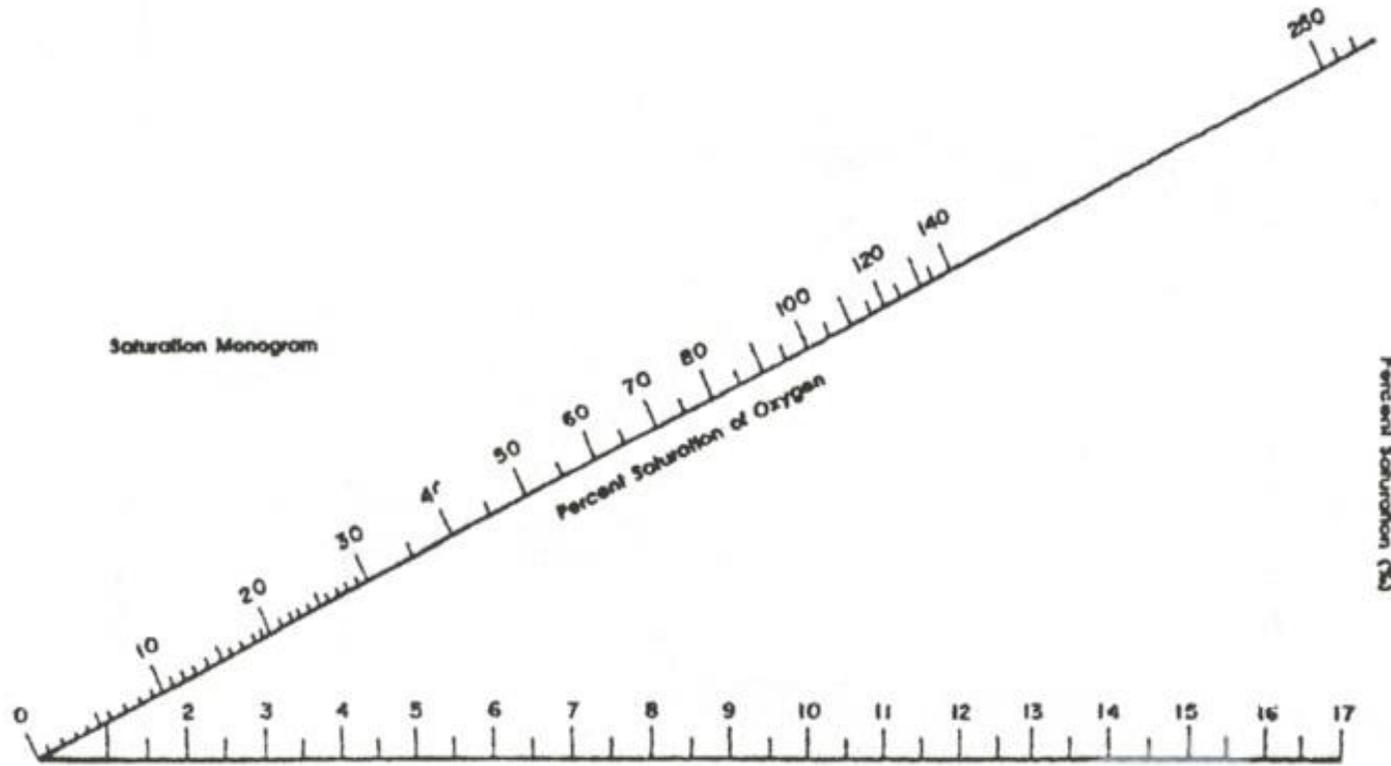
1. Fill the titration tube (small glass cylinder) to the 20mL line with the "fixed" sample.
 2. Fill the direct reading titrator (syringe) with No.4 (Sodium Thiosulfate) by slowly pulling out the plunger until the large ring on the plunger is opposite the zero line on the scale. (pictured right) If any air bubbles appear, pump the titration solution back into the bottle to expel the air bubble. **Do not remove the adapter tip.**
 3. Insert the titrator into the top of the titration tube (cylinder). While gently shaking the tube, slowly press the plunger to titrate until the yellow/brown colour is reduced to a very faint yellow/straw colour. (Two drops and shake, two drops and shake)
 4. Remove the titrator (syringe) and cap. Be careful not to disturb the titrator plunger. Then add 8 drops of starch indicator. Sample should turn blue. If the sample does not go blue begin titration again.
 5. Replace the cap and titrator. Continue titrating until the blue colour disappears. Read the test result directly from the scale where the large ring on the titrator meets the titrator barrel.
- * If the titrator reaches the bottom line before the end of titration, just refill and continue. Remember to include the first 10mg/L in your final result.
6. For D.O. reading as % saturation (see graph over page).



Water temperature in degrees Celsius (°C)
(Determine this with a Celsius thermometer)



Saturation Monogram



Oxygen in mg/L
(Measure this with a dissolved oxygen test kit or a meter)