

## TEST PROCEDURE

### PART 1 - COLLECTING THE WATER SAMPLE

1.



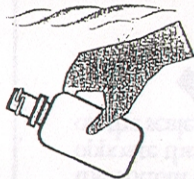
Rinse the Water Sampling Bottle (0688-DO) with the sample water.

2.



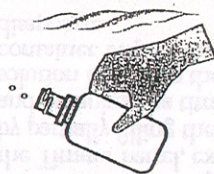
Tightly cap the bottle, and submerge it to the desired depth.

3.



Remove the cap and allow the bottle to fill.

4.



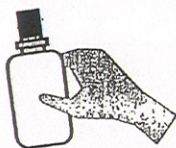
Tap the sides of the bottle to dislodge any air bubbles.

5.



Replace the cap while the bottle is still submerged.

6.



Retrieve the bottle and make sure that no air bubbles are trapped inside.

## TEST PROCEDURE

### PART 2 - ADDING THE REAGENTS

**NOTE:**

Be careful not to introduce air into the sample while adding the reagents.

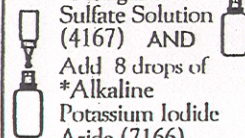
1.

Remove the cap from the bottle.



2.

Immediately add 8 drops of \*Manganous Sulfate Solution (4167) AND Add 8 drops of \*Alkaline Potassium Iodide Azide (7166).



3.



Cap the bottle and mix by inverting several times. A precipitate will form.

4.

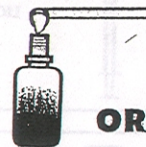


Allow the precipitate to settle below the shoulder of the bottle.

5.

For Kit Code 7414:

Immediately use the 1.0 g spoon (0697) to add one level measure of \*Sulfamic Acid Powder (6286).



OR

For Kit Code 5860:

Add 8 drops of \*Sulfuric Acid, 1:1 (6141WT).



6.

Cap and gently invert the bottle to mix the contents until the precipitate and the reagent have totally dissolved. The solution will be clear yellow to orange if the sample contains dissolved oxygen.



**NOTE:**

At this point the sample has been "fixed" and contact between the sample and the atmosphere will not affect the test result. Samples may be held at this point and titrated later.



# TEST PROCEDURE

## PART 3 - THE TITRATION

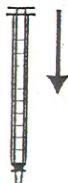
1.

Fill the titration tube (0299) to the 20 mL line with the fixed sample. Cap the tube.



2.

Depress plunger of the Titrator.



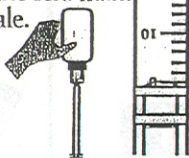
3.

Insert the Titrator into the plug in the top of the \*Sodium Thiosulfate, 0.025N (4169) titrating solution.



4.

Invert the bottle and slowly withdraw the plunger until the bottom of the plunger is opposite the zero mark on the scale.



**NOTE:**

If small air bubbles appear in the Titrator barrel, expel them by partially filling the barrel and pumping the titration solution back into the reagent container. Repeat until bubble disappears.

5.

Turn the bottle upright and remove the Titrator.



**NOTE:**

If the sample is a very pale yellow, go to Step 9.



continued . . .

# TEST PROCEDURE

6.

Insert the tip of the Titrator into the opening of the titration tube cap.



7.

Slowly depress the plunger to dispense the titrating solution until the yellow-brown color changes to a very pale yellow. Gently swirl the tube during the titration to mix the contents.



8.

Carefully remove the Titrator and cap. Do not to disturb the Titrator plunger.



9.

Add 8 drops of Starch Indicator Solution (4170WT). The sample should turn blue.



10.

Cap the titration tube. Insert the tip of the Titrator into the opening of the titration tube cap.



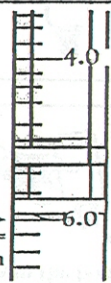
11.

Continue titrating until the blue color disappears and the solution becomes colorless.



12.

Record the test result where the titrator tip meets the scale. Record as ppm Dissolved Oxygen. Each minor division on the Titrator scale equals 0.2 ppm.



continued . . .