



WATER SAMPLER – FLUSHING STYLE

CODE 1060

QUANTITY	CONTENTS	CODE
1	Water Sampling Bottle Body	1080
3	Test Tubes, glass	0829
1	Rod, w/Stopper	1059
1	Sounding Lead	1068
1	Center Plug, w/Inlet Tube	1089
2	Stoppers, cork	0658

INTRODUCTION

This device is designed for use in the field and is a simplified water sampler. The sample is collected in a removable inner chamber which is overflowed 10 times to insure a representative sample. Samples may be taken at a controlled depth by using a calibrated line. Attaching the two pound weight to the bottom of the sampling device insures rapid descent and minimizes the amount of drift due to currents. More weight should be attached to the sampling device in strong currents.

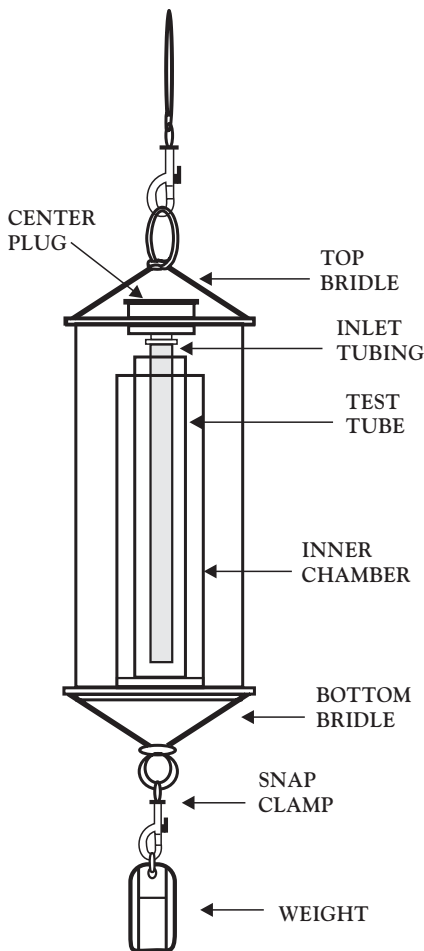
It is necessary to maintain a position directly over the Water Sampler when lowering it so that it remains in an upright position. This permits the displacement of all of the air in the sampler so that it will fill completely.

It should be noted that the bubbles of air displaced from the sampler will be observed downstream.

PROCEDURE

A. COLLECTING A WATER SAMPLE

1. Remove the plastic center plug with inlet tubing attached. Insert a test tube (0829), with the stopper removed, into the inner chamber of the cylinder.
2. Replace the plastic center plug and make sure the inlet tubing is in the test tube.
3. Attach the two pound weight (1068) to the bottom bridle of the sampler by the snap clamp.
4. Attach the snap clamp on the calibrated line to the top bridle of the sampler.
5. Quickly lower the water sampler to the desired depth and leave until full. This can be determined when the bubbles from the displaced air in the sampler cease to appear. This usually takes from 3-5 minutes.
6. Carefully retrieve the water sampler.
7. Remove the plastic center plug to expose the test tube in the inner chamber.
8. Carefully retrieve the test tube from the chamber using the rod with stopper (1059).
9. If a dissolved oxygen test is to be performed on this sample, proceed immediately to Part B.



B. COLLECTING A DISSOLVED OXYGEN WATER SAMPLE

The dissolved oxygen test is performed with reagents furnished in LaMotte's Dissolved Oxygen Kits, Code 7414 or 5860.

***WARNING:** Reagents marked with a * are considered to be potential health hazards. To view or print a Material Safety Data Sheet (MSDS) for these reagents see MSDS CD or www.lamotte.com. To obtain a printed copy, contact LaMotte by e-mail, phone or fax.

1. Remove the rod with stopper from the test tube.
2. To the sample, add 8 drops of *Manganous Sulfate Solution (4167) and 8 drops of *Alkaline Potassium Iodide Azide (7166).
3. Stopper the tube and gently mix by inverting.
4. Allow the test tube to stand undisturbed until the precipitate settles two inches below the top of the tube.
5. Use a 1.0 g spoon (0697) to add one measure of *Sulfamic Acid Powder (6286), or add 8 drops of *Sulfuric Acid, 1:1 (6141WT). Cap the test tube and mix until the precipitate has completely dissolved.

Contact of the water sample with air will not affect it now. By following instructions provided with the Dissolved Oxygen Kit, the "fixed" sample may either be titrated in the field or returned to the laboratory for final titration.

C. TAKING SOUNDINGS WITH THE GRADUATED LINE

The two pound weight can be used for taking soundings. Attach the weight to the graduated line by the snap clamp and lower it into the water. Measure the depth at which the sounding lead strikes the bottom. The line is graduated in meters with every fifty meters marked by a plastic band.

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