

# PTFE Kemmerer Water Samplers

## Test before you sample!

We recommend that any new sampler be thoroughly cleaned prior to any sampling. In the event you are performing chemical sampling, before any sampling is done, first fill the sampler with distilled, contaminant-free water and test to determine what contaminants may be present in the sample.

We also recommend that the above procedure be repeated throughout the sampling season.

# **Warning:**

Do not attach the PTFE line adaptor unless you attach a second line to the drain valve. You may lose your bottle.

# **Warning:**

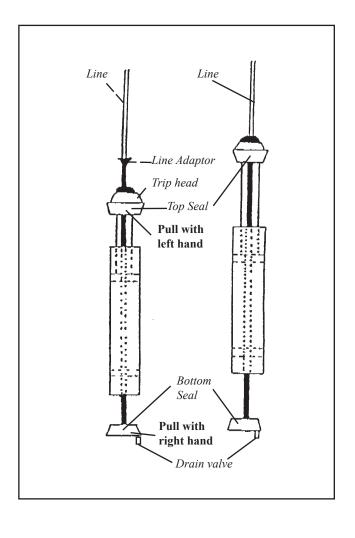
Due to the nature of PTFE, which is dimensionally unstable, the bottle will leak at the seals.

## **Warranty and Parts:**

We replace all missing or defective parts free of charge. All products guaranteed free from defect for 90 days. This guarantee does not include accident, misuse, or normal wear and tear.

#### P/N 005829

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## **Operating Procedures:**

Operating the **Wildee**® Kemmerer Water Sampler is simply a matter of lowering the instrument on a suitable sounding line to a desired depth. This teflon water sampler employs a tripping device of **Wildee**® design. It is an automatic device which locks the stoppers open previous to lowering into the water. Despite its simplicity of design and operating convenience, preliminary practice in handling the Kemmerer Water Sampler is helpful in developing a good technique. In field work, attention to the key steps in the operation can help assure reliable and uniform samples.



#### **How To Use:**

- 1. PTFE Kemmerer water samplers have a special line adaptor which screws onto the top of the shaft. Two types of line adaptor are provided, one in stainless steel and the other in PTFE. Wildee® recommends that you use the stainless steel adaptor wherever possible, as the PTFE adaptors are not as strong. If the PTFE adaptor must be used, a secondary rope must be tied to the drain valve of the unit so that if the line adaptor should break, the bottle will not be lost. This is due to the weight of the PTFE bottle and PTFE adaptor.
- 2. Line is pre-attached to the line adaptor at the factory. If you need to change the line adaptor, simply cut the line and crimp on the new adaptor using a round stainless steel crimp (available at hardware stores).
- 3. To cock the sampler, pull the trip head into the trip plate. Hold both top and bottom stoppers and give a short pull to the bottom stopper.
- 4. Attach a messenger to the line. When sampler is at desired depth, release the messenger. This falls down the line and closes both the upper and lower stoppers. The stoppers seal by their own weight.

## Tips for trace sampling:

- 1. All samplers contaminate or distort in some way.
- Plastics may leach metals from ultraviolet inhibitors, metal-organic plasticizers, (rarely) metal catalysts.
- Teflon has a rough porous surface that traps ions and fine charged particles. Errors may occur in your first sample.
- Run a test blank by filling the sampler with distilled water, holding for at least as long as the sample will be held in the sampler, and running test analysis.
- Metal and glass may dissolve into the sample, usually at the nanogram/ liter level.
- The sample may react with the sampler, causing errors
- 2. Are you using the right sampler? Is the sampler clean? Have you run a test blank?
- 3. Selecting a particular sampler may depend upon the material(s) sought or environment being sampled.

- 4. Alconox detergent is suggested to remove oil and most soils. Rinse. A 3% acid solution (HCl or HN0<sub>3</sub>) will remove detergent. Rinse with distilled water
- 5. Air dry and store in a clean plastic bag until needed.

#### **Sampler Maintenance:**

Regular attention to a few points of simple, routine maintenance can assure long, trouble-free service from the Kemmerer Water Sampler. Good maintenance procedures consists of the following:

- 1. The sampler should be stored hung from a hook in a vertical position with all valves open. Storage in the closed form may damage the seating surfaces of the seals.
- 2. Guard the sampler from blows on the cylinder ends (this may cause them to be knocked out of position), a common cause of sampler leakage which leads to serious errors.
- 3. Leakage may also occur from a bent central rod. When this happens, it is best to replace the rod with a new one.
- 4. Worn or age-hardened seals should be replaced to prevent leakage. Never remove stoppers when dry. To remove dry stoppers, moisten first, then grasp the stopper with a slight twisting and pulling motion. Never attempt to remove the stopper, either wet or dry, with a direct pulling motion. This will shorten stopper life dramatically.

## **Accessories for Teflon Kemmerers:**

46-G10	Teflon-coated messenger, 11 oz
62-C15	Line, 100', 3/16"
7900-B25	Alconox, for cleaning bottles
910-A25	Multipurpose plywood case

#### **1295-B32** 1.2 Liter PTFE Kemmerer Bottle

The top-of-the-line teflon Kemmerer is available **only** from *Wildlife Supply*®! Includes 1.2 L teflon body with all-teflon All-Angle<sup>TM</sup> trip heads. Especially useful when you need chemical or heat resistance, or both. The teflon seals are rigid and do not seal as securely as silicone. For strength, the teflon center rod is solid; therefore, a line cannot pass all the way through it and be knotted, as in our other Kemmerers. We solve this problem by including a special teflon adaptor which fastens the line to the center rod top. Since the seals are also teflon, your water sample touches only teflon.