

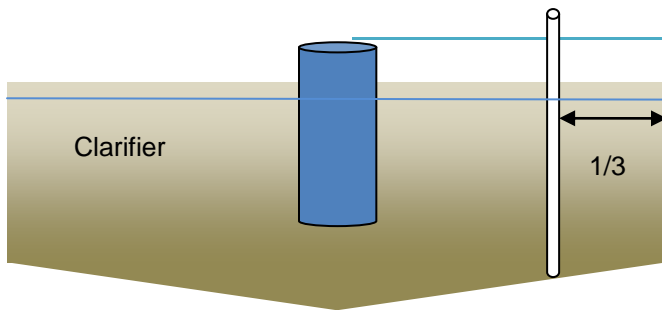
## CORETAKER® (B-10104)

CORETAKER® shows the operator a cross section of the clarifier from top to bottom. An automatic check valve allows liquid to enter while being lowered into the tank. The valve automatically shuts when the unit is raised from the tank. The settled sludge blanket is measured and examined for color. The contents can be purged into a bucket for measuring sludge concentration with the Centrifuge.

### Use of CORETAKER®

#### Sample Location

1/3 of the distance from the clarifier side wall to the center. This same location should be used every time a core sample is taken. Mark this spot on the railing for all operators to use.



#### Lowering into the Tank

Too fast of a rate will distort the sample inside the tube. The sludge blanket will be much lower than actual. The proper rate to lower CORETAKER® to tank bottom is about one foot per second. Do not bounce the check valve on the tank bottom.

#### Raising from the Tank

Raise the unit smoothly from the tank to vertical position and examine its contents. Start and stop movements can distort the sample.

#### Examine Contents

Note how high the sludge blanket rises in the bottom tube. Examine color of settled sludge. Dark sludge may indicate old age while light sludge may indicate young age. Note the nature of the interface of the sludge and the supernatant. Is there a ragged edge or a well defined straight edge? Note clarity of liquid above the settled sludge. Is it turbid or clear?

#### Save the Sample

The sample in the CORETAKER® is valuable because it is representative of the tank from top to bottom. Purge it into a bucket for concentration measurement in the Centrifuge.



### Application to Process Control

- Primary and secondary clarifier sludge blanket thickness and color
- Retrieving samples from secondary clarifiers to measure Clarifier Sludge Concentration (CSC)
- Calculate sludge inventory, detention time and return sludge flow adjustments