

Turbidimeters/Pocket Colorimeters

Turbidimeter- Portable

A Hach 2100P turbidity meter is on hand in the lab. Cleanliness of the sample vials is critical when measuring low turbidities such as encountered in the water systems. Fill a sample cell to the line with a representative sample. Wipe the vial dry and clean with a soft, lint-free cloth. Do not touch the clean cell. Apply a thin layer of silicone oil to minimize the effects of any scratches on the sample vial. With the turbidimeter on a flat sturdy surface, turn it on and insert the sample cell. Orient the mark on the cell toward the mark on the instrument and close the cover. Press the "Read" button. Record the turbidity after the lamp symbol turns off.

Gelex standards are available in the lab to check the calibration of the instrument. Formazin is also available to do a recalibration if necessary. The recalibration procedure is detailed in the manual, which is on file in the laboratory.

Turbidimeter

- ◆ Turn on power and lamp switches
- ◆ Allow machine to warm up for thirty minutes
- ◆ Set range switch at 2 NTU for most readings
- ◆ Adjust zero knob to give a .00 reading on the display
- ◆ Place standard vial in the compartment and replace the cover (1 NTU standard solution replaced monthly)
- ◆ Set the range switch to the next higher value than the standard value (2 NTU)
- ◆ Using the standardize knob adjust the reading on the display to match the standard value
- ◆ Record the zero and standard values in the turbidimeter log book. A sample of this is found in Section 6.
- ◆ Remove the standard vial and insert the sample vial and replace cover
- ◆ Set the range switch to maximum value without over-ranging
- ◆ Record the value of the sample
- ◆ Repeat steps 8, 9, and 10 for each subsequent sample
- ◆ Remove the final sample, replace cover and turn off the lamp and power switches.

