

CONDUCTIVITY/TOTAL DISSOLVED SOLIDS

LaMotte Tracer PockeTester



CALIBRATION:

1. Take off the bottom cap to expose the electrodes
2. Press the **ON/OFF** button to turn on the meter
3. Check to see that meter is in CONDUCTIVITY mode (μS should be

displayed above the reading). To change modes, press and hold the **MODE** button until the correct units appear.

4. Insert the electrodes (meter) into the 1413 $\mu\text{S}/\text{cm}$ standard calibration solution.
5. Press and hold the **CAL** button until
 - a. **CAL** appears on the bottom of the display
 - b. **1413** flashes on the display
 - c. **SA** and **END** appear on the display

6. Remove meter from solution, press **ON/OFF** button to turn off, rinse the meter with distilled water & shake dry.

Over ↓



MEASURING CONDUCTIVITY & TDS:

1. Take off the bottom cap to expose the electrodes.
2. Press the **ON/OFF** button to turn on the meter- **SELF CAL** will flash on the display
3. Check to see that meter is in CONDUCTIVITY mode (μS should be

displayed above the reading). To change modes, press and hold the **MODE** button until the correct units appear.

4. Insert the electrodes (meter) into a small container of sample water. Do not let the meter touch the sides or bottom of sample container.
5. Allow the reading to stabilize, then record the CONDUCTIVITY on the data sheet.
6. Press and hold the **MODE** button for 3 seconds and until you see **TDS** on the bottom of the display and **ppm** in the top left corner. (*There should not be an "S" above the reading - that is the salinity mode and is not used.*) Do not recalibrate.
7. Allow the reading to stabilize, then record the TDS measurement on the data sheet.
8. Remove meter from solution, press **ON/OFF** button to turn off, rinse the meter with distilled water, & shake dry.

Dissolved Oxygen (Hach OX-2P)



1. Fill a dissolved oxygen bottle (round glass bottle with glass stopper) with the sample A water up to about the middle of the neck of the bottle. Fill the other bottle with sample B water. Insert the stopper and pour out excess water.
 2. Add the contents of one Dissolved Oxygen 1 Reagent packet and the contents of one Dissolved Oxygen 2 Reagent packet to each bottle. To avoid trapping air bubbles in the bottles, incline the stopper slightly and insert the stopper. Make sure there are no air bubbles (hold cap and turn upside down). Add additional sample water if air bubbles are present.
 3. Grip the bottle firmly, and hold the stopper with your thumb; invert repeatedly to mix (turn bottle upside down and right side up repeatedly). A flocculent (floc) precipitate will be formed. If oxygen is present the floc will be brownish orange in color.
 4. Allow the samples to stand until the floc has settled halfway down in the bottle, leaving the upper half of the sample clear. Shake the bottles again (turn bottle upside down and right side up repeatedly). Again, let it stand until the upper half of the sample is clear.
- Over ↓

5. Remove the stopper from each bottle and add the contents of one Dissolved Oxygen 3 Reagent Powder Pillow to each bottle. Carefully re-stopper the bottles and shake (as described above) to mix. Make sure there are no air bubbles (add more sample water if there are). The floc will dissolve and a yellow/brown color will develop if oxygen is present.
6. Completely fill the cylindrical plastic measuring tube with the colored solution prepared in steps 1—5. Pour this measured amount into a square-mixing bottle for sample A. Do the same steps for sample B in another square-mixing bottle.
7. Using the eyedropper (holding it straight up and down above the bottle), add Sodium Thiosulfate Standard Solution one drop at a time to the mixing bottle. (Be careful not to empty entire eyedropper. You need to be able to count the drops.) *Swirl* the glass bottle to mix after *each* drop and count each drop as it is added. Continue to add drops until the sample changes from yellow to colorless. Use a white background to ensure that the sample is colorless.
8. Record the number of drops as the DO value on the data sheet. Rinse all glassware with distilled water.

