METHODOLOGY QUICK GUIDE

Calibrating the meter

Make sure that you calibrate your TPS meter each month before you go out to sample

Electrical Conductivity

1. Turn on the TPS meter
2. Hit the mode button until the EC and temperature readings are showing on the screen
3. Pour enough calibration fluid into a vial so that when you put the EC probe in the fluid is above the vent hole on the probe (to exclude air).
4. Dip the probe into the fluid and jiggle around until all the air has escaped.
5. Wait until the EC reading stabilises
6. Hold down the "Cal" button for a second or two till the display says "Cal. OK".
7. Rinse the probe in clean drinking water before sampling.

pH

1. Turn on TPS meter
2. Remove the black cap from the base of the pH probe
3. Hit the mode button until the pH and temperature readings are showing on the screen
4. Pour enough of each calibration fluid into separate vials to cover the base of the pH probe.
5. Dip the probe into the low range (pH 4.00) calibration fluid.
6. Wait until the pH reading stabilises
7. Hold down the "Cal" button for a second or two till the display says "Cal OK".
8. Rinse probe in clean drinking water.
9. Repeat steps 4 to 6 with the high range (pH 6.88) calibration fluid.
10. Remove the probe from the solution and rinse with clean drinking water
11. Half fill the black cap with water and put the cap on the pH probe.
12. Turn off the TPS meter.

If you have any problems please contact Ian Mullen at BRS on [redacted]

Collecting a water sample

1. Make sure that the collecting container is very clean. Previous contents could affect your result. Use a container with an opening large enough to take both the EC/ temperature and pH probe.
2. Choose a sample which is representative of the body of water being considered. It needs to be a sample which is like most of the water you want to get information about. *If you don't collect a representative sample you're wasting your time*. Try not to take your sample too close to the surface, bottom or sides of the waterbody.
   - *Flowing Water* - For rivers and creeks try to take your sample in a place where the water is flowing.
   - *Still Water* - eg. Dams, swamps and lakes. Saline water is denser than fresh water. This means, that in a still water body, the saline water will settle to the bottom. If you have an offtake pipe from the base of the dam, sample water from here.
3. Rinse the container 2 or 3 times with some of the water to be sampled.
4. Collect the sample.

Taking EC, pH and Temperature readings

1. Turn on the TPS meter
2. Remove the black cap from the base of the pH probe
3. Hit the mode button until EC, pH and Temperature are displayed on the screen
4. Immerse the pH and the EC/temperature probes into the sample you have collected ensuring that the fluid level is above the vent hole on the EC probe.
5. Jiggle the EC/temperature probe around a bit to remove any air from inside the cover.
6. Allow about one minute until the digital read-out stabilises or continually jumps between two numbers.
7. Record the readings for EC (as well as the units), temperature and pH on the record sheet.
8. Remove the probes from the sample and rinse with clean drinking water.
9. Half fill the black cap with water and put the cap on the pH probe.
10. Turn off the TPS meter

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