

pH

Equipment List

- Orion 210A pH meter with temperature and pH probes
- pHisa ionic strength buffer
- 1 mL syringe
- distilled water squirt bottle
- sample container
- filling solution
- 9 V battery





Considerations:

Please **do not** set down probe, it is very fragile. Only place in water or its storage container. Please do your best to **conserve** buffer!

If you are not immediately reading pH in the field: Rinse one of the shallow, wide empty containers with distilled water. Take a sample of your site water in this container (this much water should be enough for testing both pH and turbidity). Keep container **sealed and in a cooler with ice** until you are ready to take the measurement – **NO MORE THAN 2 HOURS later!**

Sample Measurement

- 1) Ensure that there is no crystal build-up on the inside of the pH probe and that the filling solution is within one inch of the vent.
- 2) Remove the pH probe from its storage solution (loosen the lid, remove probe, leave bottle up-right). 
- 3) Expose the vent by removing the plastic cover or plug. 

Expose the temperature probe by removing the black plastic cap.

- 4) Place both probes in your water sample (water should reach no higher than where the curly inside part of the probe begins – if you have too much use some for turbidity reading or pour some out).

Let sit for 10 min (this would be a good time to do another test)

- Believe me; letting it sit will make reading it much easier!

- 5) Turn on pH meter. It will automatically go to the “measure” function.



- 6) Swirl your probes in the sample for several seconds. Do not let the probe touch the walls of the container.
- 7) When the screen displays “ready” hold the probes still in the water. Wait until the numbers are relatively stable and the screen says “ready” again, and then record the pH value and the sample temperature.
- 8) Turn off the meter (press POWER).
Place the pH probe back in its storage solution bottle and make sure the top is tightened.
Cover the vent with cover or plug.
Place cap back on temperature probe.

