

Alkalinity Protocol

Field Guide

Task

Measure the alkalinity of your water sample.

What You Need

- [Hydrosphere Investigation Data Sheet](#)
- Alkalinity test kit
- Gloves
- Distilled water in wash bottle
- Goggles
- Pen or Pencil

In the Field

1. Fill out the top portion of your *Hydrosphere Investigation Data Sheet*.
2. Put on the gloves and goggles
3. Follow the instructions in your alkalinity kit to measure the alkalinity of your water.
4. Record your measurement on the *Hydrosphere Investigation Data Sheet* as *Observer 1*.
5. Repeat the measurement using fresh water samples.
6. Record as *Observers 2 and 3*.
7. Calculate the average of the three measurements.
8. Each of your individual measurements should be within the acceptable range of the average.

Maximum acceptable differences (precision) for common alkalinity test kits

Kit manufacturer	Precision
LaMotte	± 8 mg/L
Hach	± 6.8 mg/L (Low Range, 0-10 mg/L)
	± 17 mg/L (High Range, 0-50 mg/L)

9. If one measurement is outside this range, discard that measurement and find the average of the other two.
10. If they are still in range, report only the two measurements.
11. If more than two of your measurements are not in range, repeat from Step 3.