



## ALAP Sampling Protocol - Quick Reference Guide\*

Equipment Check List		
Boat	Integrated tube sampler	Membrane filter
Anchor (if possible)	1 Liter brown bottle	Tweezers
Life jackets	Secchi disk	Aluminum foil
Cooler with ice	Filtering apparatus	AWI sample bottle
Sample info sheet	Pencil	Sharpie marker

1. During the scheduled sampling week, travel to the deepest part of the lake and set an anchor (if possible). Fill out the sample information sheet with appropriate descriptive information and label the sample bottle and zip lock baggie with a sharpie. **Please note: We are using new labels this year. Fine point sharpie works best. Please test your writing utensil before heading out to sample. Some pens do not work on the smooth waterproof surface.**
2. Thoroughly rinse the integrated tube sampler, brown bottle, and the AWI sample bottle and cap with lake water a minimum of three times each.
3. Observe the secchi transparency from the shady side of the boat by lowering the disk to the point where it disappears. Record the depth where it is no longer visible on the information sheet as secchi reading #1. Lower the disk a few more feet and then slowly pull it back up until it reappears. Record the depth that it reappears as secchi depth #2. Check yes for "Visible on the Bottom" if you can see that the secchi disk is sitting on the bottom of the lake.
4. Lower the integrated tube sampler into the lake to the 2 meter line. Insert the cork into the tube and pull the tube up from the bottom so none of the captured water is lost. Empty the contents of the tube into the brown bottle and mix thoroughly.
5. Fill the AWI sample bottle by pouring lake water from the brown bottle. Only fill the sample bottle to just below the shoulder so that it does not break when the water expands when frozen. Cap the bottle and put it on ice until it can be frozen.
6. Place a membrane filter in the apparatus and make sure it is positioned correctly. Check to make sure both O-rings and the rubber stopper are in place. Assemble the filtering apparatus and pour 250 mL from the brown bottle into the filter reservoir. Use the hand pump to filter the lake water. If for some reason you are not able to filter 250 mL, please note how much water was filtered on the information sheet. This is important when calculating a chlorophyll value.
7. When the 250 mL are completely filtered disassemble the apparatus and remove the membrane filter with a tweezer. It is helpful to release the pressure from the apparatus by removing the rubber stopper before attempting to remove the membrane.
8. Fold the filter in half (algae side in), then in half again so that it is a triangle and wrap in foil. Place the foil in the labeled zip lock bag and put it on ice right away. The chlorophyll will rapidly degrade if not kept cool.
9. Make sure the sample information sheet is complete. **Fold it up and place inside the zip lock bag with the filter. This is important to protect the paper during the freeze/ thaw process.** Attach the bag to the bottle with a rubber band and freeze immediately.
10. Drop the frozen sample off at the Adirondack Watershed Institute of Paul Smith's College or regional collection hub during the scheduled collection week.

\* This is a "quick reference guide". Refer to the sampling manual or training video for detailed explanation of the sampling protocol. Training video can be found at <http://www.adkwatershed.org/water-quality/lakes>