

What if?...

Frequently Asked Questions

Q: What if I get to the post office too late on Thursday afternoon and they are closed. What should I do with my samples?

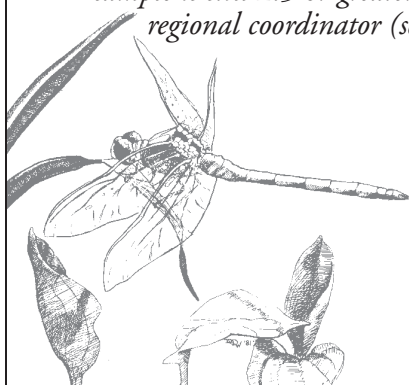
A: *It's okay! Just unpack your box, put the chlorophyll sample in the freezer and phosphorus sample in the refrigerator until Monday. Dispose of the ice and re-package again on Monday.*

Q: What if I get to the post office and I have not put the pre-paid merchandise return label on the package?

A: *The best option is to return home and get the label for the package. Very few WDNR offices have petty cash available to refund the cost of shipping. If you pay for the cost of shipping yourself, it may be difficult to be reimbursed.*

Q: What if I test my phosphorus sample with the pH paper and the pH is greater than 2?

A: *Check to make sure that you added one vial of sulfuric acid (H_2SO_4) to your sample. If you have not, add 1 vial of H_2SO_4 to your sample, mix, and then test the pH again with a new strip of litmus paper. If the pH is still greater than 2, add a second vial of H_2SO_4 to your sample, mix, and test again with a new strip of litmus paper. If the pH of your sample is still 2.5 or greater, contact your regional coordinator (see page ii).*



Q: What if my Van Dorn sampling bottle breaks while I am collecting water samples.

A: *Unfortunately, these types of water samplers seem to break when it is the most inconvenient. If you are unable to make a repair on the spot, you will need to contact your regional coordinator and make arrangements for a new sampler. If you are unable to complete that sampling session, just record the information that you have and make a note of what happened.*

Q: What if I don't receive a Styrofoam[®] mailer back from the State Laboratory of Hygiene before I am ready to collect my next sample?

A: *If you need a mailer, call (800) 442-4618 at least one week before you plan to take your next sample. This toll-free number is a general number for the State Laboratory of Hygiene. Ask them to transfer you to the shipping department to request a new mailer.*

Q: What if the water in the magnetic filter cup isn't filtering through the filter? It seems like I have been using the hand pump for a long time and nothing is happening.

A: *First, check to make certain that you are using a **white** filter and not a blue filter liner. Next, check to make sure that you have a good seal between the rubber stopper and the flask. Sometimes it helps to press down on the rubber stopper to make sure that it is in the flask as far as it will go. Check the clear tubing; is there a good connection between the flask and the hand pump? If your equipment is not the problem, you may have a lot of algae, sediment, or other material in your water that is making it hard to filter. If you are able, filter the remaining water in the filter cup, remove the filter and record just the amount that you were able to filter. Another option is to transfer the remaining water to your empty graduated cylinder, remove the first filter and place it in the mailing tube. Put another filter on the base*

and filter the remaining water in the cylinder. Both filters can be placed in the tube and mailed to the State Laboratory of Hygiene.

Q: What if my digital temperature recorder is not responding and a message displaying “897” is all that appears on the screen?

A: Your digital temperature meter is trying desperately to spell “BAT” but is doing it using numbers. This message means that a new battery is needed. Most of the digital temperature meters require a 9 volt battery. If you don’t want to buy one yourself, you can contact your regional coordinator for a new one. The battery compartment is a small door located on the back of the meter; just remove the door and slip in a new battery.

Q: What if I forget to place my lab slip in my mailer with my samples before I send them to the State Laboratory of Hygiene?

A: Contact your CLMN regional coordinator by email or by phone and as soon as you can. Tell the coordinator your name, WBIC number, Station ID# (Storet#), the name of your lake, and the amount of water you filtered for your chlorophyll sample. Your regional coordinator will contact the State Laboratory of Hygiene directly with your information.

Q: What if I just took my Secchi reading closer to my house instead of the deepest part of the lake (the location assigned to me by my Coordinator)?

A: All of the data collected at a specific site is tied back to that site through the Station ID # (Storet #). Usually, Secchi disc readings are taken at the deepest part of the lake to get data that best represents the lake as a whole. Large lakes or lakes with distinct lobes may have more than one area sampled. If you think a new sampling spot will yield good data, talk to your regional coordinator to have a new Station ID # (Storet #) assigned to that location.

Q: What if I use the Winker titration method to determine my dissolved oxygen? Is there any way for me to know what’s going on with all these color changes?

A: The first step in a dissolved oxygen titration is the addition of 8 drops of manganous sulfate solution and 8 drops of alkaline potassium iodide azide solution. These reagents react to form a precipitate of manganous hydroxide. Immediately upon formation of the precipitate, the oxygen in the water oxidizes an equivalent amount of the manganous hydroxide to brown-colored manganic hydroxide. For every molecule of oxygen in the water, four molecules of manganous hydroxide is converted to manganic hydroxide.

To “fix” the sample, 8 drops of sulfuric acid is added to the sample. The acid converts the manganic hydroxide to manganic sulfate. At this point the sample is considered “fixed” and any concern for additional oxygen being introduced into the sample is reduced. Simultaneously, iodine (from the potassium iodide in the alkaline potassium iodide azide solution) is oxidized by manganic sulfate, releasing free iodine into the water. Since the manganic sulfate for this reaction is a result of the reaction between the manganous hydroxide and oxygen, the amount of iodine released is directly proportional to the amount of oxygen present in your original sample. The release of free iodine is indicated by your sample turning a yellow-brown color.

The final stage in the Winkler titration is the addition of sodium thiosulfate. The sodium thiosulfate reacts with the free iodine to produce sodium iodide. When all the iodine has been converted, your sample changes from yellow-brown to colorless. Since the yellow-to-clear color change is very hard to see, it is necessary to add the starch indicator solution. Starch turns blue in the presence of iodine. Once all the iodine has been titrated out, the starch turns clear.