Reading the Water Sample with the AquaFluor: Getting Started

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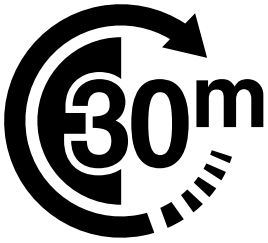
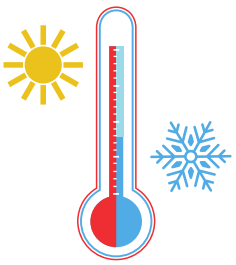
STEP 01

Before reading the sample.

Do not measure in direct sunlight. The sample should sit for at least 30 minutes in the dark or indoor shaded light before taking readings. This is important to maximize the chlorophyll readings. Samples should also be read at room temperature.







STEP 02

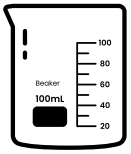
Assemble your materials.

You will need the following to read your water sample:

- AquaFluor
- Gloves
- Water sample
- Plastic cuvette
- KimWipes
- Beaker
- Waste receptacle
- Deionized water wash bottle





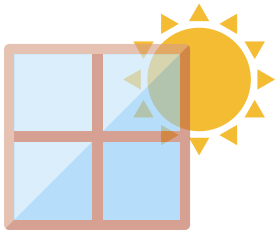



STEP 03

Check the AquaFluor blank.

Press the **ON/OFF** to power on the device. Fill a plastic cuvette about 3/4 full with DI water. Hold the cuvette up to the light to check for cleanliness and use a KimWipe to clean all sides. Wearing gloves helps with smudges; you will not get an accurate reading if the cuvette is dirty.





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STEP 04

Check the AquaFluor blank.

Insert the cuvette into the reading chamber. Make sure the mark on the cuvette lines up with the chamber arrow so that it's inserted in the same direction each time. Press the **A/B** button, make sure IVCH (in vivo chlorophyll) appears on the screen - this will be the measurement that is taken first. Press either **READ** button to take the IVCH measurement of the blank.

QUICK TIPS

The AquaFluor is not affected by room light, so the compartment cover does not need to be closed to read samples. Check that the blank value should be close to zero (it can be a bit higher but should always be less than 1).

STEP 05

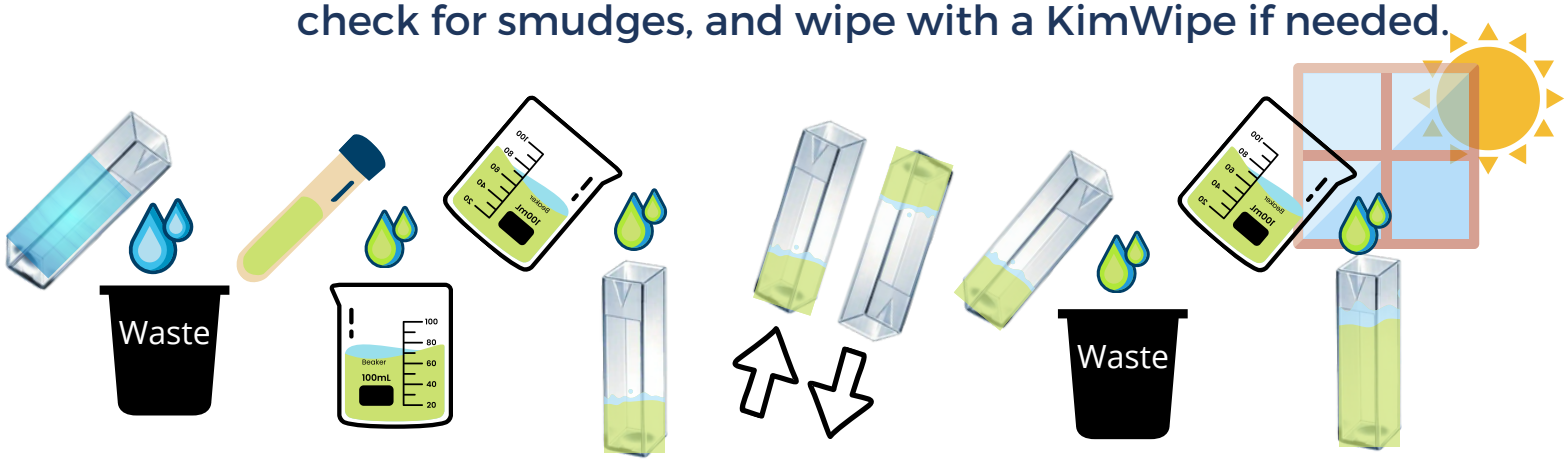
Check the AquaFluor blank.

Leave the cuvette in the compartment, and press **A/B** again so that the screen changes to CDOM (color-dissolved organic matter). Press either **READ** button to take the CDOM measurement of the blank. Check that the blank value should be close to zero.

STEP 06

Prepare your sample.

Empty the cuvette into the waste bin. Next, pour the sample into the empty beaker. Pour a small amount of sample water into the cuvette to rinse. Shake to rinse and then empty. Fill the rinsed cuvette 3/4 full of sample water. Hold the cuvette up to the light, check for smudges, and wipe with a KimWipe if needed.



Reading the Water Sample with the AquaFluor: Reading the Sample.

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STEP 07

Read your sample.

Insert the cuvette into the reading chamber (lining up the mark on the cuvette to the arrow on the machine) and use the **A/B** button to switch to IVCH. Press the **READ** button and note the time. Enter the reading into Fieldscope with the sample time collected and sample time read in the "Notes" section.

STEP 08

Read your sample.

Leave the cuvette in the compartment, and press **A/B** again so that the screen changes to CDOM (color-dissolved organic matter). Press either **READ** button to take the CDOM measurement. Enter the reading into Fieldscope.

STEP 09

Repeat and Clean Up.

Perform Steps 7-8 **two more times** for a total of three IVCH and three CDOM readings per sample. Enter all measurements into Fieldscope. The cuvette doesn't need to be rinsed with sample water between replicates, only between new samples. When finished, rinse cuvettes thoroughly with DI water, empty rinses into the waste receptacle, and leave to dry. Power off the AquaFluor device by pressing **ON/OFF** and place it back into its protective case.