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something to build on

4 tips for accurate pool-water testing

by Tyler Frysinger

Managing Pool Water

Pool-water chemistry checks may sound boring and tedious, but accurately checking your pool's water is vital to guest safety and equipment longevity. The best piece of water testing equipment for your pool is a high-quality manual test kit. Controllers are great, but their main use is for chemical dosing rather than testing.

Accurate documentation is also essential and creates a written history of pool-water chemistry. Keeping a written record is vital in the unfortunate circumstance of a pool-related injury or lawsuit.

Inaccurate water quality test results can cause many issues at your pool. The following is a list of four common errors and how to correct them.

1. Testing location

Many operators test the water in random places. Doing this will prevent an accurate long-term picture of the water quality. Choose a single location and make it permanent. The ideal location will be where the water mixes well and is of average depth.

2. Testing depth

I have seen countless people obtain a water sample somewhere in the first 12 inches of water. A lot of dirt and oils collect in this area, which could skew your chemistry readings. Your sample should be taken from roughly 18 inches deep, which is elbow depth for most people the chemistry is more stable in this zone.

3. Sample collection

If you scoop through the water with your vial, the water you collect will be from the surface. Instead, the vial needs to go straight down. Turn your vial upside down, "push" it through the water to roughly 18 inches deep and then turn it right side up. You should see a bubble rise out of the vial.

4. Testing kits

The best test kits use titration rather than color comparisons to provide readings - the results are also more precise. When you titrate a sample, the water changes from clear to potentially several other colors during the testing process. For example, when I test the chlorine level with my Taylor test kit, the water starts clear, turns pink and then turns clear again when the test is complete. Some operators will say a titration is complete as soon as the water changes color. This is incorrect. It is complete when the water no longer changes color. Use the "plus one" rule: When the water changes color, add one more drop until it no longer changes. For example, if it takes 20 drops for the pink chlorine test water to turn clear, add drop 21. If the color does not change, the test was finished at 20 drops.

I hope these helpful tips reduce your poolrelated stress this season. Feel free to email me at tyler@heartlandretreat.com if you have any questions.

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Just over 10 years ago, God called on Tyler Frysinger to serve the Kingdom through camping ministry at Heartland Conference Retreat Center (Marengo, Ohio). During his time there, he has served as an outdoor education manager, marketing specialist and is currently a member of the site and facilities team.