



Algal Bloom: Blue Green Algae blooms are often described as looking like paint in the water.



Blue Green Algae

The onset of warm weather brings with it the concern for harmful algal blooms (HABs). Of particular concern to Oklahomans are the Blue Green Algae (BGA) found in most lakes, rivers, and ponds throughout the State. Blue Green Algae is actually microscopic bacteria, called cyanobacteria. Cyanobacteria have been found among the oldest fossils, making them one of the oldest forms of life on the planet. These bacteria can form visible colonies in warm, slow-moving waters with high nutrient content resulting in foam, scum, or mats of algae on the water. When this occurs it is called an algal bloom, and it can happen very quickly – often in a matter of days. BGA blooms typically occur in late summer and early fall and are frequently described to look like paint on the surface of the water, which can range in color from blue or bright green to brown or red. Although most forms of algae pose no threat to human health, BGA produce toxins that can cause a variety of symptoms in humans, as well as pets and livestock. The most common effects of human exposure to these toxins are upper respiratory problems, skin rashes or hives, vomiting, and diarrhea.

In order to minimize the risk of infection from BGA, people should avoid swimming or other recreational activities where the water is discolored, or where foam, scum, or mats of algae are found on the water. Children are more susceptible to the effects of BGA toxins because they are more likely to drink or swallow the water in which they are playing, and due to their smaller size, may experience more severe symptoms from lower quantities of the toxins. If you encounter a body of water that appears to have a Blue Green Algae bloom, keep children and pets out of the water to avoid infection.

According to the National Oceanic and Atmospheric Administration (NOAA), the occurrence of harmful algal blooms appears to be increasing across the US. Because of this, the EPA has added certain algae to the Drinking Water Contaminant Candidate List. If you have concerns about BGA in your drinking or recreational water supplies, **Accurate Labs can provide testing to determine the concentration of the Microcystin LR toxin, which is the most frequently encountered and the most toxic compound produced by Blue Green Algae. Using dedicated LC/MS/MS instrumentation Accurate Labs can provide rapid analysis and detailed reporting.**

If you are unsure about proper sampling techniques or concerned about personal safety when taking samples, Accurate Environmental's staff of well-trained field service technicians can do the sampling for you and deliver them to Accurate Labs for analysis. Enlisting Accurate Field Services for your sampling and sample delivery needs provides you with a simpler and safer way to get samples to the lab for prompt analysis and reporting. **Contact Accurate Environmental Laboratory at (800) 516-LABS if you have any questions or concerns regarding Harmful Algae Blooms in your area.**