



Log Details - #2

Aurora Lake

1206 Surfside Cir, Aurora, OH 44202,
USA

General Info

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Weather Data				General Information	
Temperature	84°F			Start Date/Time	07/10/2025 10:30 AM
Conditions	Clear	Wind	3.36 mph East	Lead Staff	Ed Kwietniewski
Humidity	51%	Pressure	1013 hPa	Additional Staff	
Sunrise/Sunset	6:04 AM / 8:57 PM				

Map



Map Graphics

Type	Coordinates	Label	Area	Perimeter
polygon	41.335014, -81.390801	Launch/Lake entrance (Site 1)	1.7 acres	1634 ft
polygon	41.339187, -81.387089	Northern zone with small inlet (Site 2)	0.8 acres	911 ft
polygon	41.337600, -81.382668	Northeast Inlet (Site 3)	1.1 acres	1117 ft
polygon	41.330749, -81.391903	Cove (Site 4)	1.5 acres	1010 ft
marker	41.326522, -81.380996	Back of Hawthorn Channel	N/A	--

Products and Services

Item	Amount	Units	Rate	Rate Units	Inventory	Location
Chemical Target: Algae Method: Boat Notes: Aphanizomenon						
Copper Sulfate	0		1	ppm	none	Site Wide
Chemical Type: [object Object] EPA ID: 56576-1 State #: N/A Active Ingredient: Copper Sulfate Pentahydrate						

Restrictions

Restriction	Days	Notes
Swimming	-	-
Drinking	-	-
Contact	-	-
Irrigation	-	-
Fishing	-	-

Observation

Species	Type	Severity	Location	Treated
Aphanizomenon sp.	Other	High	Site Wide	Yes

Photos



Cove (Site 4) extensive cyanobacteria growth



Cove (Site 4) clumping Aphanizomenon



Treatment of Site 4



Treatment of site 4 (Note bloom was heavy enough to appear like green paint through equipment)



Post-application appearance at site 4.



Hawthorn channel with lower concentration of algae biomass



rear of Hawthorn channel. Strong sulfur smell was prevelant



Northeast inlet cyanobacteria growth.



Northeast inlet directly after application



Launch area with heavy cyanobacteria growth.



access to main lake from launch with clumping Aphanizomenon



corner of launch zone directly after application.

Notes

Today we conducted our second visit/assessment of Aurora Lake. Overall, Aphanizomenon growth was strong in a number of different locations around the lake. More specifically, algae growth appeared to be greater as one travelled from the southern end of the lake to the northern end (due to wind action). This appeared to allow significant build-up of algae within select cove areas that are marked in the map included with this report. We targeted these areas with 1 ppm of copper sulfate to reduce the growth. We also collected a depth profile at the deep point with our YSI probe and our regular chlorophyll-a check at the 10 locations listed on our last update (not listed above to prevent overcrowding the map). A Microcystin sample was also collected at the deep point sampling location and delivered to Enviroscience.

The Aphanizomenon growth was more substantial than our previous visit. This is based on our personal observations of the lake and confirmed with chlorophyll-a sampling. During our last visit to the lake on 6/26/2026, chlorophyll-a concentrations were noted to be 8.12 ug/L at the cove zone (zone 4). Our visit on 7/10/2025 showcased a value of 13.25 ug/L. Typically, chlorophyll-a concentrations displayed on our in-situ probe may bounce around slightly as the sampling device levels out. Under normal conditions, these values may move 1 - 2 ug/L until a stable reading is produced. While in zones where heavy algae growth was noted (such as the cove), values bounced over 10 ug/L above and under the stabilized readout. We do not believe this is due to any error on the probe or calibration needs, but rather due to large clumps of Aphanizomenon drifting by the probe as we were collecting the info and the probe adjusting. In the southern end of the lake (where

notable concentrations of algae was lower, the usual 1 - 2 ug/L of data bouncing was observed. Chlorophyll-a values collected at the northern end of the lake were generally higher than those collected at the southern end of the lake. The southern end of the lake looked good during today's visit. Chlorophyll-a values are roughly summarized below:

Sample Location 1 (Northern-most sample): 4.59 ug/L
Sample Location 2: 11.05 ug/L
Sample Location 3: 5.50 ug/L
Sample Location 4: 3.25 ug/L
Sample Location 5: 2.60 ug/L
Sample Location 6 (Deep Point): 2.83 ug/L
Sample Location 7: 2.60 ug/L
Sample Location 8: 3.25 ug/L
Sample Location 9: 4.30 ug/L
Sample Location 10 (Southern-most): 1.97 ug/L

The raw sampling page is included with this report as an attachment and showcases the depth profile as well. Oxygen concentrations increased near the bottom and recovered by 2.0 ft off the bottom (anoxic to hypoxic) and stratification was clearly weakened since our last visit (more consistent temperature values from surface to bottom compared to our last visit).

The area near Hawthorn channel did not seem to be as bad as areas in the northern end of the lake despite observations that the area had heavy algae growth. Although direct observations did not show heavy growth at the time of visitation, algae growth could have been present earlier in the day and moved out to the north. A distinctive smell was present when we checked on the zone and occasional white streaks were noted. Typically, when cyanobacteria is exposed to drying, it can produce a terrible smell and white-out.

If the bloom continues to progress and worsen as it has been this season, additional action may be suggested such as a single larger-scale application. However, if algae concentrations naturally reduce, this suggestion can be ignored. We will continue to target algae growth in the areas where it appears to worsen such as the noted coves and inlets.

Once I receive the results back from our Microcystin sample, I will forward it over.

Thanks!