

August 7th, 2026

SUMMARY OF CERTIFIED WATER QUALITY ANALYSIS

Sample Location: Great Hill Pond (Sample Site: End of Right of Way, next to 60 Lake Rd., Portland, CT)

Client / Collector: Jim Steffman

Collection Date/Time: August 7, 2026 at 9:31 AM

Testing Facility: Northeast Laboratories, Inc. (30 Cold Spring Rd., Rocky Hill, CT 06067)

Accreditation: CT Cert. #PH-0404 | EPA Cert. #CT-024 | FDA Reg. #086650488 | ISO/IEC 17025 Accredited

Report ID: NE Labs ID: N26102572-01

Report Date: August 13, 2026

CERTIFIED LABORATORY RESULTS AND HEALTH THRESHOLDS

1. Total Cyanobacteria Cell Count: 1,700,000 cells/mL. This result is 17 times higher than the 100,000 cells/mL guidance threshold established by CT DPH and CT DEEP for recreational health advisories and water closures.
2. Dominant Genus (Microcystis): 1,700,000 cells/mL. Classified as a High Risk Potential toxin producer, this single genus accounts for 100% of the primary bloom density.
3. Secondary Genus (Snowella): 29,000 cells/mL. Classified as a Moderate Risk Potential cyanobacteria, indicating multiple co-occurring blue-green algae species in the water column.
4. Microcystins Toxin Assay (Abraxis): Greater than or equal to 5 ppb (ug/L). Confirms a high concentration of active microcystin toxins present in the surface bloom at or above the test upper reporting limit.

KEY FINDINGS AND PUBLIC HEALTH IMPLICATIONS

Public Health Closure Standard: CT DEEP and CT DPH monitoring guidelines state that visible scum paired with a cyanobacteria cell density above 100,000 cells/mL presents an acute public

health hazard requiring immediate swimming advisories and beach closures. The lab-certified count of 1,700,000 cells/mL substantially exceeds state safety limits.

Direct Correlation with Reported Symptoms: Microcystis produces both hepatotoxins (microcystins) and dermatotoxins capable of causing intense contact dermatitis, skin irritation, and severe stinging/burning upon contact with water. These findings provide direct scientific corroboration for recent neighbor reports of acute burning on exposed skin following lake immersion.

Independent Certified Chain of Custody: The analysis was performed under ISO/IEC 17025 quality management standards by a state-certified public health laboratory and released under the official review of QA/QC Selena Anderson and Laboratory Director Zachary Cannone. The document stands as verified, unconflicted third-party evidence.

~jim

August 5th, 2026

SUMMARY OF CERTIFIED WATER QUALITY ANALYSIS

(Report #N26102526):

Client: Jim Steffman

Address: 60 Lake Road, Portland, CT 06480

Testing Facility: Northeast Laboratories, Inc. (Rocky Hill, CT — CT Cert. PH-0404 / EPA Cert. CT-024)

Report Date: August 11, 2026

Sample Collection Date: August 5, 2026

Lab Identification IDs: **N26102526-01 & N26102526-02**

1. KEY LABORATORY FINDINGS (AUGUST 5, 2026)

* Total Cyanobacteria Cell Density: 580,000 cells/mL (Sample Point: Private Dock / Active Bloom).

Regulatory Comparison: Exceeds the Connecticut Department of Public Health (CT DPH) and CT DEEP recreational threshold (100,000 cells/mL) by nearly 6 times.

* Dominant Taxon: Microcystis at 570,000 cells/mL (High-Risk Cyanotoxin Producer).

* Secondary Cyanobacteria: Snowella observed at 6,700 cells/mL.

* Active Cyanotoxin Detection: Microcystins confirmed at ≥ 5 ppb ($\mu\text{g/L}$) via Abraxis analytical testing.

* Bacterial Water Quality (E. coli): 240 CFU/100 mL (Sample Point: Private Beach, Method: SM9222D).

Regulatory Comparison: Meets/exceeds standard single-sample bathing water closure advisory thresholds (235 CFU/100 mL).

2. CHRONOLOGICAL DATA ESCALATION (AUGUST 5 TO AUGUST 7)

Comparing certified laboratory reports demonstrates rapid biomass acceleration and toxin persistence following the July 22 chemical treatment:

• **August 5, 2026 (Report #N26102526):**

Total Cyanobacteria: 580,000 cells/mL (~6x state advisory threshold)

Dominant Microcystis: 570,000 cells/mL

Microcystin Toxin Level: ≥ 5 ppb

E. coli: 240 CFU/100 mL

• **August 7, 2026 (Report #N26102572):**

Total Cyanobacteria: 1,700,000 cells/mL (17x state advisory threshold)

Dominant Microcystis: 1,700,000 cells/mL

Microcystin Toxin Level: ≥ 5 ppb

Data Summary: Cyanobacterial cell counts nearly tripled (+193%) in 48 hours, confirming rapid exponential growth and severe ecological destabilization across the shoreline.

3. PUBLIC HEALTH & REGULATORY IMPLICATIONS

* Severe Health Hazards: Microcystis produces potent microcystin hepatotoxins and dermatotoxins that trigger contact dermatitis, severe skin inflammation, burning/stinging sensations, gastrointestinal illness, and acute toxicity in domestic animals.

* Refutation of Early "All-Clear" Observations: The certified data establishes that hazardous cell densities (580,000 cells/mL) and active toxins were already widely present on August 5th, disproving assertions that water conditions were clear or low-risk during that period.

* Compound Shoreline Contamination: The concurrent presence of elevated E. coli alongside microcystins indicates compound biological degradation along the littoral zone.

~jim