

**Ministry of the  
Environment, Conservation  
and Parks**

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**Ministère de  
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September 4, 2019

**MEMORANDUM**

**TO:** Melinda Coleman  
North Bay Area Office

**FROM:** Kaoru Utsumi  
Phytoplankton Specialist, EMRB

**RE: Algal identification of sample collected on August 30, 2019  
from Three Mile Lake (MC01)**

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Analysis of the sample was indicative of a bloom of blue-green algae (specifically: *Anabaena* (aka *Dolichospermum*), *Gloeotrichia*). Many species of blue-green algae (also called cyanobacteria) have the potential to produce toxins that are harmful to the health of humans and animals. This determination was based on the amount of algal material present in the submitted sample.

Small amounts of the following types of algae were observed in the sample, at levels considered too low to contribute to a bloom:

- blue-green algae (specifically *Aphanocapsa*)
- diatoms (specifically *Nitzschia*, *Fragilaria*, *Synedra*, *Navicula*)
- golden-brown algae (specifically *Dinobryon*)

Observations included particles that were not identified as algae: debris, pine pollen, zooplankton.

The sample was submitted to Laboratory Services Branch for algal toxin analysis. Inquiries about these tests should be directed to [lasbcustomerservice@ontario.ca](mailto:lasbcustomerservice@ontario.ca). Product code MCYST3469 will return ELISA results and MCYST3450 will return mass spectrometry results. ELISA is a screening test for total microcystins, a group of algal toxins. Mass spectrometry measures individual variants of common algal toxins, including microcystin-LR. The Ontario

Drinking Water Quality Standard for microcystin-LR is a maximum acceptable concentration of 1.5 micrograms per litre.

The information in this memo was intended for the individual and/or entity to which it is addressed. If you are the intended recipient and would like more information about this analysis, please contact Kaoru Utsumi at 416-327-2837 or [Kaoru.Utsumi@ontario.ca](mailto:Kaoru.Utsumi@ontario.ca). If you are not the intended recipient, please contact Melinda Coleman for more information.