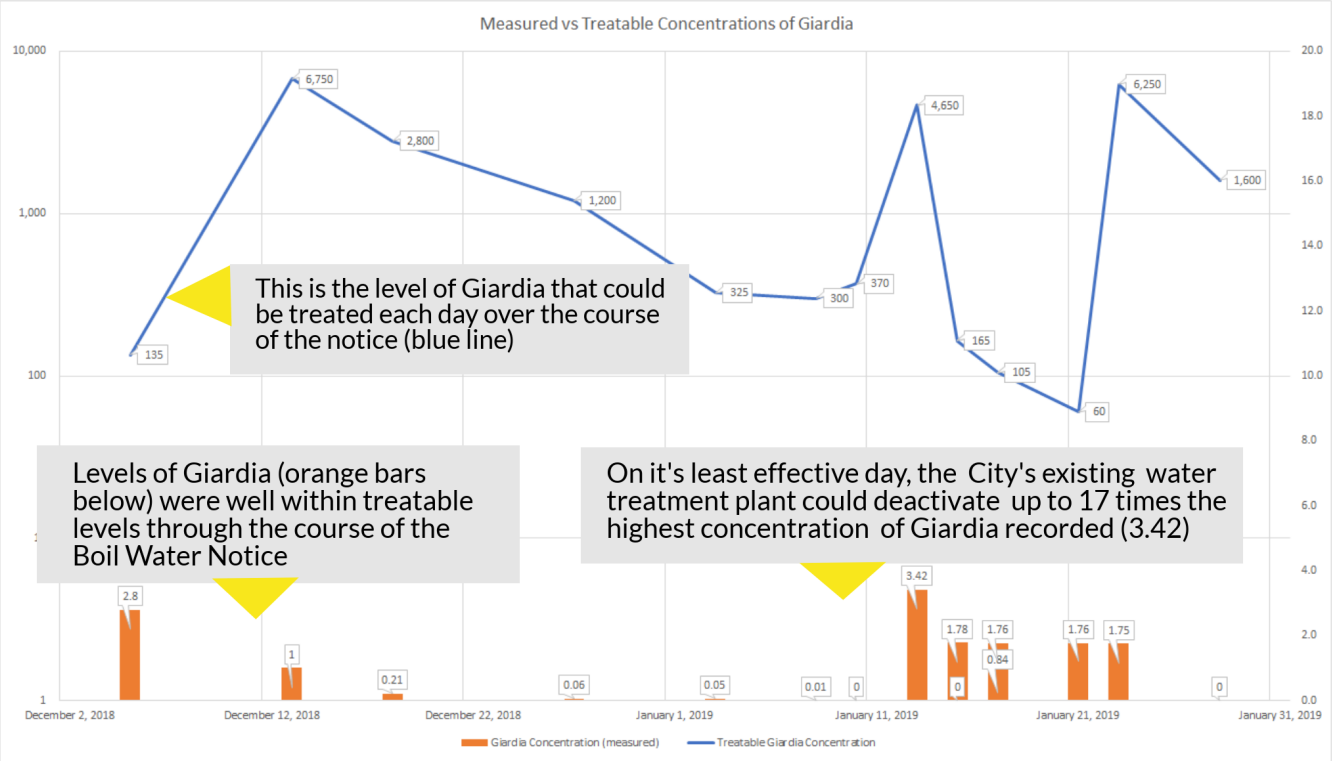
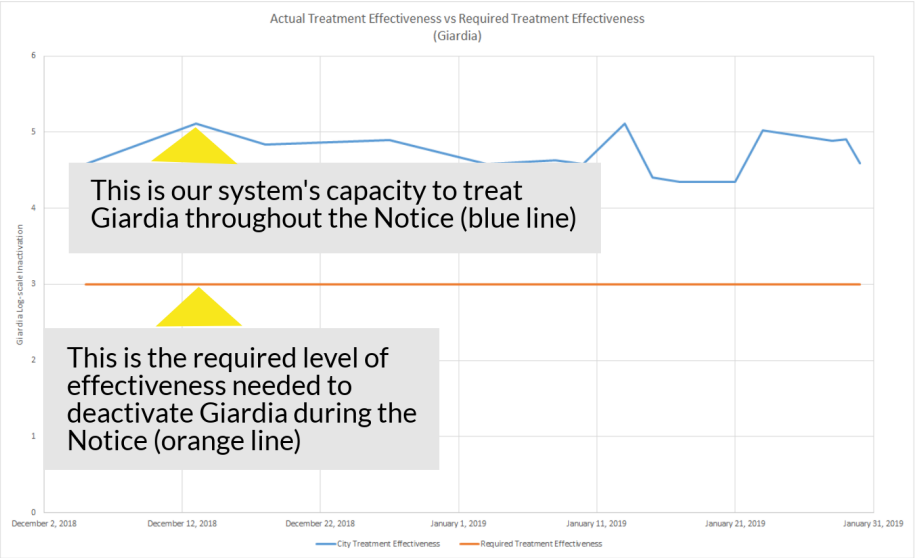
WATER TEST RESULTS

Giardia Results



The above graph describes measured levels of Giardia as compared to treatment capacity of City's chlorination system. Effectiveness of treatment (shown in the blue line) depends on a number of factors which the City tracked during the Boil Water Notice, including temperature, pH, concentration of chlorine, and the water's contact time with chlorine. Over the entire course of the notice, the City's water treatment system was well within its ability to treat (render harmless) the amounts of Giardia detected (as shown in the orange bars).

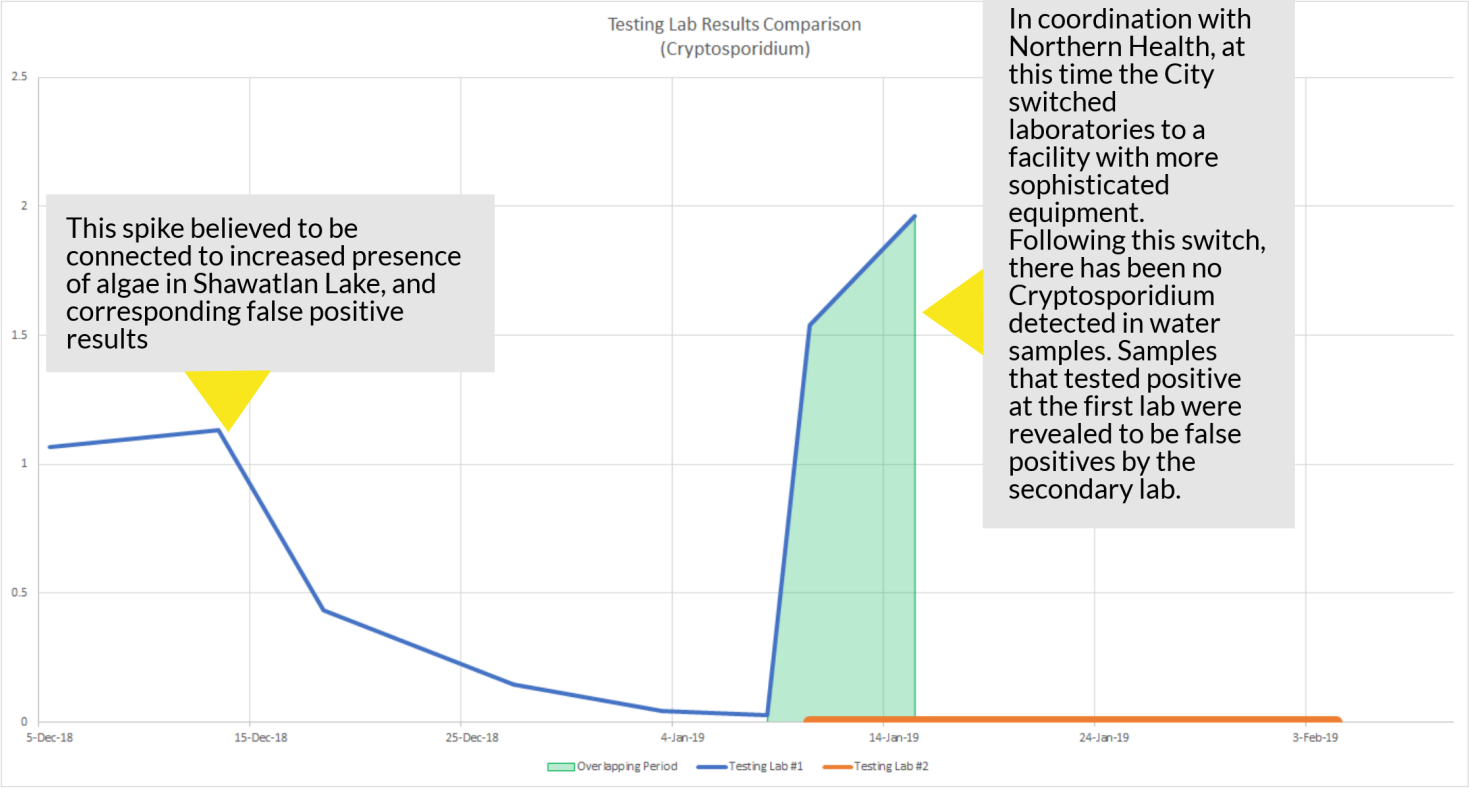
The graph to the right further illustrates the required treatment effectiveness for Giardia over the course of the Boil Water Notice (orange line), as compared to the City's treatment capacity (blue line).



Data calculated by inputting parameters of City's treatment system into Health Canada's Quantitative Microbial Risk Assessment (QMRA)

WATER TEST RESULTS

Cryptosporidium Results



Our chlorination system can treat Giardia, but it is not fully effective in deactivating Cryptosporidium, which was the primary motivation for the Boil Water Notice. The above graph describes perceived levels of Cryptosporidium in the City's water supply over the course of the Boil Water Notice. However, as noted in the After-Incident Report, the City now believes that the initial test result for Cryptosporidium was a false positive.

This is due to a number of factors:

- Cryptosporidium is easy to misidentify without sophisticated equipment, which is why additional tests were done when a small amount of Cryptosporidium was detected in November.
- The City switched to a more sophisticated lab after it was revealed that the testing designation for the original lab had lapsed after a change in ownership.
- As observed in the graph above, testing at a secondary, more sophisticated lab has not confirmed the presence of Cryptosporidium in any test result.
- Water samples tested by both labs showed that Lab #1 misidentified algae as Cryptosporidium in a sample taken January 11th.
- An aerial photograph and patrol of Shawatlan Lake conducted in late December revealed an algal bloom present in the lake.

Unfortunately, there is no way to confirm whether the initial tests were false positives, as the slides were discarded by the first lab. Given the result provided, the regulator (Northern Health) and the City acted in the best interests of public health by putting a Boil Water Notice into effect.