

Summary of 3 mile lake testing of pH, dissolved oxygen, conductivity, turbidity, water temperature profile performed by the University of Waterloo students (Chris Kahlmeier & Sam Klinger) on July 18, 2012.

Site	Sample Temp (Degrees Celsius)	Sample Depth (m)	Time Collected	Secchi Depth (m)	GPS Coordinates	Site Locations and Notes
A Top	24.3	0.5	8:52	5.25	N45.29127 W079.30779	Deepest part of lake
A Bottom	23.8	7				
B Top	24.6	0.5	9:09	Bottom at 5	N45.59668 W079.30255	Bear Trap Bay. Riparian removed in some areas
B Bottom	24.7	4.5				
C Top	24.5	0.5	9:19	Bottom at 4.5	N45.60177 W079.31358	Beaver sighted near area. North end of lake
C Bottom	24.2	4				
D Top	24.9	0.5	9:33	Bottom at 3.5	N45.60190 W079.32655	Near mouth to the lagoon
D Bottom	24.8	3				
E Top	25	0.5	9:45	Bottom at 4.5	N45.58648 W079.31781	West of the large island. Lots of cottages but intact riparian.
E Bottom	24.8	4				
F Top	25.1	0.5	9:53	Bottom at 4.75	N45.58124 W079.30452	Near local boat launch
F Bottom	25.1	4				

Site	pH
A Top	7.02
A Bottom	7.08
B Top	7.12
B Bottom	7.13
C Top	7.15
C Bottom	7.17
D Top	7.15
D Bottom	7.14
E Top	7.14
E Bottom	7.14
F Top	7.15
F Bottom	7.11

These pH levels are to be expected. They are close to neutral and should be of no concern.

Site	Dissolved Oxygen (mg/L)
A Top	8.92
A Bottom	7.46
B Top	8.89
B Bottom	8.62
C Top	8.79
C Bottom	8.56
D Top	8.70
D Bottom	9.29
E Top	8.76
E Bottom	9.55
F Top	8.76
F Bottom	8.76

These dissolved oxygen levels are also normal. The A Bottom site is a tad low, probably because of its depth. As the summer goes on, the deeper areas of the lake become unable to mix. I suspect that mixing is still occurring here, but not to the extent of a shallower site. This site should be of no concern.

Site	Conductivity (us/m)
A Top	38.0
A Bottom	39.0
B Top	39.4
B Bottom	39.3
C Top	38.4
C Bottom	39.4
D Top	38.0
D Bottom	38.1
E Top	40.9
E Bottom	38.0
F Top	39.4
F Bottom	38.3

These levels are normal and to be expected

Site	Turbidity (NTUs)
A Top	0.42
A Bottom	0.16
B Top	0.32
B Bottom	0.48
C Top	0.44
C Bottom	0.37
D Top	0.50
D Bottom	0.55
E Top	1.90
E Bottom	0.67
F Top	0.49
F Bottom	0.43

These numbers are also normal and to be expected. The level in E Top is a little high which could be just a local contamination.