Clear Lake Water Tests 2024

Year	Site	Sample Date	Phosphorus Concentration (ug/l)	Total Coliforms (cfu's per 100 ml)	Ecoli (cfu's per 100 ml)	Secchi Depth (metres)	Water Temp.
2024	CLR-0	19-May	6.3 & 5.7 (duplicate sample)			5.05	22
	CLR-2	Spring Turnover	5.5				22
	CLR-5	readings					
	CLR-8	(phosphorus only)	5.6				21
	CLR-9						
2024	CLR-0	24-Jun				6.18	25
	CLR-2			25	0		24
	CLR-5			307	25		24
	CLR-8			146	5		26
	CLR-9			49	5		24
2024	CLR-0	22-Jul				6	25
	CLR-2			76	3		26
	CLR-5			119	0		26
	CLR-8			11	0		26
	CLR-9			79	0		26
2024	CLR-0	17-Aug				5.93	24
	CLR-2			289	0		24
	CLR-5		* re test required	489	226		25
	CLR-8			72	5		24
	CLR-9			62	0		24
2024	CLR-5	20-Aug	Re Test done	141	0		23
NOTES							
			Ice went out on Mar. 17, 2024				
2024 Annual	CLR-0	Average					
2024 Annual	CLR-2	Average					
2024 Annual	CLR-5	Average					
2024 Annual	CLR-8	Average					
2024 Annual	CLR-9	Average					
2024 Annual	**All Sites**	**Average All Sites**					

Phosphorus samples at CLR-0 are taken at secchi depth. Phosphorus samples at all other sites are taken near surface

Site Location			Coliform	E. Coli
CLR-0	Middle of lake (deep water test)		Ontario Standard < 1,000 counts/100 ml	< 200 counts/100 ml
CLR-2	NW end of lake (Big Bay/Resort area)		MLA Standard < 300 counts/100 ml	< 50 counts/100 ml
CLR-5	Little Bay area (Ridge Rd./Little Bay Rd)		* OLD Phosphorus Threshold was 4.79 ug/l as per District of Muskoka Official Plan	
CLR-8	Last bay on Ridge Rd.before Camp Pine Crest		(changed in 2021 to threshold of 20 ug/l)	
CLR-9	Clear Lake Rd. east of launch ramp		CFU (colony forming unit)	ug/l (micrograms per litre)

*** Provincial Water Quality Phosphorus Monitoring Threshold for Protection Against Aesthetic Deterioration (10 ug/L) and Nuisance Algal Growth (20 ug/L) ***

PHOSPHORUS SOURCES

Up to 75% occurs naturally, remainder is human influence ie. detergents, fertilizers, phosphorus leaching from septics

TOTAL COLIFORM BACTERIA

Total coliform bacteria are a group of bacteria found in high numbers in both human and animal intestinal wastes and therefore are found in water that has been contaminated with fecal material. Unfortunately, bacteria with the biochemical characteristics of total coliforms are also found in non-contaminated water. Thus, in the absence of fecal coliforms, the presence of total coliforms may indicate older fecal contamination or the presence of decaying organic matter. Although the total coliform bacteria group is a less reliable indicator of sewage contamination, because of its superior survival characteristics, it is preferred as an indicator of treatment adequacy in drinking water supply systems **For Drinking water coliform count must be 0.**

FECAL COLIFORMS (E. COLI)

Fecal coliform bacteria are a subset of the total coliform bacterial group and also are found in human and animal intestinal wastes. However, they are a more precise indicator of the presence of sewage contamination than total coliforms. The fecal coliform bacteria group includes the genera Escherichia and, to a lesser extent, Klebsiella and Enterobacter.

For Drinking water E. Coli count must be 0.