

Rainbow Lake, Gratiot County
 May 22, 2026

E. Coli Testing Results

On **Wednesday, May 6, 2026** Tigris collected water samples on **Rainbow Lakes** for E. coli testing to monitor and identify any potential health risks. Water samples were taken from 6 locations on the main lake and 1 on Little Rainbow. Samples were plated the same day. Colonies were counted 24 hours later.

The table below shows the conditions at the time the samples were taken. The water quality was only tested to the parameters below.

Big Rainbow

Location	E. Coli Count	Target Range	Status
#1	0 CFU / 100 mL	Less than 300 CFU per 100 mL	GOOD
#2	70 CFU / 100 mL		GOOD
#3	90 CFU / 100 mL		GOOD
#4	50 CFU / 100 mL		GOOD
#5	20 CFU / 100 mL		GOOD
#6	80 CFU / 100 mL		GOOD
Geometric Mean	28.2 CFU / 100 mL		GOOD

Little Rainbow

Location	E. Coli Count	Target Range	Status
#1	80 CFU / 100 mL	Less than 300 CFU per 100 mL	GOOD

Tigris followed the EPA's Method 1603: E. coli in Water by Membrane Filtration Using Modified membrane-Thermotolerant E.coli Agar. 10 milliliters of sample water was vacuum filtered through sterile filter membranes with 0.45 µm pore size. The filter membranes were then transferred to Aquaplate mTEC Prepared Media Plates. Once plated, the samples were incubated at 35.0 °C for 2 hours and then 44.5 °C for 22 hours. On these plates, E. coli colonies grow magenta to purple, which were counted and multiplied by a factor of 10 to report results as colonies per 100 milliliters.

Michigan Public Health Code, Part 25, sets the Total Body Contact Standard at 300 Colony-Forming Units per 100 milliliters of water (CFU/100 mL) as the geometric mean of all samples collected at a beach during one sampling event. To calculate the geometric mean, we use 1 CFU to replace any 0 CFU results. As the geometric mean is less than this standard, the areas tested are **SAFE** for recreational use, such as swimming.

Thank you for choosing Tigris!



Michael Smith
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