

## DARRIN FRESH WATER INSTITUTE

Sandra A. Nierswicky-Bauer, Director

October 2, 2000

Mr. Paul Burroughs  
HCO #1, Box 126  
Ticonderoga, New York 12883

Richard F. Bopp  
Associate Director of  
Hudson River Program

Charles W. Boylen  
Associate Director of  
Environmental  
Assessment Programs

Dear Mr. Burroughs,

Enclosed are the results for the water samples that you collected from Eagle Lake. As you will notice, we have run two standard tests --Total Coliform and Fecal Coliform bacteria. Both of these are used as indicators of bacterial contamination of water by waste materials. Testing for the presence of coliform bacteria is the most commonly used guideline for the suitability of waters for drinking, swimming and other forms of contract recreation. Coliform bacteria are indicators of the presence of contamination from human or animal wastes.

From samples collected for Eagle Lake, there appears to be no sign of coliform bacterial contamination to the lake from septic sources, at least from the points and times these samples were collected. All samples show both total and fecal coliform levels well below the New York State DOH standards (see below) for waters used for contact recreation.

Table 1 Bacterial levels at Eagle Lake in 2000.

<u>Sample Site</u>	<u>Date</u>	<u>Total Coliform colonies/100 ml</u>	<u>Fecal Coliform colonies/100 ml</u>
East End - near DiPofi	September 18, 2000	less than 1	less than 1
Halfway down Lake	September 18, 2000	6	less than 1
Hurds Point	September 18, 2000	610	less than 1
West End - Causeway	September 18, 2000	9	2

The greatest concentration of total or fecal coliform bacteria was found at Hurds Point, with 610 colonies per 100 mls of sample. This number falls well below the NYS DOH standard for contact recreation and is not of a concentration that would normally indicate a faulty septic system or any other significant point source. Please bear in mind that these results indicate conditions only at the time of sampling and can change through time. The only way to assure that the beaches are within guidelines for swimming is to continue routine monitoring.



*Adirondack Field Station at Bolton Landing*  
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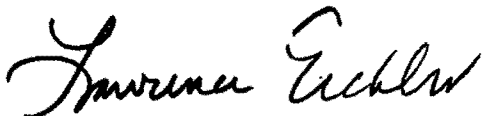
Table 2. New York State coliform bacteria standards for bathing beaches.

<b>Maximum Allowable Levels of Coliform Bacteria in Waters Used for Contact Recreation (NYS Dept. of Health)</b>		
<b>Bacterial Test</b>	<b>Max. 5 Sample Mean</b>	<b>Max. Single Result</b>
<b>Total Coliform</b>	<b>2400 per 100 mls</b>	<b>5000 per 100 mls</b>
<b>Fecal Coliform</b>	<b>200 per 100 mls</b>	<b>1000 per 100 mls</b>

A monitoring program at public and private beaches is recommended with a frequency of at least monthly during the bathing season. If contamination sources are suspected, dye testing of septic systems can confirm failures. Routine dye testing may also provide a means for detecting improperly operating septic systems prior to major contamination of the lake.

I hope this information proves useful to you.

Respectfully



Lawrence Eichler  
Research Scientist

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Hudson River Program

### Report of Analysis LAB ID: 10719

Charles W. Boylen  
Associate Director of  
Environmental  
Assessment Programs

Sample ID: 00-455  
Date Collected: 18-Sep-00  
Matrix: water  
Collected By: P. Burroughs  
Location: Eagle Lake - East end, near DIPofl

<u>Analysis Date</u>	<u>Analyte</u>	<u>Analyst</u>	<u>Result</u>	<u>Units</u>
18-Sep-00	Total Coliform	LE/EH	lt 1	colonies/100 ml
18-Sep-00	Fecal Coliform	LE/EH	lt 1	colonies/100 ml

Sample ID: 00-456  
Date Collected: 18-Sep-00  
Matrix: water  
Collected By: P. Burroughs  
Location: Eagle Lake - halfway down lake, near Kral

<u>Analysis Date</u>	<u>Analyte</u>	<u>Analyst</u>	<u>Result</u>	<u>Units</u>
18-Sep-00	Total Coliform	LE/EH		colonies/100 ml
18-Sep-00	Fecal Coliform	LE/EH		colonies/100 ml

Sample ID: 00-457  
Date Collected: 18-Sep-00  
Matrix: water  
Collected By: P. Burroughs  
Location: Eagle Lake - Western part of big lake, Hurd's Pt.

<u>Analysis Date</u>	<u>Analyte</u>	<u>Analyst</u>	<u>Result</u>	<u>Units</u>
18-Sep-00	Total Coliform	LE/EH	610	colonies/100 ml
18-Sep-00	Fecal Coliform	LE/EH	lt 1	colonies/100 ml

Sample ID: 00-458  
Date Collected: 18-Sep-00  
Matrix: water  
Collected By: P. Burroughs  
Location: Eagle Lake - West end by causeway

<u>Analysis Date</u>	<u>Analyte</u>	<u>Analyst</u>	<u>Result</u>	<u>Units</u>
18-Sep-00	Total Coliform	LE/EH	9	colonies/100 ml
18-Sep-00	Fecal Coliform	LE/EH	2	colonies/100 ml

Results Submitted By: Eric Howe



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Assessment Programs

Date: 9/21/00

Burroughs  
HC01 Box 126  
Ticonderoga, NY 12833

Lab ID: 10719

Sample #: 00-455 through 458

### BILL FOR LABORATORY SERVICES

Total

4	Total Coliform Bacterial Analysis @ \$10.00 ea.	\$40.00
4	Fecal Coliform Bacterial Analysis @ \$10.00 ea.	\$40.00
	Fecal Strep. Bacterial Analysis @ \$10.00 ea.	\$0.00
	Standard Plate Count Bacterial Analysis @ \$15.00 ea.	\$0.00
	E. coli Bacterial Analysis @ \$10.00 ea.	\$0.00
	<b>TOTAL LABORATORY FEES</b>	<b>\$80.00</b>

Please make check payable to: Darrin Fresh Water Institute  
Please include the Sample # for which this payment applies.

Mail Payment To: Darrin Freshwater Institute  
5060 Lakeshore Drive  
Bolton Landing, NY 12814



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