

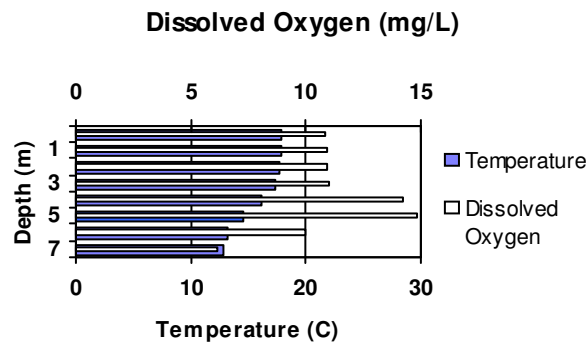
# LAKE CHECK Water Quality Monitoring Report

2024661

Customer	Waterbody	Sample Information
Emerald Lake	Emerald	Date: 5/13/2024
		Site: Middle

## On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	17.9	10.9	115
1	17.8	10.9	115
2	17.7	10.9	115
3	17.4	11.0	115
4	16.2	14.2	145
5	14.5	14.8	145
6	13.2	10.0	95
7	12.9	6.1	58



Secchi Disk Depth 4.0 meters

Thermocline Depth meters

## Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	298	uS/cm	
Total Dissolved Solids	194	mg/L	Low concentration of dissolved salts
pH	8.6	S.U.	Water is slightly alkaline
Alkalinity	145	mg CaCO3/L	Water is hard
Total Phosphorus	10	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A		

## Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	40	mesotrophic
Based on Total Phosphorus	33	meso-oligotrophic
Based on Chlorophyll	N/A	

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## Conclusions

- Conditions are good for fish growth.
- Minimum dissolved oxygen is adequate for good fish production.
- pH is within acceptable limits.
- Phosphorus and Nitrogen are within acceptable limits.
- Repeat LakeCheck in Fall.

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- WARNING, condition requires immediate attention.
  - CAUTION, condition requires further evaluation.
  - OK, condition within acceptable limits.
  - NEUTRAL, condition neither good nor bad.

## Notes

Report describes conditions at the time the sample was collected.

Approved by Jaimee Desjardins Date \_\_\_\_\_  
Mrs. Jaimee Desjardins, Technical Services Manager

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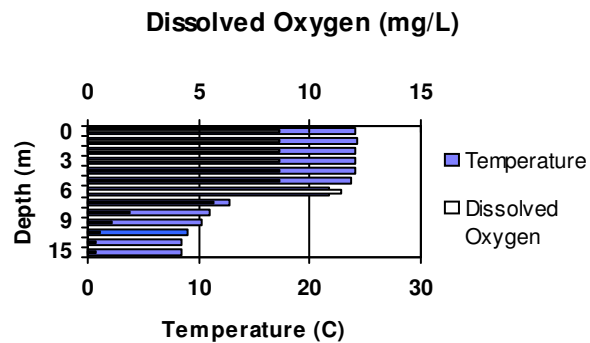
# Water Quality Monitoring Report

2024662

Customer	Waterbody	Sample Information
Emerald Lake	Emerald	Date: 8/19/2024
		Site: Middle

## On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	24.1	8.6	103
1	24.2	8.6	103
2	24.1	8.6	103
3	24.1	8.6	103
4	24.0	8.6	103
5	23.8	8.6	102
6	21.8	11.4	129
7	12.7	5.7	53
8	10.9	1.9	18
9	10.2	1.1	10
10	9.0	0.6	5
12	8.4	0.4	3
15	8.4	0.3	3



Secchi Disk Depth 4.0 meters  
 Thermocline Depth meters

## Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	287	uS/cm	
Total Dissolved Solids	186	mg/L	Low concentration of dissolved salts
pH	8.1	S.U.	Water is slightly alkaline
Alkalinity	128	mg CaCO3/L	Water is hard
Total Phosphorus	12	ug/L	Moderately phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A		

## Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	40	mesotrophic
Based on Total Phosphorus	36	meso-oligotrophic
Based on Chlorophyll	N/A	

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## Conclusions

- Conditions for fish growth are FAIR. (see cautions/warnings below)
- Minimum dissolved oxygen is nearly low enough to adversely affect sensitive fish.
- pH is within acceptable limits.
- Phosphorus and Nitrogen are within acceptable limits.
- REPEAT LakeCheck NEXT YEAR!

- 
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  - OK, condition within acceptable limits.
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## Notes

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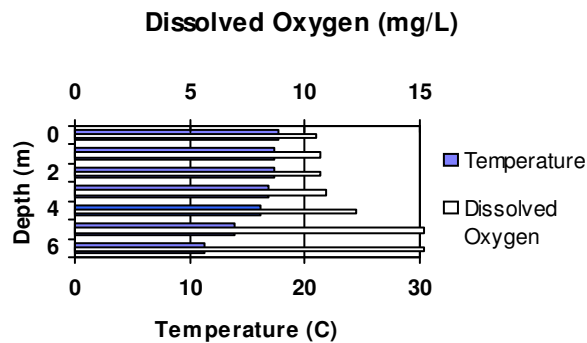
# LAKE CHECK Water Quality Monitoring Report

2024663

Customer	Waterbody	Sample Information
Emerald/Sylvan	Sylvan	Date: 5/13/2024
		Site: Middle

## On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	
		mg/L	%
0	17.7	10.5	111
1	17.4	10.6	111
2	17.3	10.7	112
3	16.9	10.9	113
4	16.1	12.3	127
5	13.8	15.1	146
6	11.3	15.2	139



Secchi Disk Depth 4.0 meters

Thermocline Depth meters

## Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	294	uS/cm	Low concentration of dissolved salts
Total Dissolved Solids	191	mg/L	
pH	8.5	S.U.	Water is slightly alkaline
Alkalinity	148	mg CaCO3/L	Water is hard
Total Phosphorus	5	ug/L	Not phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A		

## Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	40	mesotrophic
Based on Total Phosphorus	23	oligotrophic
Based on Chlorophyll	N/A	

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## Conclusions

- Conditions are good for fish growth.
- Minimum dissolved oxygen is adequate for good fish production.
- pH is within acceptable limits.
- Phosphorus and Nitrogen are within acceptable limits.
- Repeat LakeCheck in Fall.

- 
- WARNING, condition requires immediate attention.
  - CAUTION, condition requires further evaluation.
  - OK, condition within acceptable limits.
  - NEUTRAL, condition neither good nor bad.

## Notes

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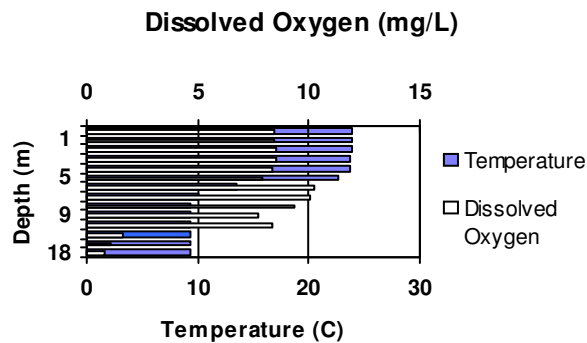
# LAKE CHECK Water Quality Monitoring Report

2024664

Customer	Waterbody	Sample Information
Emerald/Sylvan	Sylvan	Date: 8/19/2024
		Site: Middle

## On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	
		mg/L	%
0	23.9	8.4	100
1	23.9	8.5	100
2	23.9	8.5	101
3	23.8	8.5	101
4	23.7	8.4	99
5	22.7	7.9	99
6	13.5	10.2	99
7	10.0	10.1	89
8	9.4	9.3	82
9	9.3	7.7	67
10	9.3	8.4	73
12	9.3	1.6	15
15	9.3	1.1	10
18	9.3	0.8	8



Secchi Disk Depth 4.0 meters  
Thermocline Depth meters

## Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	288	uS/cm	
Total Dissolved Solids	187	mg/L	Low concentration of dissolved salts
pH	8.0	S.U.	Water is slightly alkaline
Alkalinity	124	mg CaCO3/L	Water is hard
Total Phosphorus	5	ug/L	Not phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A		

## Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	40	mesotrophic
Based on Total Phosphorus	23	oligotrophic
Based on Chlorophyll	N/A	

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## Conclusions

- Conditions are good for fish growth.
- Minimum dissolved oxygen is adequate for good fish production.
- pH is within acceptable limits.
- Phosphorus and Nitrogen are within acceptable limits.
- Repeat PondCheck next year.

- 
- WARNING, condition requires immediate attention.
  - CAUTION, condition requires further evaluation.
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## Notes

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