

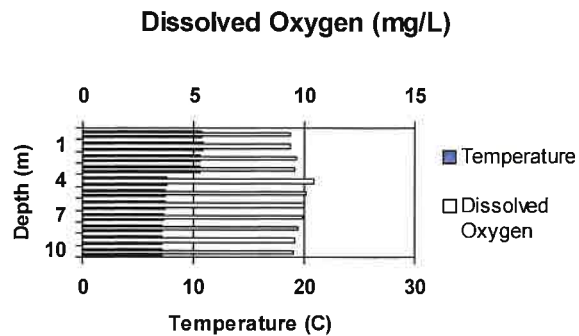
LAKE CHECK Water Quality Monitoring Report

2019337

Customer	Waterbody	Sample Information
Three Mile Lake	Three Mile Lake	Date: 4/9/2019
		Site: Middle deep hole

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	10.7	9.3	85
1	10.8	9.4	85
2	10.6	9.6	86
3	10.5	9.6	86
4	7.5	10.4	87
5	7.4	10.1	84
6	7.4	10.0	83
7	7.3	9.9	82
8	7.2	9.7	81
9	7.2	9.5	79
10	7.2	9.5	79



Secchi Disk Depth	2.5 meters
Thermocline Depth	3.5 meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	140	uS/cm	Low concentration of dissolved salts
Total Dissolved Solids	91	mg/L	
pH	7.8	S.U.	Water is slightly alkaline
Alkalinity	102	mg CaCO3/L	Water is soft
Total Phosphorus	10	ug/L	Slightly phosphorus enriched
Nitrates	250	ug/L	Not nitrogen enriched
Chlorophyll	N/A		

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	47	mesotrophic
Based on Total Phosphorus	33	meso-oligotrophic
Based on Chlorophyll	N/A	

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 Conroy

Date 12/9/2019

Mrs. Jaimee Conroy, Technical Services Manager

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
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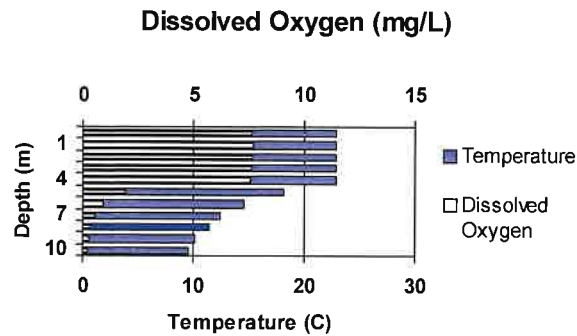
LAKE CHECK Water Quality Monitoring Report

2019338

Customer	Waterbody	Sample Information
Three Mile Lake	Three Mile Lake	Date: 8/29/2019
		Site: Middle deep hole

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	
		mg/L	%
0	22.9	7.7	86
1	22.9	7.7	86
2	22.9	7.6	86
3	22.9	7.6	86
4	22.9	7.6	85
5	18.2	1.9	19
6	14.6	0.9	9
7	12.4	0.5	5
8	11.4	0.4	3
9	10.1	0.3	2
10	9.6	0.2	2



Secchi Disk Depth	1.9 meters
Thermocline Depth	4.5 meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	146	uS/cm	
Total Dissolved Solids	95	mg/L	Low concentration of dissolved salts
pH	7.5	S.U.	Water is neutral (neither acid nor basic)
Alkalinity	74	mg CaCO3/L	Water is soft
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	51	moderately eutrophic
Based on Total Phosphorus	33	meso-oligotrophic
Based on Chlorophyll	N/A	

Conclusions

- Conditions are good for fish growth.
- Bottom water is deoxygenated, preventing fish from living in cooler water at bottom of lake.
- pH is within acceptable limits.
- Phosphorus and Nitrogen are within acceptable limits.
- REPEAT LakeCheck NEXT YEAR!

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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 Conroy

Date 12/9/2019

Mrs. Jaimee Conroy, Technical Services Manager

FROM YOUR **WQ PRO** DEALER



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Bacteria Sampling Report

Waterbody:
Three Mile Lake

Three Mile Lake

Date Sampled:
6/12/2019

Location	<i>E. coli</i>	Total Coliforms	Interpretation
East Park	4.0	52	● Water meets bacteriological standards for safe swimming.
South	<1.0	48	● Water meets bacteriological standards for safe swimming.
West Park St	<1.0	4.0	● Water meets bacteriological standards for safe swimming.

Bacterial counts are expressed as the number of Colony Forming Units per 100 milliliters (CFU/100mL).

For full body contact recreation (including swimming) counts of *E. coli* should not exceed 130 (CFU/100mL) as a monthly geometric mean of at least five samples per the State of Michigan standard, or single samples should not exceed 298 (CFU/100mL) [235 CFU/100mL in a designated bathing beach area] per Federal (EPA) guidelines.

Current recreational water quality standards do not rely on Total Coliform counts.

Approved by


Mrs. Jaimee Conroy, Technical Services Manager

Date 09-Dec-19



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