

# **CHECK** Water Quality Monitoring Report

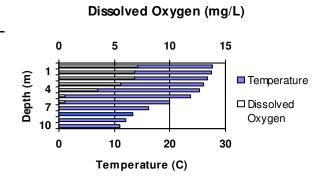
Customer Waterbody Sample Information

Three Mile Lake Date: 8/19/2021

Site: middle

# **On-Site Results**

Depth	Temperature	Dissolved Oxygen		
(m)	(degrees C)	mg/L	%	
0	27.6	7.1	90	
1	27.4	6.9	87	
2	26.8	6.9	86	
3	26.0	5.6	69	
4	25.3	3.5	42	
5	23.7	0.5	6	
6	19.9	0.5	6	
7	16.1	0.1	1	
8	13.3	0.1	1	
9	12.0	0.1	1	
10	11.0	0.1	1	



Secchi Disk Depth

2.5 meters

Thermocline Depth

4.5 meters

# **Analytical Results**

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli		CFU/100 mL	N/A
Conductivity	140	uS/cm	
Total Dissolved Solids	91	mg/L	Low concentration of dissolved salts
pH	8.3	S.U.	Water is slightly alkaline
Alkalinity	64	mg CaCO3/	LWater is soft
Total Phosphorus	32	ug/L	Phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A		

# **Trophic State Evaluation**

TSI	Trop	hic S	Status

Based on Secchi Disk Depth

47 mesotrophic

Based on Total Phosphorus

50 moderately eutrophic

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.
- Sample is somewhat phosphorus enriched. Create natural buffer between lawn & lakeshore.
- REPEAT LakeCheck NEXT YEAR!
- WARNING, condition requires immediate attention.
- CAUTION, condition requires further evaluation.
- OK, condition within acceptable limits.
- NEUTRAL, condition neither good nor bad.

### **Notes**

Late summer phosphorus sample is taken below the thermocline. Phosphorus is expected to be higher at this depth

Report describes conditions at the time the sample was collected.

Approved by

Mrs. Jaimee Desjardins, Technical Services Manager

Date 12/1/2027

**FROM YOUR** 

DEALER DEALER

PLM Lake & Land Management Corp P.O. Box 132

Caledonia MI 49316-

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Temperature (C)

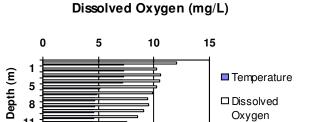
Sample Information Customer Waterbody

Three Mile Lake Three Mile Lake Date: 4/9/2021

Site: middle

# **On-Site Results**

Depth	Temperature	Dissolved Oxygen	
(m)	(degrees C)	mg/L	%
0	14.6	12.1	124
1	14.6	10.3	99
2	14.5	10.6	104
3	14.4	10.5	103
5	10.3	10.2	92
6	9.7	9.9	87
7	9.4	9.4	82
8	9.3	9.5	83
9	9.2	9.1	80
10	9.1	8.6	75
11	9.0	7.5	70



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Secchi Disk Depth

3.5 meters

Thermocline Depth

4.5 meters

# **Analytical Results**

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli		CFU/100 mL	N/A
Conductivity	135	uS/cm	
Total Dissolved Solids	88	mg/L Low concentration of dissolved salts	
pH	8.1	S.U.	Water is slightly alkaline
Alkalinity	61	mg CaCO3/	LWater is soft
Total Phosphorus	10	ug/L	Slightly phosphorus enriched
Nitrates	260	ug/L	Slightly nitrogen enriched
Chlorophyll	N/A		

# **Trophic State Evaluation**

	TSI	Trophic Status
Based on Secchi Disk Depth	42	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.
- No remedial action recommended at this time.
- 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**

Report describes conditions at the time the sample was collected.

Approved b

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