

# **CHECK** Water Quality Monitoring Report

Customer

Waterbody

Sample Information

Three Mile Lake

Three Mile Lake

Date: 8/31/2006

Joyce Beedie

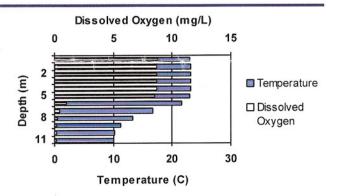
PO Box 482

MI 49079

Site: Deep Hole

Paw Paw **On-Site Results** 

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Depth (m)	Temperature (degrees C)	Dissolved mg/L	Oxygen %	
0	23.0	8.8	103	
1	23.1	8.7	102	
2	23.1	8.7	102	
3	23.1	8.7	102	
4	23.1	8.7	102	
5	23.1	8.5	99	
6	21.6	1.1	12	
7	16.6	0.4	5	
8	13.2	0.2	2	
9	11.3	0.2	2	
10	10.2	0.2	1	
11	10.0	0.1	11	



Secchi Disk Depth

3.4 meters

Thermocline Depth

5.5 meters

## **Analytical Results**

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli		CFU/100 mL	N/A
Conductivity	95	uS/cm	Land of the standard of the
<b>Total Dissolved Solids</b>	65	mg/L	Low concentration of dissolved salts
рН	8.2	S.U.	Water is slightly alkaline
Alkalinity	110	mg CaCO3/	LWater is soft
Total Phosphorus	30	ug/L	Moderately phosphorus enriched
Nitrates	560	ug/L	Moderately nitrogen enriched
Chlorophyll	N/A		

## **Trophic State Evaluation**

TSI Trophic Status

Based on Secchi Disk Depth

42 mesotrophic

Based on Total Phosphorus

49 moderately eutrophic

Based on Chlorophyll

N/A

#### Conclusions

- Conditions for fish growth are FAIR. (see cautions/warnings below)
- Minimum dissolved oxygen is nearly low enough to adversely affect sensitive fish.
- Bottom water is deoxygenated, preventing fish from living in cooler water at bottom of lake.
- pH is within acceptable limits.
- Sample is somewhat phosphorus enriched. Use phosphorus-free fertilizer on lakeshore lawns.
- Sample is nitrogen enriched. Consider nutrient abatement measures.
- Deep water sample indicates possible internal loading of nutrients.
- 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**

Report describes conditions at the time the sample was collected.

Approved by

Ars. Jaimee Conroy, Technical Services Manager

Date 9/28/2006

FROM YOUR





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