

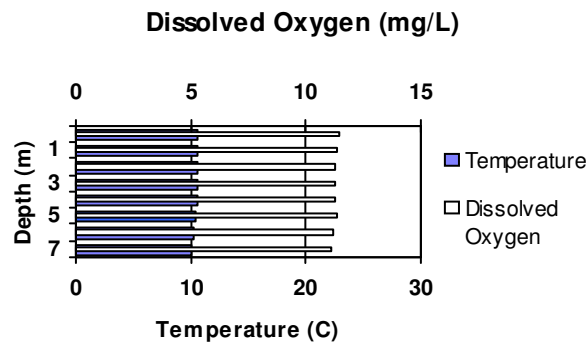
LAKE CHECK Water Quality Monitoring Report

2020483

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 5/6/2020
		Site: Site #1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	10.7	11.4	103
1	10.6	11.3	102
2	10.6	11.3	102
3	10.6	11.3	101
4	10.6	11.2	101
5	10.4	11.4	102
6	10.2	11.2	100
7	10.0	11.1	100



Secchi Disk Depth 7.0 meters
 Thermocline Depth meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	144	uS/cm	
Total Dissolved Solids	129	mg/L	Low concentration of dissolved salts
pH	8.0	S.U.	Water is slightly alkaline
Alkalinity	109	mg CaCO3/L	Water is soft
Total Phosphorus	19	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	32	meso-oligotrophic
Based on Total Phosphorus	42	mesotrophic
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 nutrient (N and P) enriched. Adopt appropriate lakeshore landscaping and lawn care practices.
- REPEAT LakeCheck Soon!!

-
- 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

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294

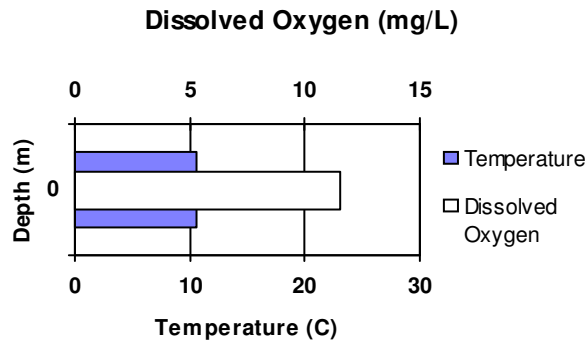
LAKE CHECK Water Quality Monitoring Report

2020484

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 5/6/2020
		Site: Site #3

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	10.5	11.5	103



Secchi Disk Depth	5.5 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	145	uS/cm	
Total Dissolved Solids	130	mg/L	Low concentration of dissolved salts
pH	8.2	S.U.	Water is slightly alkaline
Alkalinity	114	mg CaCO3/L	Water is soft
Total Phosphorus	33	ug/L	Phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A	ug/L	

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	35	meso-oligotrophic
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 highly phosphorus enriched. Consider nutrient abatement measures.
- REPEAT LakeCheck Soon!!

-
- 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

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294



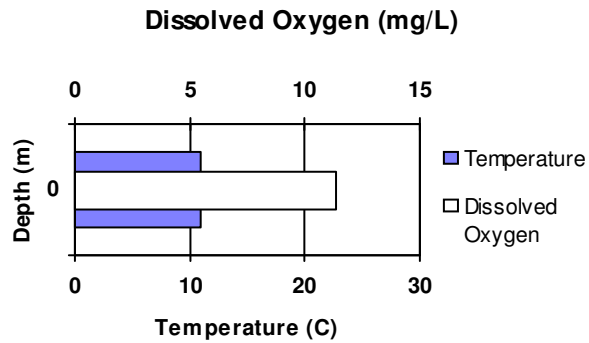
Water Quality Monitoring Report

2020485

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 5/6/2020
		Site: Site #2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	10.9	11.3	103



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	145	uS/cm	
Total Dissolved Solids	129	mg/L	Low concentration of dissolved salts
pH	7.9	S.U.	Water is slightly alkaline
Alkalinity	110	mg CaCO ₃ /L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A	ug/L	

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	40	mesotrophic
Based on Total Phosphorus	28	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 Soon!!

-
- 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

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294

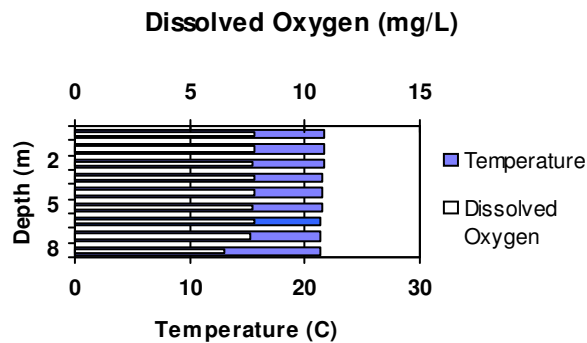
LAKE CHECK Water Quality Monitoring Report

2020486

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 8/31/2020
		Site: Site #1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	
		mg/L	%
0	21.6	7.8	89
1	21.6	7.8	89
2	21.6	7.7	88
3	21.6	7.8	88
4	21.5	7.8	89
5	21.4	7.8	88
6	21.4	7.8	88
7	21.4	7.6	86
8	21.4	6.5	74



Secchi Disk Depth 2.0 meters

Thermocline Depth meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	171	uS/cm	
Total Dissolved Solids	119	mg/L	Low concentration of dissolved salts
pH	7.8	S.U.	Water is slightly alkaline
Alkalinity	81	mg CaCO3/L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A	ug/L	

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	50	moderately eutrophic
Based on Total Phosphorus	28	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 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 Jaimee Desjardins Date _____
Mrs. Jaimee Desjardins, Technical Services Manager

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294

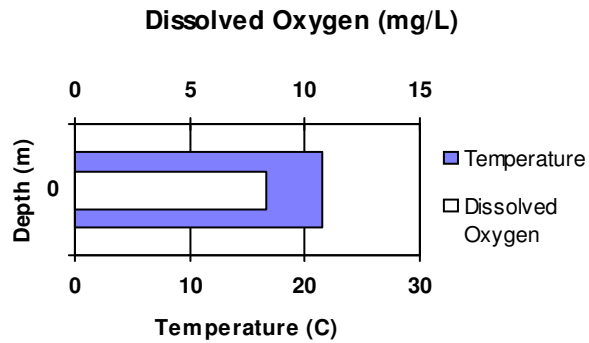


Water Quality Monitoring Report

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 8/31/2020
		Site: Site #2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	21.6	8.3	94



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	171	uS/cm	
Total Dissolved Solids	119	mg/L	Low concentration of dissolved salts
pH	7.8	S.U.	Water is slightly alkaline
Alkalinity	83	mg CaCO3/L	Water is soft
Total Phosphorus	22	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	44	mesotrophic
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

Report describes conditions at the time the sample was collected.

Approved by Jaimee Desjardins Date _____
Mrs. Jaimee Desjardins, Technical Services Manager

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294

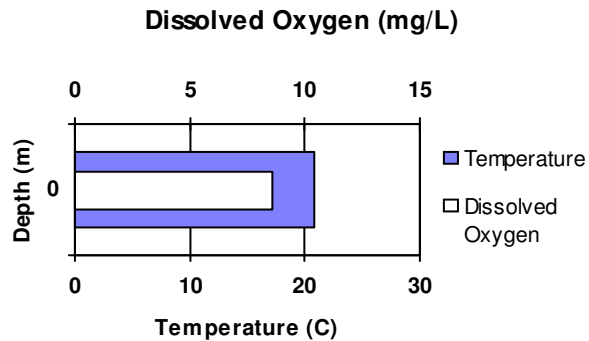
LAKE CHECK Water Quality Monitoring Report

2020488

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 8/31/2020
		Site: Site #3

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	20.9	8.6	96



Secchi Disk Depth	5.5 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	167	uS/cm	
Total Dissolved Solids	118	mg/L	Low concentration of dissolved salts
pH	8.0	S.U.	Water is slightly alkaline
Alkalinity	78	mg CaCO ₃ /L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A	ug/L	

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	35	meso-oligotrophic
Based on Total Phosphorus	28	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 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 Jaimee Desjardins Date _____
Mrs. Jaimee Desjardins, Technical Services Manager

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294

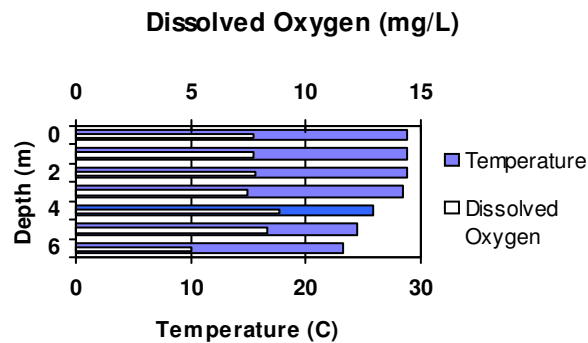
LAKE CHECK Water Quality Monitoring Report

2020489

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 7/7/2020
		Site: Site #1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	
		mg/L	%
0	28.7	7.7	100
1	28.7	7.7	100
2	28.7	7.8	100
3	28.4	7.4	95
4	25.8	8.9	109
5	24.4	8.3	100
6	23.3	5.0	63



Secchi Disk Depth 5.0 meters
Thermocline Depth meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	191	uS/cm	
Total Dissolved Solids	128	mg/L	Low concentration of dissolved salts
pH	7.8	S.U.	Water is slightly alkaline
Alkalinity	83	mg CaCO3/L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A	ug/L	

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	37	meso-oligotrophic
Based on Total Phosphorus	28	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.

-
- 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

FROM YOUR **WO
PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294

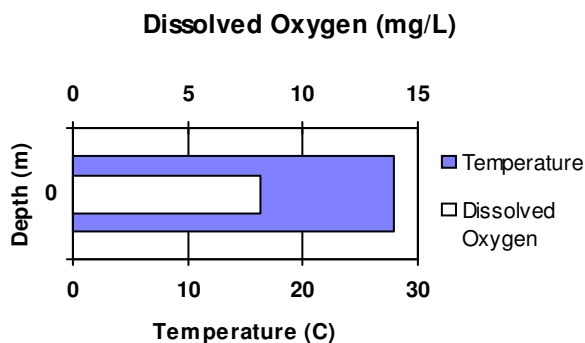
LAKE CHECK Water Quality Monitoring Report

2020490

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 7/7/2020
		Site: Site #2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen mg/L	%
0	28.0	8.1	103



Secchi Disk Depth	5.0 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	196	uS/cm	
Total Dissolved Solids	127	mg/L	Low concentration of dissolved salts
pH	7.7	S.U.	Water is slightly alkaline
Alkalinity	86	mg CaCO3/L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A	ug/L	

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	37	meso-oligotrophic
Based on Total Phosphorus	28	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.

-
- 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

FROM YOUR **WO PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294

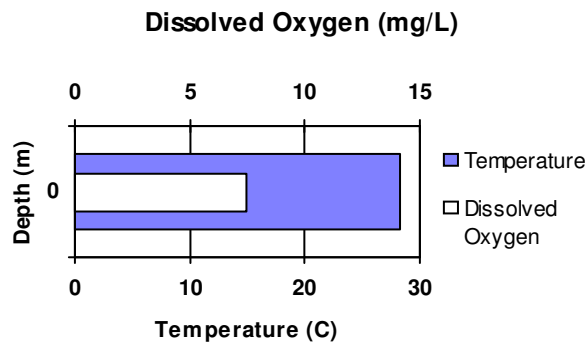
LAKE CHECK Water Quality Monitoring Report

2020491

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 7/7/2020
		Site: Site #3

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	28.2	7.4	96



Secchi Disk Depth	1.5 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	199	uS/cm	
Total Dissolved Solids	130	mg/L	Low concentration of dissolved salts
pH	8.0	S.U.	Water is slightly alkaline
Alkalinity	90	mg CaCO ₃ /L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	N/A	ug/L	

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	54	moderately eutrophic
Based on Total Phosphorus	28	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.

-
- 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

FROM YOUR **WO
PRO** DEALER



PLM Lake & Land Management Corp
P.O. Box 132
Caledonia MI 49316-
Phone: (616) 891-1294