

LAKE CHECK Water Quality Monitoring Report

2024500

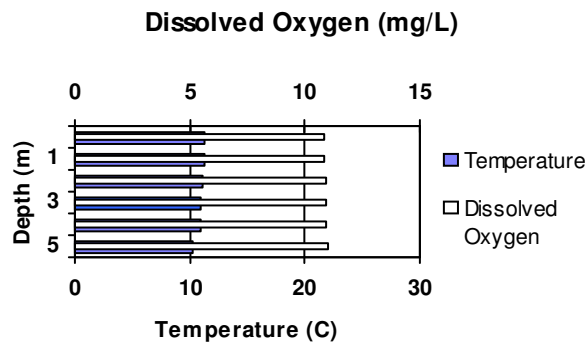
Customer	Waterbody	Sample Information
Missaukee Lake	Lake Missaukee	Date: 4/15/2024
		Site: Site #1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen mg/L	%
0	11.2	10.8	99
1	11.2	10.9	99
2	11.1	10.9	99
3	11.0	10.9	99
4	10.9	10.9	99
5	10.3	11.0	98

Secchi Disk Depth 5.7 meters

Thermocline Depth meters



Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	202	uS/cm	
Total Dissolved Solids	131	mg/L	Low concentration of dissolved salts
pH	8.4	S.U.	Water is slightly alkaline
Alkalinity	98	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	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 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

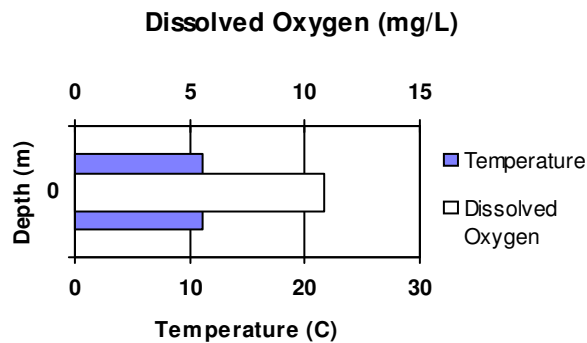
LAKE CHECK Water Quality Monitoring Report

2024501

Customer	Waterbody	Sample Information
Missaukee Lake	Lake Missaukee	Date: 4/15/2024
		Site: Site #2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	%
0	11.1	10.8	99



Secchi Disk Depth	meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	201	uS/cm	
Total Dissolved Solids	130	mg/L	Low concentration of dissolved salts
pH	8.4	S.U.	Water is slightly alkaline
Alkalinity	101	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	N/A	
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

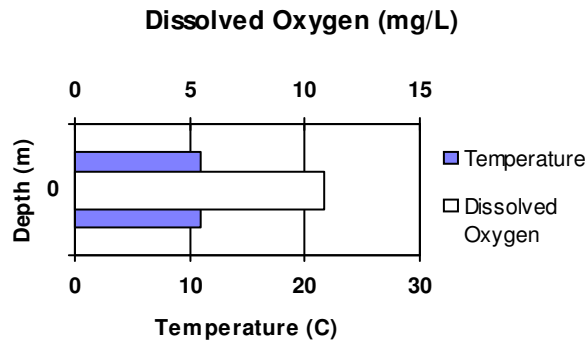
LAKE CHECK Water Quality Monitoring Report

2024502

Customer	Waterbody	Sample Information
Missaukee Lake	Lake Missaukee	Date: 4/15/2024
		Site: Site #3

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen mg/L	%
0	11.0	10.8	99



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	201	uS/cm	
Total Dissolved Solids	131	mg/L	Low concentration of dissolved salts
pH	8.4	S.U.	Water is slightly alkaline
Alkalinity	102	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	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 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

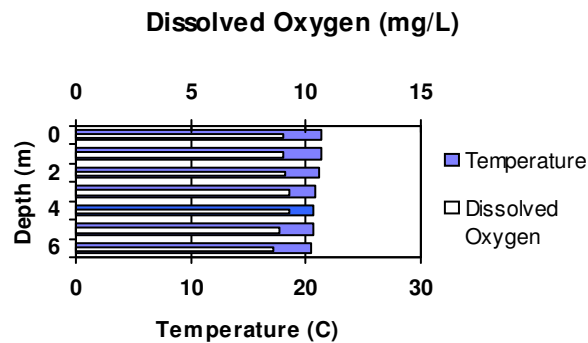
LAKE CHECK Water Quality Monitoring Report

2024503

Customer	Waterbody	Sample Information
Missaukee Lake	Lake Missaukee	Date: 7/2/2024
		Site: Site #1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	
		mg/L	%
0	21.3	9.1	102
1	21.3	9.1	102
2	21.2	9.1	102
3	20.8	9.3	104
4	20.7	9.3	102
5	20.6	8.9	99
6	20.5	8.6	95



Secchi Disk Depth 3.7 meters
Thermocline Depth meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	197	uS/cm	
Total Dissolved Solids	128	mg/L	Low concentration of dissolved salts
pH	8.6	S.U.	Water is slightly alkaline
Alkalinity	84	mg CaCO ₃ /L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	1.84	ug/L	Low algae production

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	41	mesotrophic
Based on Total Phosphorus	28	oligotrophic
Based on Chlorophyll	37	meso-oligotrophic

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

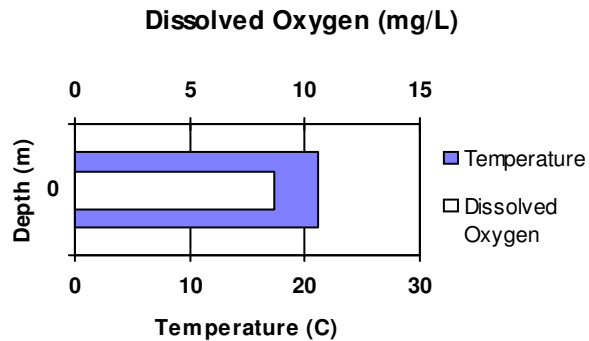
LAKE CHECK Water Quality Monitoring Report

2024504

Customer	Waterbody	Sample Information
Missaukee Lake	Lake Missaukee	Date: 7/2/2024
		Site: Site #2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	21.2	8.7	98



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	198	uS/cm	
Total Dissolved Solids	120	mg/L	Low concentration of dissolved salts
pH	8.3	S.U.	Water is slightly alkaline
Alkalinity	79	mg CaCO3/L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	2.15	ug/L	Low algae production

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	40	mesotrophic
Based on Total Phosphorus	28	oligotrophic
Based on Chlorophyll	38	mesotrophic

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

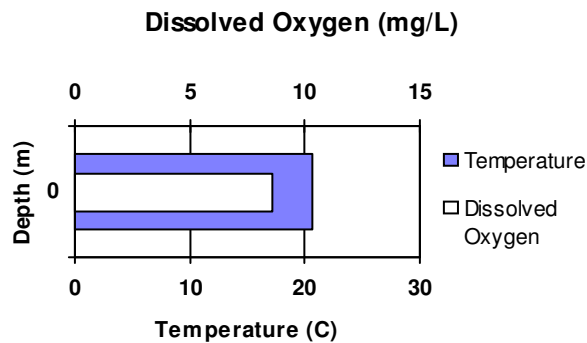
LAKE CHECK Water Quality Monitoring Report

2024505

Customer	Waterbody	Sample Information
Missaukee Lake	Lake Missaukee	Date: 7/2/2024
		Site: Site #3

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	20.6	8.6	95



Secchi Disk Depth	2.7 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	129	mg/L	Low concentration of dissolved salts
pH	8.6	S.U.	Water is slightly alkaline
Alkalinity	82	mg CaCO ₃ /L	Water is soft
Total Phosphorus	7	ug/L	Slightly phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	13.1	ug/L	High algae production

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	46	mesotrophic
Based on Total Phosphorus	28	oligotrophic
Based on Chlorophyll	56	eutrophic

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

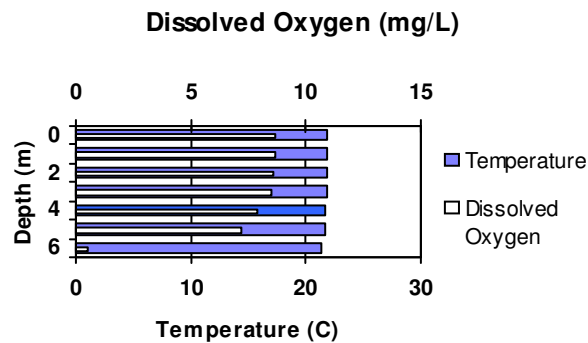
LAKE CHECK Water Quality Monitoring Report

2024750

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 9/3/2024
		Site: Site 1

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen (mg/L)	
		mg/L	%
0	21.8	8.7	99
1	21.9	8.6	99
2	21.8	8.6	98
3	21.8	8.5	97
4	21.7	7.9	90
5	21.6	7.2	82
6	21.4	0.6	7



Secchi Disk Depth 3.0 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	124	mg/L	Low concentration of dissolved salts
pH	8.2	S.U.	Water is slightly alkaline
Alkalinity	86	mg CaCO ₃ /L	Water is soft
Total Phosphorus	13	ug/L	Moderately phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	2.37	ug/L	Low algae production

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	44	mesotrophic
Based on Total Phosphorus	37	meso-oligotrophic
Based on Chlorophyll	39	mesotrophic

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



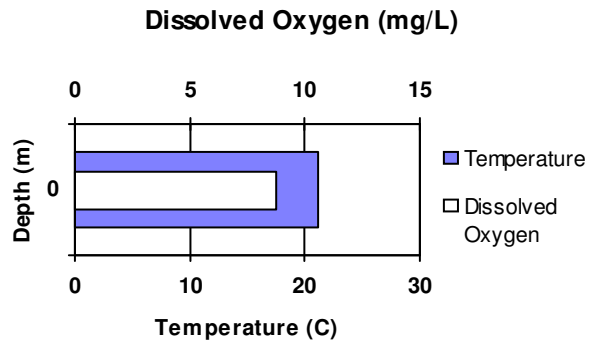
Water Quality Monitoring Report

2024751

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 9/9/2024
		Site: Site 2

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	21.2	8.8	99



Secchi Disk Depth	3.0 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	190	uS/cm	
Total Dissolved Solids	124	mg/L	Low concentration of dissolved salts
pH	8.2	S.U.	Water is slightly alkaline
Alkalinity	96	mg CaCO ₃ /L	Water is soft
Total Phosphorus	5	ug/L	Not phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	3.08	ug/L	Low algae production

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	44	mesotrophic
Based on Total Phosphorus	23	oligotrophic
Based on Chlorophyll	42	mesotrophic

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



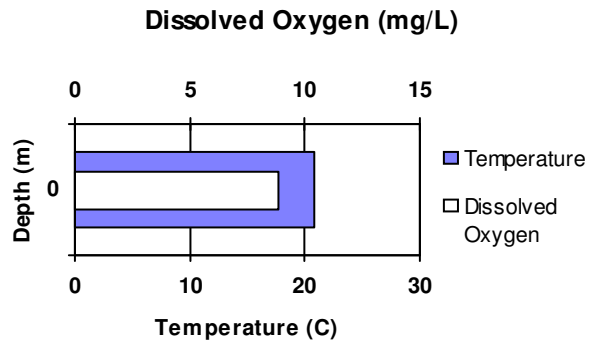
Water Quality Monitoring Report

2024752

Customer	Waterbody	Sample Information
Missaukee Lake	Missaukee	Date: 9/9/2024
		Site: Site 3

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	20.8	8.8	99



Secchi Disk Depth	3.0 meters
Thermocline Depth	meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	193	uS/cm	
Total Dissolved Solids	125	mg/L	Low concentration of dissolved salts
pH	8.2	S.U.	Water is slightly alkaline
Alkalinity	92	mg CaCO3/L	Water is soft
Total Phosphorus	5	ug/L	Not phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	1.71	ug/L	Low algae production

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	44	mesotrophic
Based on Total Phosphorus	23	oligotrophic
Based on Chlorophyll	36	meso-oligotrophic

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