

| Customer | Waterbody | Sample Information |
|----------------------|------------|--------------------|
| Perch Lake (Jackson) | Perch lake | Date: 4/19/2017 |
| | | Site: Middle |

On-Site Results

| Depth (m) | Temperature (degrees C) | Dissolved O mg/L | xygen % | | Dissolve | ed Oxygeı | n (mg/L) |
|--------------|----------------------------|---------------------|------------|-----------|----------|-----------|--|
| 0 | 16.4 | 9.1 | 93 | 0 | 5 | 10 | 15 |
| 1 | 16.4 | 8.9 | 91 | + | | | |
| 2 | 16.4 | 8.6 | 88 | Depth (m) | | | ■ Temperature □ Dissolved Oxygen |
| Secch | i Disk Depth | 2.0 meters | | 0 | 10 | 20 | 30 |
| Therm | nocline Depth | meters | | | Temper | ature (C) | |

Analytical Results

| Parameter | Result | Units | Interpretation |
|-------------------------|--------|------------|---|
| Fecal Bacteria (E. coli | | CFU/100 mL | N/A |
| Conductivity | 313 | uS/cm | |
| Total Dissolved Solids | 204 | mg/L | Moderate concentration of dissolved salts |
| рН | 8.3 | S.U. | Water is slightly alkaline |
| Alkalinity | 115 | mg CaCO3/ | LWater is soft |
| Total Phosphorus | 12 | ug/L | Moderately phosphorus enriched |
| Nitrates | 532 | ug/L | Moderately nitrogen enriched |
| Chlorophyll | N/A | | |

Trophic State Evaluation

| | TSI Trophic Status |
|----------------------------|-------------------------|
| Based on Secchi Disk Depth | 50 moderately eutrophic |
| Based on Total Phosphorus | 36 meso-oligotrophic |
| Based on Chlorophyll | N/A |

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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 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

amee Conor _ Date <u>12/4/2017</u>

Mrs. Jaimee Cohroy, Technical Services Manager





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



| Customer | Waterbody | Sample Information |
|----------------------|------------|--------------------|
| Perch Lake (Jackson) | Perch Lake | Date: 9/5/2017 |
| | | Site: Middle |

On-Site Results

| Depth (m) | Temperature (degrees C) | Dissolved mg/L | Oxygen % | | Dissolve | ed Oxygeı | n (mg/L) |
|--------------|----------------------------|-------------------|-------------|-----------|----------|-----------|--|
| 0 | 21.3 | 9.1 | 97 | 0 | 5 | 10 | 15 |
| 1 | 21.3 | 9.1 | 98 | + | | | |
| 2 | 21.2 | 9.4 | 101 | Depth (m) | | | Temperature Dissolved Oxygen |
| Secch | i Disk Depth | 2.0 meter | S | 0 | 10 | 20 | 30 |
| Therm | nocline Depth | meter | S | | Temper | ature (C) | |

Analytical Results

| Parameter | Result | Units | Interpretation |
|-------------------------|--------|------------|--------------------------------------|
| Fecal Bacteria (E. coli | | CFU/100 mL | N/A |
| Conductivity | 310 | uS/cm | |
| Total Dissolved Solids | 200 | mg/L | Low concentration of dissolved salts |
| рН | 8.3 | S.U. | Water is slightly alkaline |
| Alkalinity | 118 | mg CaCO3/ | LWater 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 | 50 moderately eutrophic |
| 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 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.

(onor ame Approved by _ Date <u>12/4/20</u>17

Mrs. Jaimee Conroy, Technical Services Manager





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