

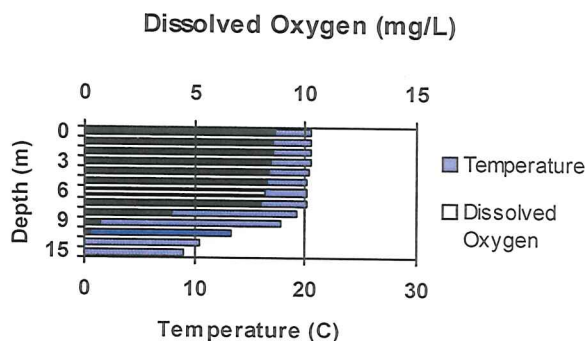
LAKE CHECK Water Quality Monitoring Report

2017421

Customer	Waterbody	Sample Information
Fremont Lake	Fremont	Date: 9/6/2017
		Site: Middle

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	20.4	8.6	96
1	20.4	8.6	95
2	20.4	8.5	95
3	20.4	8.4	94
4	20.3	8.3	92
5	20.2	8.2	91
6	20.2	8.1	90
7	20.2	8.0	89
8	19.3	4.0	43
9	17.8	0.7	7
10	13.3	0.3	3
12	10.5	0.1	1
15	8.9	0.0	0



Secchi Disk Depth 3.5 meters

Thermocline Depth meters

Analytical Results

Parameter	Result	Units	Interpretation
Fecal Bacteria (E. coli)		CFU/100 mL	N/A
Conductivity	464	uS/cm	
Total Dissolved Solids	330	mg/L	Moderate concentration of dissolved salts
pH	8.7	S.U.	Water is slightly alkaline
Alkalinity	158	mg CaCO3/L	Water is hard
Total Phosphorus	25	ug/L	Moderately phosphorus enriched
Nitrates	230	ug/L	Not nitrogen enriched
Chlorophyll	0.717	ug/L	Very low algae production

Trophic State Evaluation

	TSI	Trophic Status
Based on Secchi Disk Depth	42	mesotrophic
Based on Total Phosphorus	46	mesotrophic
Based on Chlorophyll	27	oligotrophic

Conclusions

- Conditions for fish growth are FAIR. (see cautions/warnings below)
- Minimum dissolved oxygen is nearly low enough to adversely affect sensitive fish.
- pH is within acceptable limits.
- Sample is highly phosphorus enriched. Consider nutrient abatement measures.
- Deep water sample indicates possible internal loading of nutrients.
- REPEAT LakeCheck NEXT YEAR!

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- WARNING. condition requires immediate attention.
 - CAUTION. condition requires further evaluation.
 - OK. condition within acceptable limits.
 - NEUTRAL. condition neither good nor bad.

Notes

A Deep Sample was also taken, results are as follows: TP = 121 ug/L, ALK = 201mg/L, Nitrates = 230mg/L

Report describes conditions at the time the sample was collected.

Approved by

Jaimee Conroy

Date _____

Mrs. Jaimee Conroy, Technical Services Manager

FROM YOUR **WQ PRO** DEALER



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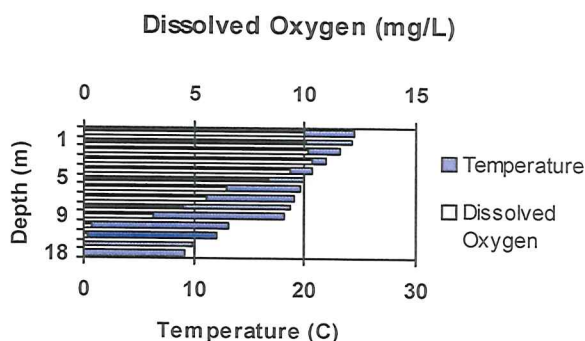
LAKE CHECK Water Quality Monitoring Report

2017422

Customer	Waterbody	Sample Information
Fremont Lake	Fremont	Date: 9/25/2017
		Site: Middle

On-Site Results

Depth (m)	Temperature (degrees C)	Dissolved Oxygen	
		mg/L	%
0	24.5	10.0	120
1	24.3	10.0	120
2	23.2	10.2	119
3	21.9	10.4	118
4	20.7	9.3	105
5	19.9	8.4	92
6	19.6	6.5	72
7	19.1	5.6	66
8	18.7	4.4	48
9	18.2	3.1	33
10	13.2	0.3	4
12	12.1	0.2	2
15	9.8	0.1	1
18	9.2	0.0	0



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	501	uS/cm	
Total Dissolved Solids	329	mg/L	Moderate concentration of dissolved salts
pH	9.1	S.U.	Water is slightly alkaline
Alkalinity	158	mg CaCO3/L	Water is hard
Total Phosphorus	25	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	46	mesotrophic
Based on Total Phosphorus	46	mesotrophic
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.
- pH is above desirable limits!
- Sample is somewhat phosphorus enriched. Create natural buffer between lawn & lakeshore.
- Deep water sample indicates possible internal loading of nutrients.
- REPEAT LakeCheck NEXT YEAR!

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- WARNING. condition requires immediate attention.
 - CAUTION. condition requires further evaluation.
 - OK. condition within acceptable limits.
 - NEUTRAL. condition neither good nor bad.

Notes

Results from other Test below Thermocline: TP = 14ug/L, ALK = 159 mg/L, Nitrates = 230 mg/L

Report describes conditions at the time the sample was collected.

Approved by

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