



AQUATIC CONSULTING & TESTING, INC.

1525 W. University Drive, Suite 106
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Lic. No. AZ0003

04 March 2024

Ms. Fran Pawlak, Executive Director
Dobson Ranch HOA
2719 South Reyes
Mesa, Arizona 85202

February 2024 Lake Report

The following abbreviated report presents the results of field inspections on the Dobson Ranch lakes for the month of February 2024. This report summarizes data collected under the revised program initiated in 2019 that includes comprehensive testing of one-half of the lakes on a monthly basis from March through October and bi-weekly field inspections twice per month throughout the year. Therefore, this report provides visual inspection and field data for Lakes 1-8 completed during the month. Field sheets for the inspections are also included. Additionally, special *E. coli* and total phosphorus data are presented for Lake 8.

February 2024 Report Narrative Summary

The following pages provide a summary of the monthly survey results. A brief narrative description is provided for each lake.

Lake 1

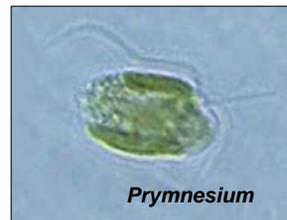
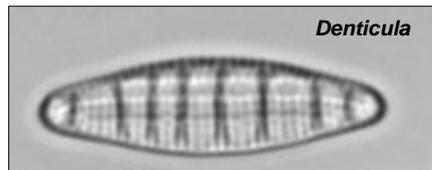
The Lake 1 temperature remained low and ranged from a high of 16.9 C to a low of 14.1 C. Water pH was 8.2-8.3 SU indicating low to moderate algae density. Dissolved oxygen (9.3-11.2 mg/L) was satisfactory for the fishery and fish activity appeared normal. Increases in dissolved oxygen concentration frequently occur during winter because of reduced respiration and decomposition rates at colder temperatures and the ability of cold water to hold more dissolved oxygen than warm water. Transparency was improved at over one meter and turbidity ranged from 2.9-3.4 NTU. Fountains were in service throughout the reporting period.

Waterfowl mean density was less than two birds per acre (<2/A) which is considered excellent (Arizona Game & Fish Department rating system shown below). No cormorants were noted. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

Waterfowl Density Ranking System (AZG&FD)

No. waterfowl per acre	Ranking
<3	Excellent
3-4	Good
5-6	Fair
>6	Poor

No abnormal algae growth or submerged weeds were observed. The diatom, *Denticula*, dominated the phytoplankton. Cell density was very low. No golden algae (*Prymnesium parvum* or related species) were detected.

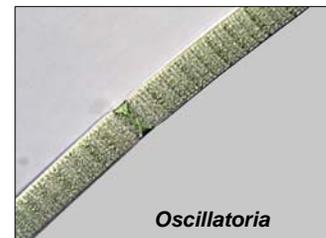


Lake 2

The water temperature of Lake 2 was 14.0-16.9 C. Water pH ranged from 8.0 to 8.2 SU indicating probable low algae density. Dissolved oxygen (9.9-10.2 mg/L) was satisfactory for the fishery and fish activity appeared normal. Transparency was approximately one meter and turbidity was typical at 3.7-4.7NTU. Fountains were in operation.

About two to five waterfowl per acre (2-5/A) were observed and the density is considered excellent to fair for an urban lake. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No abnormal algae growth or submerged weeds were observed. The dominant alga was *Oscillatoria*. Total cell density was low in the lake. No golden algae (*Prymnesium parvum* or related species) were detected.



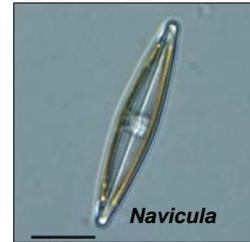
Lake 3

Lake temperature range was 14.1-16.5 C. Water pH ranged from 8.1 to 8.3 SU. Dissolved oxygen concentration ranged from 9.7-10.5 mg/L and remained satisfactory for the fishery. Fish activity appeared normal. Transparency was stable at just under one meter. Turbidity was stable, ranging from 4.2 to 4.9 NTU. Fountains were operating throughout the reporting period.

Waterfowl density ranged from eight to nine birds per acre (8-9/A); a "poor" rating. Minimal cormorants were observed. Decreased numbers of waterfowl was not expected

during the migratory season. Adult midge flies did not appear to produce any nuisance issues o lakeside residents or visitors.

No abnormal algae growth or submerged weeds were observed. *Navicula* was the dominant alga. Very low total phytoplankton density prevented any problems. No golden algae (*Prymnesium parvum* or related species) were detected.



Lake 4

The temperature of Lake 4 was 14.0-16.3 C. Water pH was moderate at 8.2-8.3 SU and indicated a low to moderate algae density. Dissolved oxygen (10.1 mg/L) was satisfactory for the fishery and fish activity appeared normal. Transparency was slightly over one meter and turbidity remained low (4.2-5.5 NTU). Fountains were in operation.

Waterfowl density was three per acre (3/A) which is considered good. No cormorant issues were reported. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

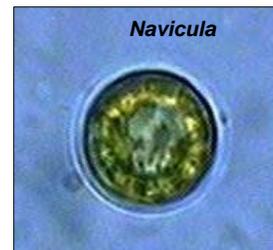
No abnormal algae growth or submerged weeds were observed. The diatom *Navicula*, was the dominant form. This alga is unlikely to cause any issues. Total phytoplankton density also was relatively low. No golden algae (*Prymnesium parvum* or related species) were detected.

Lake 5

Lake temperature ranged from 13.8-16.4 C during the month. Water pH was 8.2 SU, indicative of a low to moderate algal density. Dissolved oxygen (9.4-10.1 mg/L) was more than satisfactory for the fishery and fish activity appeared normal. Transparency was just under one meter and turbidity ranged from 3.9-4.2 NTU.

Waterfowl density was about four to nine birds per acre (4-9/A); good to poor by the AZG&F ranking system. Few cormorants were observed. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No abnormal algae growth or submerged weeds were observed. The dominant algae was, *Cyclotella*. The total cell density was very low. No golden algae (*Prymnesium parvum* or related species) were detected.



Lake 6

The temperature of Lake 6 ranged from 13.9-16.8 C during the reporting period. Water pH was variable and elevated, ranging from a low of 8.3 to a high of 8.4 SU, indicating moderate algae density. Dissolved oxygen (9.3-11.4 mg/L) was more than satisfactory for the fishery and fish activity appeared normal. Turbidity ranged from 5.6-11.5 NTU during the month and transparency was less than one meter. Data indicate increased algal growth.

Waterfowl density was approximately six (6/A) which is considered poor. Cormorants were occasionally observed. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

No abnormal algae growth (other than increased density) or submerged weeds were observed. The dominant alga was the diatom (Bacillariophyta) unicell, *Cyclotella*. The alga is not typically operationally problematic and no issue occurred. Golden algae (*Prymnesium parvum* or related species) were not detected.

Lake 7

Lake temperature ranged from 14.1 to 16.8 C. Water pH was 8.2 SU during the reporting period SU. Dissolved oxygen ranged from 9.3 to 10.0 mg/L and was more than satisfactory for the fishery. Fish activity appeared normal. Transparency was about one meter, with turbidity of 2.8-3.4 NTU. Fountains were in operation.

Waterfowl density was about one bird per acre (~1/A); excellent according to the Arizona Game & Fish Department rating system. No cormorants were noted. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors.

The dominant suspended algae in the lake were again a variety of unicellular green flagellates. Golden algae was not detected in the lake during the reporting period.

Lake 8

Lake temperatures ranged from 14.1 to 16.9 C during the month. Water pH was 8.2-8.3 SU. Dissolved oxygen concentrations were 10.0-10.1 mg/L and were satisfactory for the fishery. Fish activity appeared normal. Transparency was about one meter and turbidity correspondingly measured 4.2 to 5.6 NTU. Aerators were not in operation.

Waterfowl density was variable; about seven birds per acre (7/A). The rating would be considered poor based on the Arizona Game & Fish Department rating system. Cormorants were not observed. Adult midge flies did not appear to produce any nuisance issues to lakeside residents or visitors. The aeration system was not operational during the reporting period.

No submerged weeds were observed. The phytoplankton was dominated by diatoms (*Synedra* and *Navicula*). Golden algae was not identified during the reporting period.

Special Testing

E. coli bacteria and total phosphorus were measured in Lake 8 on two dates during the month. Data are presented below.

Date	<i>E. coli</i> , MPN/100 mL)	Phosphorus, mg/L
02-07-24	10	0.043
02-22-24	11	0.070

The measured bacteria concentrations are below the maximum levels established for partial and full body contact recreation by the State.

The table at the conclusion of the report summarizes phosphorus concentrations in Lake 8 during the recent study period. Noting the Phoslock[®] application occurred on 29 November 2021, no dramatic reduction in phosphorus is shown. However, the impact may be more long-term if it reduces recycling of phosphorus from the sediment. Data collection will be continued.

An application of 325 Kg of SchlixX Plus[®] was made in early November. The product is designed to degrade organic sludge at the lake bottom, while inactivating and preventing phosphorus recycling. The product was supplied by and application was assisted and supervised by the manufacturer (Oase, Horstel Germany) at no cost to Dobson Association. Sludge depth and phosphorus concentrations will be periodically monitored to track the success of the application.

Next Month:

Lakes 1-4 are scheduled for comprehensive monitoring starting in March. All lakes will be visually inspected and field data collected two times during the month and checked for golden algae weekly during the peak season. Additional monitoring of Lake 8 phosphorus and *E. coli* will continue.

Respectfully:

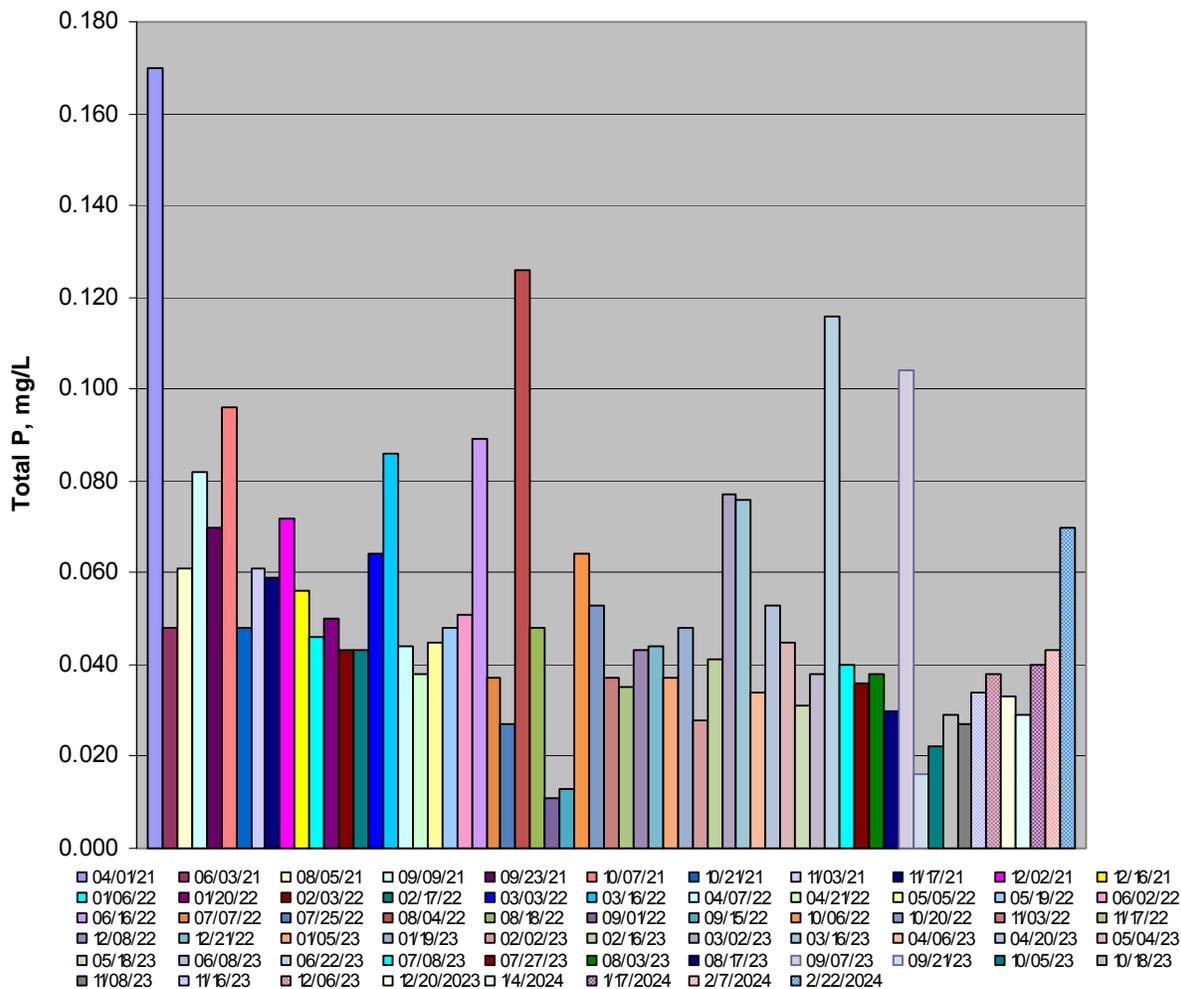
Aquatic Consulting & Testing, Inc.



Frederick A. Amalfi, Ph.D., C.L.M.



TOTAL PHOSPHORUS LAKE 8



SUPPORTING DOCUMENTATION

- Laboratory reports
- Field Inspection Sheets
- Pesticide application documents



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Lic. No. AZ0003

GOLDEN ALGAE REPORT

Client: Dobson Ranch Association
2719 South Reyes Road
Mesa, AZ 85202

Date Submitted: 02/07/24
Date Reported: 03/01/24

Attn: Fran Pawlak, Executive Director

Project: Monthly Lake 1-8 Monitorin

RESULTS

Client ID: Lake 1
ACT Lab No.: CG00893

Sample Type: Surface Water
Sample Time: 02/07/24 06:50

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Turbidity	02/07/24	02/07/24	180.1	0.1	2.9	NTU	MJ

Client ID: Lake 2
ACT Lab No.: CG00894

Sample Type: Surface Water
Sample Time: 02/07/24 07:00

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Turbidity	02/07/24	02/07/24	180.1	0.1	4.7	NTU	MJ

Client ID: Lake 3
ACT Lab No.: CG00895

Sample Type: Surface Water
Sample Time: 02/07/24 07:05

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Turbidity	02/07/24	02/07/24	180.1	0.1	4.9	NTU	MJ

Client ID: Lake 4
ACT Lab No.: CG00896

Sample Type: Surface Water
Sample Time: 02/07/24 07:15

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Turbidity	02/07/24	02/07/24	180.1	0.1	5.5	NTU	MJ

RESULTS

Client ID: Lake 5
ACT Lab No.: CG00897

Sample Type: Surface Water
Sample Time: 02/07/24 07:20

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Turbidity	02/07/24	02/07/24	180.1	0.1	3.9	NTU	MJ

Client ID: Lake 6
ACT Lab No.: CG00898

Sample Type: Surface Water
Sample Time: 02/07/24 07:30

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Turbidity	02/07/24	02/07/24	180.1	0.1	12.	NTU	MJ

Client ID: Lake 7
ACT Lab No.: CG00899

Sample Type: Surface Water
Sample Time: 02/07/24 07:40

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Turbidity	02/07/24	02/07/24	180.1	0.1	3.4	NTU	MJ

Client ID: Lake 8
ACT Lab No.: CG00900

Sample Type: Surface Water
Sample Time: 02/07/24 07:50

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/07/24	02/07/24	P/C Microscopy	1	Absent	Pres/Abs	FAA
Phosphorus, Total	02/23/24	02/26/24	365.3	0.010	0.043	mg/L as P	DW
E. coli, Colilert	02/07/24	02/08/24	SM 9223 B	1	10	MPN/100 mL	MEW
Turbidity	02/07/24	02/07/24	180.1	0.1	5.6	NTU	MJ

RESULTS

Explanation of Terms:

- Absent = No golden algae* were detected in the submitted sample.
Present 1 = Golden algae* were detected, but rarely observed in the submitted sample.
Present 2 = Golden algae* were detected and commonly observed in the submitted sample.
Present 3 = Golden algae* were detected and were the dominant algae in the submitted sample.

**Prymnesium parvum or toxin producing related species.*

na

Reviewed by: _____



Frederick A. Amalfi, Ph.D.

Laboratory Director



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Lic. No. AZ0003

GOLDEN ALGAE REPORT

Client: Dobson Ranch Association
2719 South Reyes Road
Mesa, AZ 85202

Date Submitted: 02/13/24
Date Reported: 02/15/24

Attn: Fran Pawlak, Executive Director

Project: Monthly Lake 1-8 Monitorin

RESULTS

Client ID: Lake 1
ACT Lab No.: CG01017

Sample Type: Surface Water
Sample Time: 02/13/24 08:00

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

Client ID: Lake 2
ACT Lab No.: CG01018

Sample Type: Surface Water
Sample Time: 02/13/24 08:10

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

Client ID: Lake 3
ACT Lab No.: CG01019

Sample Type: Surface Water
Sample Time: 02/13/24 08:15

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

Client ID: Lake 4
ACT Lab No.: CG01020

Sample Type: Surface Water
Sample Time: 02/13/24 08:20

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

RESULTS

Client ID: Lake 5
ACT Lab No.: CG01021

Sample Type: Surface Water
Sample Time: 02/13/24 08:30

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

Client ID: Lake 6
ACT Lab No.: CG01022

Sample Type: Surface Water
Sample Time: 02/13/24 08:45

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

Client ID: Lake 7
ACT Lab No.: CG01023

Sample Type: Surface Water
Sample Time: 02/13/24 08:55

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

Client ID: Lake 8
ACT Lab No.: CG01024

Sample Type: Surface Water
Sample Time: 02/13/24 09:05

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	02/13/24	02/13/24	P/C Microscopy	1	Absent	Pres/Abs	FAA

Explanation of Terms:

- Absent = No golden algae* were detected in the submitted sample.
Present 1 = Golden algae* were detected, but rarely observed in the submitted sample.
Present 2 = Golden algae* were detected and commonly observed in the submitted sample.
Present 3 = Golden algae* were detected and were the dominant algae in the submitted sample.

**Prymnesium parvum* or toxin producing related species.

Reviewed by: _____


Frederick A. Amalfi, Ph.D.
Laboratory Director

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 lab@aquaticconsulting.com

Chain of Custody

Client Project Info:

Lake 1-8 Monthly Monitoring
 Dobson Ranch Association

AC&T Client Reporting Information:

Dobson Ranch Association
 2719 South Reyes
 Mesa, AZ 85202
 Attn: Fran Paqwlak, Community Manager
 P: 480-831-8314
 E:

Sample Containers # / Preservation:

Page 1 of 1

AC&T Laboratory Sample Identification

Sample Location ID:	Date:	Time:	Matrix:	P-1	NO3+NO2	TKN-Elec	Ammonia (NH3)	E Coll	#Chl/Pheo	Algae - ID + #	Golden algae	Turb	Field Measurements: pH, Temp, O2	None Preserved	Na2S2O3 (Sterile)	HNO3 (Nitric)	H2SO4 (Sulfuric)	Lugols	Other:	
Lake 1	02-13-24	0800	SW								X			1						CG01017
Lake 2		0810	SW								X			1						1018
Lake 3		0815	SW								X			1						1019
Lake 4		0820	SW								X			1						1020
Lake 5		0830	SW								X			1						1021
Lake 6		0845	SW								X			1						1022
Lake 7		0855	SW								X			1						1023
Lake 8		0905	SW								X			1						1024

AC&T Sampler:

A C & T Sample Receipt:

Project Location: Dobson Ranch

Total # Containers: 8

Received Intact: YES NO

Bottles Preserved: 8

Samples On Ice: YES NO

Ice Type: WET BLUE

Sample Receipt Temperature: Ambient 14-15C

1. RELINQUISHED BY:

Signature: *[Signature]*
 Print Name: AMALY
 Date: 02-13-24 Time: 1345

3. RELINQUISHED BY:

Signature: _____
 Print Name: _____
 Date: _____ Time: _____

2. RECEIVED BY:

Signature: *[Signature]*
 Print Name: mj
 Date: 02/13/24 Time: 1345

4. RECEIVED BY:

Signature: _____
 Print Name: _____
 Date: _____ Time: _____



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Lic. No. AZ0003

LABORATORY REPORT

Client: Dobson Ranch Association
2719 South Reyes Road
Mesa, AZ 85202

Date Submitted: 02/22/24
Date Reported: 03/07/24

Attn: Fran Pawlak, Executive Director

Project: Monthly Lake 1-8 Monitoring

RESULTS

Client ID: Lake 1
ACT Lab No.: CG01249

Sample Type: Surface Water
Sample Time: 02/22/24 07:00

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Turbidity	02/22/24	02/22/24	180.1	3.4	NTU

Client ID: Lake 2
ACT Lab No.: CG01250

Sample Type: Surface Water
Sample Time: 02/22/24 07:05

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Turbidity	02/22/24	02/22/24	180.1	3.7	NTU

Client ID: Lake 3
ACT Lab No.: CG01251

Sample Type: Surface Water
Sample Time: 02/22/24 07:10

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Turbidity	02/22/24	02/22/24	180.1	4.2	NTU

Client ID: Lake 4
ACT Lab No.: CG01252

Sample Type: Surface Water
Sample Time: 02/22/24 07:20

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Turbidity	02/22/24	02/22/24	180.1	5.9	NTU

RESULTS

Client ID: Lake 5
ACT Lab No.: CG01253

Sample Type: Surface Water
Sample Time: 02/22/24 07:25

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Turbidity	02/22/24	02/22/24	180.1	4.3	NTU

Client ID: Lake 6
ACT Lab No.: CG01254

Sample Type: Surface Water
Sample Time: 02/22/24 07:30

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Turbidity	02/22/24	02/22/24	180.1	5.6	NTU

Client ID: Lake 7
ACT Lab No.: CG01255

Sample Type: Surface Water
Sample Time: 02/22/24 07:40

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Turbidity	02/22/24	02/22/24	180.1	2.8	NTU

Client ID: Lake 8
ACT Lab No.: CG01256

Sample Type: Surface Water
Sample Time: 02/22/24 07:45

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Golden Algae	02/22/24	02/22/24	P/C Microscopy	Absent	Pres/Abs
Phosphorus, Total	03/06/24	03/06/24	365.3	0.070	mg/L as P
E. coli, Colilert	02/22/24	02/23/24	SM 9223 B	11	MPN/100 mL
Turbidity	02/22/24	02/22/24	180.1	4.2	NTU

Reviewed by:



Frederick A. Amalfi, Ph.D.
Laboratory Director

Aquatic Consulting & Testing, Inc.
 1525 W. University Drive, Suite 106
 Tempe, AZ 85281
 480-921-8044 fax: 480-921-0049
 lab@aquaticconsulting.com

Chain of Custody

Client Project Info:

Lake 1-8 Monthly Monitoring
 Dobson Ranch Association

AC&T Client Reporting Information:

Dobson Ranch Association
 2719 South Reyes
 Mesa, AZ 85202
 Attn: Fran Paqwlak, Community Manager
 P: 480-831-8314

E: *AM*

AC&T Sampler:

Sample Location ID:	Date:	Time:	Matrix:
Lake 1	2-22-24	7:00	SW
Lake 2		7:05	SW
Lake 3		7:10	SW
Lake 4		7:20	SW
Lake 5		7:25	SW
Lake 6		7:30	SW
Lake 7		7:40	SW
Lake 8		7:45	SW

Field Measurements:	pH, Temp, O2	Turb	Golden algae	Algae - ID + #	#Chl/Pheo	E. Coll	Ammonia (NH3)	TKN-Elec	NO3+NO2	P-T
None Preserved		X	X							X
N2S2O3 (Stvrlc)		X	X							
HNO3 (Nhr/c)		X	X							
H2SO4 (Sulfuric)		X	X							
Lugols		X	X							
Other:		X	X							

Sample Containers # / Preservation:	AC&T Laboratory Sample Identification
None Preserved	06901249
12A	1250
12A	1251
12A	1252
12A	1253
12A	1254
12A	1255
12A	1254

Project Location:	A C & T Sample Receipt:	
Dobson Ranch	Total # Containers:	18
PO#:	Received Intact:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Lakes Contract	# Bottles Preserved:	2
Notes:	Samples On Ice:	YES <input type="checkbox"/> WET <input type="checkbox"/> BLUE <input type="checkbox"/>
	Ice Type:	
	Sample Receipt Temperature:	19°C

1. RELINQUISHED BY:	
Signature:	<i>Andrew Murrett</i>
Print Name:	Andrew Murrett
Date:	2/27/24
Time:	12:45

3. RELINQUISHED BY:	
Signature:	
Print Name:	
Date:	
Time:	

2. RECEIVED BY:	
Signature:	<i>no</i>
Print Name:	mj
Date:	02/22/24
Time:	12:45

4. RECEIVED BY:	
Signature:	
Print Name:	
Date:	
Time:	



AQUATIC CONSULTING & TESTING, INC.

1525 W. University Drive, Suite 106
P.O. Box 1510
Tempe, Arizona 85281
Phone: (480) 921-8044 • Fax: (480) 921-0049

Lic. No. AZ0003

GOLDEN ALGAE REPORT

Client: Dobson Ranch Association
2719 South Reyes Road
Mesa, AZ 85202

Date Submitted: 02/28/24
Date Reported: 03/05/24

Attn: Fran Pawlak, Executive Director

Project: Monthly Lake 1-8 Monitorin

RESULTS

Client ID: Lake 1
ACT Lab No.: CG01365

Sample Type: Surface Water
Sample Time: 02/28/24 06:30

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

Client ID: Lake 2
ACT Lab No.: CG01366

Sample Type: Surface Water
Sample Time: 02/28/24 06:40

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

Client ID: Lake 3
ACT Lab No.: CG01367

Sample Type: Surface Water
Sample Time: 02/28/24 06:45

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

Client ID: Lake 4
ACT Lab No.: CG01368

Sample Type: Surface Water
Sample Time: 02/28/24 06:50

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

RESULTS

Client ID: Lake 5
ACT Lab No.: CG01369

Sample Type: Surface Water
Sample Time: 02/28/24 06:55

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

Client ID: Lake 6
ACT Lab No.: CG01370

Sample Type: Surface Water
Sample Time: 02/28/24 07:00

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

Client ID: Lake 7
ACT Lab No.: CG01371

Sample Type: Surface Water
Sample Time: 02/28/24 07:10

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

Client ID: Lake 8
ACT Lab No.: CG01372

Sample Type: Surface Water
Sample Time: 02/28/24 07:15

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MRL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	03/04/24	03/04/24	P/C Microscopy	1	Absent	Pres/Abs	ZH

Explanation of Terms:

- Absent = No golden algae* were detected in the submitted sample.
Present 1 = Golden algae* were detected, but rarely observed in the submitted sample.
Present 2 = Golden algae* were detected and commonly observed in the submitted sample.
Present 3 = Golden algae* were detected and were the dominant algae in the submitted sample.

**Prymnesium parvum* or toxin producing related species.

Reviewed by: _____


Frederick A. Amalfi, Ph.D.
Laboratory Director

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 Tempe, AZ 85281
 480-921-8044 fax: 480-921-0049
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Chain of Custody

Client Project Info:

Lake 1-8 Monthly Monitoring
 Dobson Ranch Association

AC&T Client Reporting Information:

Dobson Ranch Association
 2719 South Reyes
 Mesa, AZ 85202
 Attn: Fran Paqwiak, Community Manager
 P: 480-831-8314

AC&T Sampler:

ANA

Sample Location ID:	Date:	Time:	Matrix:
Lake 1	2/28/14	630	SW
Lake 2		640	SW
Lake 3		645	SW
Lake 4		650	SW
Lake 5		655	SW
Lake 6		700	SW
Lake 7		710	SW
Lake 8		715	SW

Field Measurements:	Turb	Golden algae	Algae - ID + #	#Chl/Phco	E. Coll	Ammonia (NH3)	TKN-Elec	NO3+NO2	P-T
pH, Temp, O2									
	X	X							
	X	X							
	X	X							
	X	X							
	X	X							
	X	X							
	X	X							

Sample Containers # / Preservation:	None Preserved	Na2S2O3 (Sterile)	HNO3 (Nitric)	H2SO4 (Sulfuric)	Lugols	Other:
	1					
	1					
	1					
	1					
	1					
	1					
	1					

AC&T Laboratory Sample Identification

CG01365
 1366
 1367
 1368
 1369
 1370
 1371
 1372

Project Location:	A C & T Sample Receipt:		1. RELINQUISHED BY:		3. RELINQUISHED BY:	
Dobson Ranch	Total # Containers:	8	Signature:	<i>Andrew M. M... [Signature]</i>		Signature:
PO#: Lakes Contract	Received Intact:	YES <input checked="" type="radio"/> NO <input type="radio"/>	Print Name:	<i>Andrew M. M... [Signature]</i>		Print Name:
	# Bottles Preserved:	Non: X	Date:	2/28/14	Time: 12:50	Date:
Notes:	Samples On Ice:	YES <input checked="" type="radio"/> NO <input type="radio"/>	2. RECEIVED BY:		4. RECEIVED BY:	
	Ice Type:	WET	Signature:	<i>MJ [Signature]</i>		Signature:
	Sample Receipt Temperature:	21°C	Print Name:	<i>MJ [Signature]</i>		Print Name:
			Date:	02/28/14	Time: 1250	Date:

DOBSON RANCH LAKES

Bi-Monthly Lake Inspection

Date: 2/17/24
 By: Am

Lake	Temp	Dis. oxygen	pH	Clarity	Algae	Submerged weeds	Fish behavior	Waterfowl density	Insect activity	Mechanical issues
1	14.1 c	9.3 mg/L	8.7 su	SDz 292 NTU	<input type="checkbox"/> Suspended <input checked="" type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 36 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
2	14.0 c	10.7 mg/L	8.0 su	SDz 47 NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 29 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
3	14.1 c	9.7 mg/L	8.1 su	SDz 49 NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 33 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
4	14.0 c	10.1 mg/L	8.2 su	SDz 55 NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 11 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
5	13.8 c	10.1 mg/L	8.7 su	SDz 394 NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 19 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
6	13.9 c	11.4 mg/L	8.4 su	SDz 77.5 NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 34 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
7	14.1 c	9.3 mg/L	8.7 su	SDz 342 NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 38 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
8	14.1 c	10.0 mg/L	8.7 su	SDz 569 NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. 14 No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Aerators <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service

Notes and recommendations for treatment/operation:

DOBSON RANCH LAKES Bi-Monthly Lake Inspection

Date: 2/22/24
By: AM

Lake	Temp	Dis. oxygen	pH	Clarity	Algae	Submerged weeds	Fish behavior	Waterfowl density	Insect activity	Mechanical issues
1	<u>16.9</u> c	<u>11.2</u> mg/L	<u>8.3</u> su	SDz <u>3.4</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>30</u> No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
2	<u>16.9</u> c	<u>9.9</u> mg/L	<u>8.2</u> su	SDz <u>2.7</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>11</u> No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
3	<u>16.5</u> c	<u>10.5</u> mg/L	<u>8.3</u> su	SDz <u>4.2</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>34</u> No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
4	<u>16.3</u> c	<u>10.1</u> mg/L	<u>8.3</u> su	SDz <u>5.9</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>9</u> No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
5	<u>16.4</u> c	<u>9.4</u> mg/L	<u>8.2</u> su	SDz <u>4.2</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>27</u> No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
6	<u>16.8</u> c	<u>9.3</u> mg/L	<u>8.2</u> su	SDz <u>5.6</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>38</u> No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
7	<u>16.8</u> c	<u>10.0</u> mg/L	<u>8.2</u> su	SDz <u>2.8</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>32</u> No/A	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input checked="" type="checkbox"/> No service
8	<u>16.9</u> c	<u>10.1</u> mg/L	<u>8.3</u> su	SDz <u>4.2</u> NTU	<input type="checkbox"/> Suspended <input type="checkbox"/> Floating <input type="checkbox"/> Bottom <input type="checkbox"/> Attached	<input type="checkbox"/> Present <input checked="" type="checkbox"/> Absent	<input type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>14</u> No/A	<input type="checkbox"/> Normal <input type="checkbox"/> Infestation	Aerators <input type="checkbox"/> Operating <input checked="" type="checkbox"/> No service

Notes and recommendations for treatment/operation:

8) Aerators out