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02 June 2023

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

May 2023 Lake Report

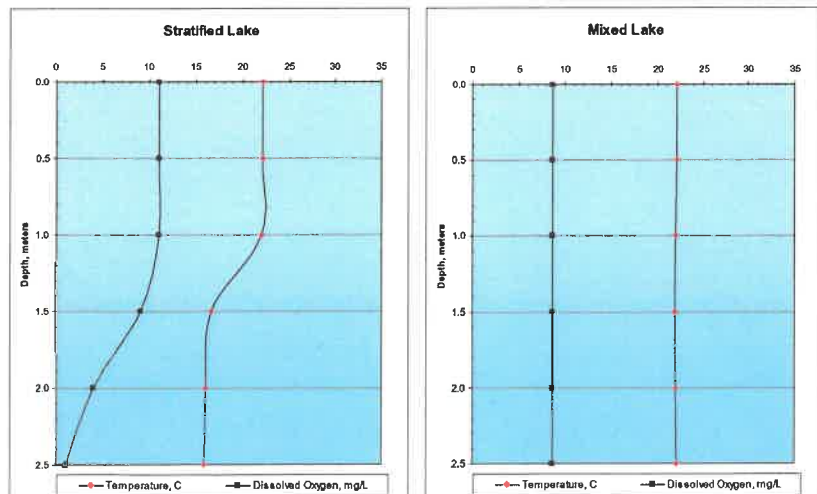
The following report presents the results of field inspections on the Dobson Ranch lakes for the month of May 2023. This report summarizes data collected under the updated program started in 2019 and expanded in 2020 that includes comprehensive testing of one-half of the lakes on a monthly basis from March through October and bi-weekly field inspections twice per month throughout the year. Comprehensive testing on Lakes 1-4 was completed during the month and laboratory reports are provided. Comparison to the last comprehensive test (March 2023) are provided for those lakes. Field sheets for the inspection weeks are also included. Additional data requested for Lake 8 are provided at the end of the narrative report.

A number of tools have been used to evaluate and quantify the water quality of each lake. These include: Arizona Department of Environmental Quality Numeric Targets for Urban Lakes, the Carlson Trophic Status Index (TSI), and a Lake Report Card based on that used by Arizona Game and Fish Department that was developed by Aquatic Consulting & Testing, Inc.

The following provides brief descriptions of some of the more important parameters.

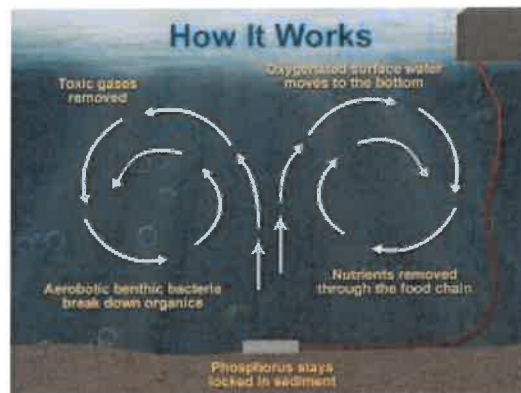
Temperature and Oxygen

Density differences in water caused by temperature produce a physical barrier to the exchange of gases and nutrients between water layers. Typically warmer (less dense) water rests above deeper, cooler (more dense) water. Deep waters can become anoxic (oxygen poor) and cause the formation and release of



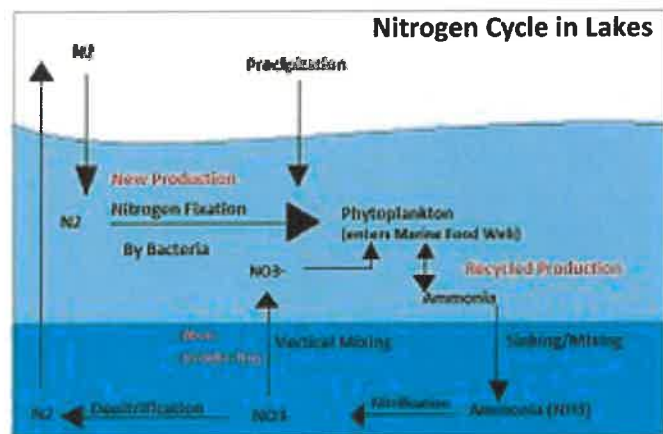
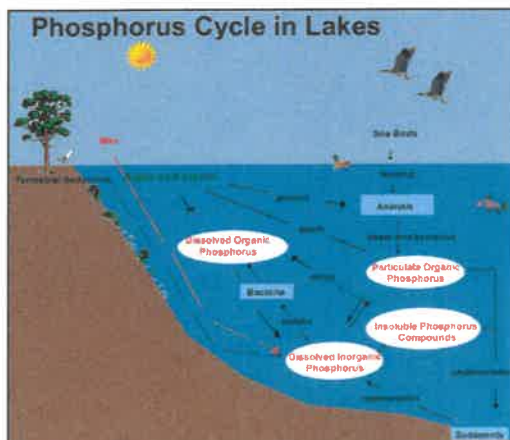
toxic gases as hydrogen sulfide and ammonia, and the release of plant nutrients as phosphates. A vertically mixed lake rarely suffers from such issues.

Aeration systems are designed to circulate and distribute oxygen vertically in the water column. Circulation is necessary for two primary purposes: (1) to deliver oxygen to the deeper waters for fish survival and (2) to maintain an aerobic environment throughout the lake to prevent the release and distribution of phosphates, ammonia, and sulfide from the anaerobic sediment.



Nutrients

Algae are plants and require nitrogen and phosphorus for growth. In the desert southwest, large growths of planktonic algae typically form in the summer when total phosphorus concentrations are above 0.030 mg/L. Nitrogen values usually need to be at least 10 times that of phosphorus and in a soluble, usable (nitrate or ammonia) form to stimulate algae growth. Phosphorus and nitrogen cycles in the aquatic environment are illustrated below.



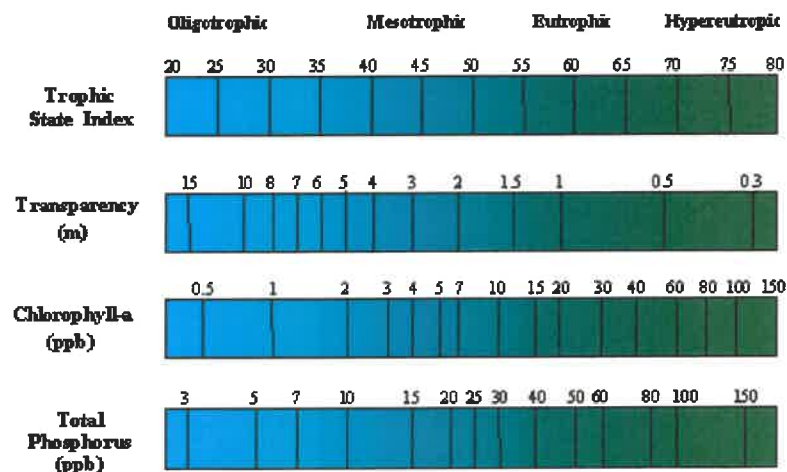
Algae and Aquatic Weeds

Algae are beneficial to a lake as they provide food for aquatic organisms and produce oxygen. However, some algae are undesirable and an overabundance of algae reduces aesthetic appeal and interferes with the ecological balance of the environment. Large die offs of algae can deplete dissolved oxygen in the water via bacterial utilization of the gas during decomposition of the plant biomass. Blue-green (Cyanophyta) algae are least desirable because some forms can form stringers (long filaments) and large colonies (masses) and are difficult to chemically manage because of their mucilaginous coatings.

Submerged weeds can be beneficial because they also produce oxygen and provide habitat and shelter for aquatic animals. However, an overabundance of weeds reduces aesthetic appeal, interferes with fishing and boating activities, interferes with the ecological balance of the environment, and can also deplete dissolved oxygen if a rapid die-off occurs.

Trophic Status Index

The Carlson Trophic Status Index (TSI) is a series of calculations that attempt to put a numerical value on water quality. The more algae and greener a lake is, the more nutrients a lake has, and the less transparent the water becomes, the higher the trophic status and the greater the TSI value. Three values are calculated using the Secchi disk depth, total phosphorus concentration, and chlorophyll measurement to obtain an average TSI. Those lakes with relatively low TSI values are unproductive and termed oligotrophic. Those lakes with very high TSI values are classified as productive (eutrophic). Those lakes with TSI values falling in between are considered mesotrophic.



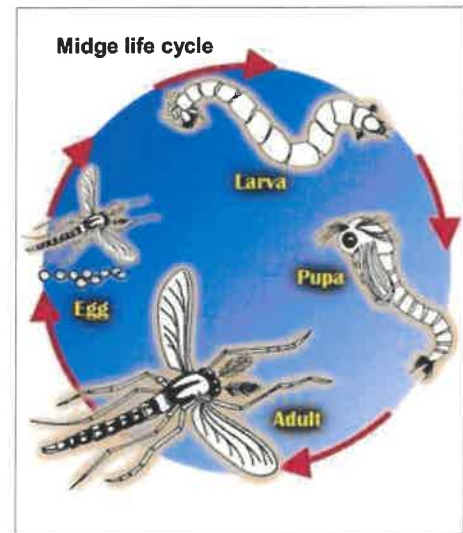
The Trophic Status report addendum provides each of these values for the sampling sites. For southern Arizona, a TSI of less than 60 is the target for reasonable aesthetic quality. Fisheries often flourish when TSI values are in the 55 to 65 range. Severe aesthetic and recreational problems occur when conditions result in TSI values of 80 or higher.

General Characteristics of Oligotrophic and Eutrophic Lakes

Condition	Oligotrophic	Eutrophic
Productivity	Low	High
Algae density	Low	High
Nutrient concentrations	Low	High
Hypolimnion oxygen content	High	Low
Sediment nutrient release	Low to none	High
Organic matter	Low	High
Light transparency	Deep	Shallow
Macrophyte (weed) density	Low	High

Midge flies

Midge flies are common inhabitants of most lakes. Adult females lay hundreds of eggs on the water surface. The eggs settle to the lake bottom and hatch in a few days. Larvae develop and grow in the superficial sediments over a three to four week period. In about 30 days the insect larvae become pupae, rise in the water column, and emerge as adult flies. The adults tend to swarm at dusk and dawn and become a nuisance. They fly into residents' eyes and mouths, congregate under eaves of houses, and leave a sticky messy residue when they die. Management techniques may include stocking of bottom-feeding fishes and application of bacterial or chemical larvicides. The primary control of midge flies has been stocking of fish that eat the larvae living in the lake sediment.



Waterfowl

The adverse impacts of excessive waterfowl include fecal matter deposition and public health issues, turf destruction, aesthetic detracting, and fish consumption. The Arizona Game and Fish Department has recently adopted the following classification for ducks counts (per acre) in urban fishing lakes: <3 (excellent), 3-4 (good), 5-6 (fair), and >6 (poor; relocate non-migratory).

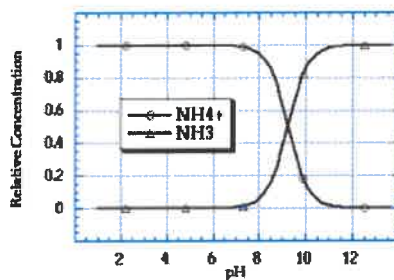
May 2023 Report Narrative Summary

The following pages provide a summary of the monthly survey results. Comprehensive analyses were conducted on Lakes 1-4 on 04 May 2023. A brief narrative description is provided for each lake. Data are additionally qualified in the Lake Report Card (See Supporting Documentation). Lakes 1-8 received visual examination and basic water quality testing on 04 and 18 May 2023.

Lakes 1-4

Lake 1

Lake 1 exhibited no thermal stratification and no significant loss of oxygen in the deep waters (see attached profiles). The surface dissolved oxygen concentration (7.1-8.3 mg/L) was above the target 6.0 mg/L concentration desired to protect the fishery and no fish stress was observed. Water pH was moderate at 8.2 to 8.3 SU and indicated a low to moderate suspended algae density. Low pH is advantageous because it prevents conversion of ammonium ions (NH_4^+) to toxic (to aquatic animals) ammonia (NH_3) gas (see chart below). Transparency (Secchi disk depth) was good at 1.38 m (4.5 ft) and turbidity was low at 1.9-4.7 NTU.



Alkalinity (140 mg/L as CaCO_3) and hardness (214 mg/L as CaCO_3) were fairly stable. Values are typical and expected from most waters in central Arizona. The total dissolved solids (mineral) concentration of the lake was good at 592 mg/L.

Waterfowl density ranged from one (1) to two (2) birds per acre which is considered excellent (Arizona Game & Fish Department rating system). No cormorants were observed.



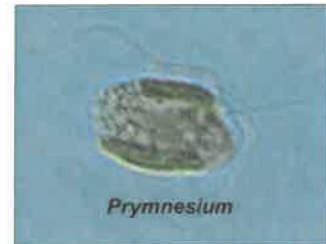
Midge fly density was quite low ($<40/\text{m}^2$) and should produce no issues to lakeside residents or visitors.

Bio-available nitrogen and total nitrogen decreased to 0.26 mg/L and 1.38 mg/L, respectively. Phosphorus concentration decreased to 0.013 mg/L. Ammonia was minimal at 0.08 mg/L. At ambient temperature and pH, no toxicity issues would result.

Chlorophyll concentration, indicative of algal biomass, increased, but remained very low at 2.24 ug/L. Algae density was correspondingly low (8.68×10^2 cells/mL). The dominant alga was *Chroomonas* (Cryptophyta unicellular flagellate). It is rarely problematic. The golden alga, *Prymnesium parvum*, was not observed. *P. parvum* can produce a toxin that destroys exposed cells in the gill tissue of fish, causing asphyxiation and death. No submerged weeds were observed.



The mean TSI value decreased from 47 to 45, with the lake remaining in the mesotrophic category. The lake may have improved clarity and become aesthetically more pleasing, but may have anoxia in the deep waters during the summer.



The *E. coli* concentration was 8 MPN/100 mL. The maximum bacteria level for full body contact (FBC=swimming) and partial body contact (PBC=fishing and boating) recreation, is 126/100 mL (30-day geometric mean). The single sample maxima are 235 and 575 for FBC and PBC recreation.

The Lake Report Card value for May 2023 was 52; up three (3) units from March, and moved into the “excellent” category. Low chlorophyll and phosphorus concentrations were primary factors for the increased score.

Lake 2

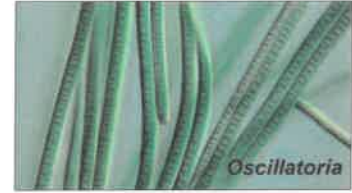
Lake 2 was vertically mixed. No substantial loss of oxygen in the deep waters occurred. (see attached profiles). The surface dissolved oxygen concentrations (6.5-7.7 mg/L) were above the target 6.0 mg/L concentration desired to protect the fishery and no fish stress was observed. Water pH was variable and in the range of 8.1-8.3 SU, and indicated a slight change in suspended (planktonic) algae density. Low pH is advantageous because it prevents conversion of ammonium ions (NH_4^+) to toxic (to aquatic animals) ammonia (NH_3) gas. Transparency (Secchi disk depth) improved to 1.10 m (3.5 ft), but turbidity increased to 7.1 to 8.4 NTU.

Alkalinity (135 mg/L as CaCO_3) and hardness (200 mg/L as CaCO_3) were relatively stable, but still elevated, as would be expected from most waters in central Arizona. The total dissolved solids (mineral) concentration increased to 548 mg/L.

Midge fly density was quite low ($<40/\text{m}^2$) and should produce no issues to lakeside residents or visitors. Maximum waterfowl density was two to three (2-3) birds per acre which is considered in the excellent range (Arizona Game & Fish Department rating system). No cormorants were noted.

Bio-available nitrogen concentration decreased to 0.26 mg/L. Total nitrogen decreased slightly to 1.49 mg/L. Phosphorus concentration decreased substantially to 0.019 mg/L; a low value. Ammonia concentration was 0.07 mg/L. At ambient temperature and pH, no toxicity issues would result.

Chlorophyll concentration, indicative of algal biomass, decreased to 1.20 ug/L. Algae density decreased to 1.69×10^3 cells/mL. *Chroomonas* was the dominant form. The alga is unlikely to cause problems. A small amount of *Oscillatoria*, a blue-green (Cyanophyta), filamentous alga was present. No potentially-toxic golden algae (*Prymnesium parvum* or related species) were found. *P. parvum* can produce a toxin that destroys exposed cells in the gill tissue of fish, causing asphyxiation and death. No submerged weeds were observed, including horned pondweed (*Zannichellia palustris*) and brittle naiad (*Najas marina*) that have been problematic in other lakes in the past.



The mean TSI value was 46 (range 32-59), moving the lake into the mesotrophic category. Mesotrophic lakes are typically moderately clear, but with a chance of anoxia in the deep water during the summer. They are more desirable for an urban lake in terms of aesthetics, but less supportive of a robust fishery.

The *E. coli* concentration was elevated at 345 MPN/100 mL, but met the partial body contact (fishing and boating) recreation standards.

The Lake Report Card value for May 2023 was 49, identical to the March assessment and maintaining the lake within the “good” category.

Lake 3

Lake 3 exhibited no thermal stratification (vertically mixed) and had no significant loss of oxygen in the deep waters (see attached profiles). The surface dissolved oxygen concentration (6.4-7.2 mg/L) met the minimum target of 6.0 mg/L desired to protect the fishery. No fish stress was observed. Water pH ranged from 8.1 to 8.3 SU and reflected a continuing decrease. Low pH is more advantageous because it prevents conversion of ammonium ions (NH_4^+) to toxic (to aquatic animals) ammonia (NH_3) gas. Transparency (Secchi disk depth) was 0.92 m (3.0 ft). Turbidity was moderate (5.6-8.9 NTU) during the month.

Waterfowl density was one (1) to four (4) birds per acre which is considered good (Arizona Game & Fish Department rating system). No cormorants were observed.

Midge fly density was low ($<40/\text{m}^2$) and should produce no issues to lakeside residents or visitors.

Alkalinity (162 mg/L as CaCO_3) and hardness (205 mg/L as CaCO_3) increased slightly and remained slightly elevated as typical and expected from most waters in central Arizona. The total dissolved solids (mineral) concentration of the lake increased to 532 mg/L.

Bio-available nitrogen concentration decreased to 0.29 mg/L, and total nitrogen decreased to 1.39 mg/L. Phosphorus concentration decreased to 0.023 mg/L. The

ammonia concentration was 0.07 mg/L and would not create any toxicity issues at ambient temperature and pH.

Chlorophyll concentration, indicative of algal biomass, decreased to 1.60 ug/L. Algae density decreased two order of magnitude to 2.10×10^2 cells/mL. The dominant alga was the blue-green colony, *Chroococcus*. No issues with the alga or other surface algae occurred at the low cell density. Golden algae (*Prymnesium parvum*) was not found during the month, following the remedial treatment in May.



The mean TSI value decreased by one (1) unit to 49 (range 35-60), with the lake remaining in the mesotrophic category.

The *E. coli* concentration was 43 MPN/100 mL and met partial and full body contact (swimming) recreation limits.

The Lake Report Card value for May 2023 was 47 a one-unit decrease compared to March 2023 and maintaining the lake in the "good" category. Dominance of blue-green algae accounted for the score reduction. .

Lake 4

Lake 4 was vertically mixed with little loss of oxygen in the deep water (see attached profiles). The dissolved oxygen concentrations were satisfactory at 6.8 to 7.8 mg/L for the fishery and fish activity appeared normal. Water pH ranged from 8.2-8.4 SU and indicated a low to moderate suspended algae density. Water transparency was 1.51 m (4.9 ft). Turbidity was moderate at 5.6 NTU.

Waterfowl density was three to four (3-4) birds per acre which is considered good to fair (Arizona Game & Fish Department rating system). No cormorants were noted. Midge fly density was quite low ($<40/m^2$) and should produce no issues to lakeside residents or visitors.

Nitrogen concentrations decreased from 0.49 to 0.26 mg/L bio-available nitrogen and from 1.62 to 1.39 mg/L total nitrogen. Phosphorus concentration decreased significantly to 0.015 mg/L. The ammonia concentration remained low (0.07 mg/L). At ambient pH and temperature, acute or chronic ammonia toxicity to fish would not occur.

Algae density was quite low at 1.68×10^3 cells/mL. The dominant alga was *Oscillatoria*. Although potentially problematic, cell density was too low for any issues to develop. The chlorophyll-a concentration (biomass indicator) decreased to 1.60 ug/L. The potentially toxic golden alga (*Prymnesium parvum*) was not present during the month.

The mean TSI value was 44 (range 35-54), moving the lake into the mesotrophic category. The value indicates the lake should be more desirable in terms of aesthetics, but possibly less supportive of a robust fishery.

The *E. coli* concentrations was 32 MPN/100 mL. The measurements met the bacteria maximum for full body contact (swimming) and partial body contact (fishing and boating) recreation.

The Lake Report Card value for May 2023 was 49, a six-unit increase, and keeping the lake in the “good” category.

Lakes 5-8

Lake 5

The Lake 5 temperature ranged from 25.0 to 27.4 C. Water pH was 8.2 SU indicating low to moderate algae density. Dissolved oxygen (6.3-6.7 mg/L) was satisfactory for the fishery and fish activity appeared normal. Decreases in dissolved oxygen concentration frequently occur during summer because of increased respiration and decomposition rates at warmer temperatures and the inability of warm water to hold as much dissolved oxygen as cold water. Transparency was improved at over one meter and turbidity ranged from 4.4 to 6.3 NTU. Fountains were in service throughout the reporting period.

Waterfowl mean density was four (4) per acre which is considered good (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.

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

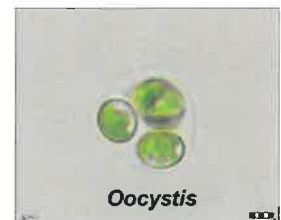


Lake 6

The water temperature of Lake 6 was 24.2-28.0 C. Water pH ranged from 8.6-8.7 SU indicating probable increasing algae density. Dissolved oxygen (8.4-8.6 mg/L) was satisfactory for the fishery and fish activity appeared normal. Transparency was approximately one meter and turbidity was atypical at 10.2-19.4 NTU. Fountains were in operation.

About three birds per acre (3/A) were observed and the density is considered good 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 algae were *Oocystis* (green colony) and *Synedra* (diatom). Total cell density was moderate in the lake. No golden algae (*Prymnesium*



parvum or related species) were detected during the reporting period.

Lake 7

Lake temperature range was 23.4 to 28.1 C. Water pH ranged from 8.7-8.9 SU. Dissolved oxygen concentration ranged from 7.7 to 9.3 mg/L and remained satisfactory for the fishery. Fish activity appeared normal. Transparency was improved at just over one meter. Turbidity was stable, ranging from 3.9 to 4.1 NTU. Fountains were operating throughout the reporting period.

Waterfowl density was less than one per acre (<1/A); an “excellent” rating. Minimal cormorants were observed. Decreased numbers of waterfowl was expected as the migratory season concluded. 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. During May, the green colony, *Coelastrum*, and the green flagellate, *Thoracomonas*, were the dominant algae. No golden algae (*Prymnesium parvum* or related species) were detected.



Lake 8

The temperature of Lake 8 was 23.4-28.2 C. Water pH was moderate at 8.2 SU and indicated a low to moderate algae density. Dissolved oxygen (6.0-7.9 mg/L) was satisfactory for the fishery and fish activity appeared normal. Transparency was over one meter and turbidity was unusually low (2.9-4.4 NTU). Fountains were in operation.

Waterfowl density was 15 to 6 birds per acre (5-6/A) which is considered poor. 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. Blue-green colonies (*Merismopedia*) and green colonies (*Scenedesmus*) dominated the phytoplankton. These algae can be problematic in terms of high turbidity water and surface scum. However, total phytoplankton density appeared moderate and no significant issues occurred. No golden algae (*Prymnesium parvum* or related species) were detected.



Special Testing

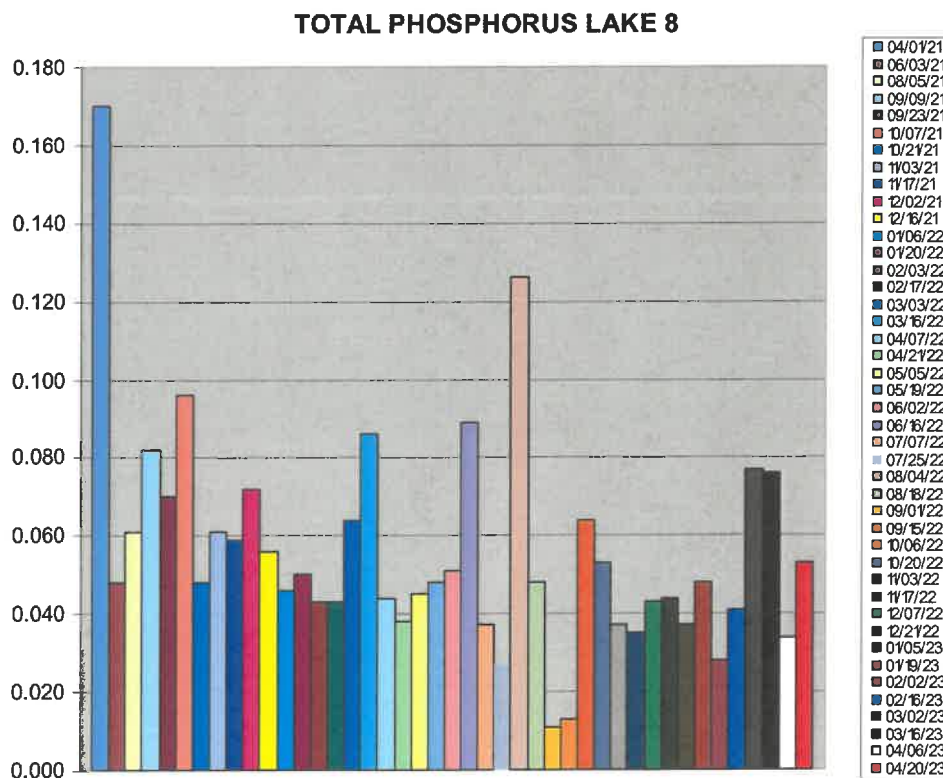
E. coli bacteria and total phosphorus were measured in Lake 8 on two dates during the month. Data are presented below.

Date	<i>E. coli</i> , MPN/100 mL)	Phosphorus, mg/L
05-04-23	51	0.045
05-18-23	272	0.031

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

The table above and figure below summarize phosphorus concentrations in Lake 8 during the reporting period and historically. Noting the Phoslock® application occurred on 29 November 2021, no dramatic reduction in phosphorus has been shown (see figure below).

An application of 325 Kg of SchlixX Plus® was made to Lake 8 in August 2022. 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 are periodically monitored to track the success of the application.



Next Month:

Lakes 5-8 are scheduled for comprehensive monitoring next month. All lakes will be visually inspected and field data collected two times during the month. Additional monitoring of Lake 8 phosphorus and *E. coli* will continue.

Respectfully:

Aquatic Consulting & Testing, Inc.



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



DOBSON RANCH REPORT CARD

DATE OF EVALUATION: **May-23** CONDITION **GOOD** SCORE **52** **49** **47** **49**

PREVIOUS EVALUATION: **Mar-23** CONDITION **GOOD** SCORE **49** **49** **48** **43**

Last complete analysis

CONDITION	RATIONALE	4 pts	3 pts	2 pts	1 pt	SCORE Lake 5	SCORE Lake 6	SCORE Lake 7	SCORE Lake 8
Transparency - SDz (m) avg.	aesthetics	EXCELLENT 1.5-2.0	GOOD 1.0-1.4	FAIR 0.5-0.9	POOR <0.5	3	3	2	4
Dissolved oxygen (mg/L) @1m	aquatic life, sediment nutrient release, odors	>7.0	5.6-6.9	4.0-5.5	<4.0	4	3	3	3
Nitrogen, total (mg/L)	algae and macrophyte growth	<0.5	0.5-1.0	1.0-2.0	>2.0	2	2	2	2
Phosphorus, total (mg/L)	algae and macrophyte growth	<0.03	0.03-0.05	0.06-0.10	>0.10	4	4	4	4
Turbidity (NTU) avg.	aesthetics, State std	<5	5-10	11-20	>20	4	3	3	3
Chlorophyll-a (ug/L) avg.	aesthetics, oxygen balance	<10	11-20	21-30	>30	4	4	4	4
Algae density (no./mL)	aesthetics	<5 x 10 ⁴	5x10 ⁴ - 9x10 ⁴	1 x 10 ⁵ -5x 10 ⁵	>5 x 10 ⁵	4	4	4	4
Midge larvae (# per sq m)	aesthetics	<200	200-400	500-800	>800	4	4	4	4
Algae form (dominant)	aesthetics, treatability	greens; no floating mats	diatoms; no floating mats	blue-greens; no floating mats	blue-greens; floating mats common	4	4	2	2
pH (SU) avg.	swimming, fishery, ammonia toxicity	6.5-8.0	8.1-8.5	8.6-9.0	>9.0	3	3	3	3
Carlson Trophic Status	eutrophication	<50	50-60	61-70	>70	4	4	4	4
Fishery	recreation, aesthetics	no fish piping; no fish kills	some fish piping, gulping; no fish kills	fish piping before dawn; occasional fish kills	fish piping common; fish kills common	4	4	4	4
Waterfowl (per acre mean)	Aesthetics, public health	<3	3-4	5-6	>6	4	3	4	4
Shoreline/banks	Minimal Filamentous Algae	no evidence of salt crusts or algal scums	some white deposits and scums	numerous patches of salt deposits and algae scums	most of lake shore covered with crusts or scums	4	4	4	4

SCORING KEY:

Excellent	Good	Fair	Poor
50-56	41-49	30-40	<30

Definitions: Ratings

Excellent: Lake aesthetic and operational conditions above level of expectation.

Good: Lake aesthetic and operational conditions at level of expectation.

Fair: Lake aesthetic and operational conditions slightly below level of expectation.

Poor: Lake aesthetic and operational conditions considerably below level of expectation.

Definitions: Terms

Benthos: Bottom dwelling organisms

Carlson Trophic Index: A series of calculations incorporating transparency, chlorophyll and phosphorus data used to provide a quantitative estimate of the degree of eutrophication in a lake.

Chlorophyll: Pigment in green plants involved in photosynthesis used to estimate the density of algae in the water column.

Coliform bacteria: Enteric bacteria used as an indicator of the sanitary condition of the water.

Eutrophication: Process by which lakes age by increasing in nutrient (nitrogen and phosphorus) content and plant life.

Fecal bacteria: Any of the bacteria types provided by the fecal matter of warm-blooded organisms.

Macrophyte: Large plant, observable without the aid of a microscope, that may be floating, submerged or emergent.

Midge: Small, flying, non-biting "gnat-like" insect whose larval stage exists in the lake sediments (bloodworm).

N/A: not applicable; insufficient data or too early in development of lake (an arbitrary 3 rating is provided for these items).

pH: -log hydrogen ion conc.; amount of acid in the water identified on scale 1-14; 1 being most acid, 7 neutral, and 14 being most caustic.

Phytoplankton (algae): Microscopic plant fraction of the plankton community.

Piping: Act of fish coming to surface of water and capturing a bubble of air in their mouth; a sign of low oxygen concentrations.

Plankton: Organisms of relatively small size that have relatively small powers of locomotion or that drift in the water.

Sedimentation: Rate at which solids accumulate on the lake bottom.

Transparency (SDz): Depth to which a standard disk can be observed in the water column.

Turbidity: Degree to which particles and color in the water scatter light; the "cloudiness" of the water.

Zooplankton: Animal fraction of the plankton community

CLIENT: DOBSON RANCH

DATE: 04-May-23

	LAKE	LAKE	LAKE	LAKE			
PARAMETER	1	2	3	4			
Secchi Disk Depth (m)	1.38	1.10	0.92	1.51			
Phosphorus, total (ug/L)	13	19	23	15			
Chlorophyll-a (ug/L)	2.2	1.2	1.6	1.6			
	LAKE	LAKE	LAKE	LAKE			
TSI VALUES	1	2	3	4			
Secchi Disk Depth	55	59	61	54			
Phosphorus, total	41	47	49	43			
Chlorophyll-a	39	32	35	35			
					average		
AVERAGE	45	46	49	44	46		

SYNOPSIS OF TROPHIC STATUS RESULTS:

Carlson Trophic Status Index (TSI): The classical interpretation of various Index value ranges is provided below:

- TSI<30 **Classic Oligotrophic**; clear water, oxygenated hypolimnion throughout the year; suitable for cold water fishery in deep lakes.
- TSI 30-40 **Oligotrophic**; shallow lakes may exhibit anoxic hypolimnion in summer.
- TSI 41-50 **Mesotrophic**; moderately clear water, increasing chance of anoxia in hypolimnion during the summer.
- TSI 51-60 **Slightly Eutrophic**; decreased transparency, anoxia in hypolimnion during the summer expected, macrophyte problems possible, warm water fishery only.
- TSI 61-70 **Eutrophic**; dominance of blue-green algae and algal scums probable, can have extensive macrophyte problems.
- TSI 70-80 **Highly Eutrophic**; heavy algal blooms, dense macrophyte beds possible, limited light penetration.
- TSI>80 **Hypereutrophic**; algal scums, summertime fish kills, limited light penetration, few macrophytes.

SUPPORTING DOCUMENTATION

- Laboratory reports
- Field Inspection Sheets
- Pesticide application documents



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Lic. No. AZ0003

LABORATORY REPORT

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

Date Submitted: 05/04/23
Date Reported: 06/05/23

Attn: Lynelle Glysson, Community Mgr

Project: Monthly Lake 1-4 Monitoring

RESULTS

Client ID: Lake 1
ACT Lab No.: CF03265

Sample Type: Surface Water
Sample Time: 05/04/23 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>			
Algae Count	05/11/23	05/11/23	SM 10200 F	See Attached	cells/mL
Algae Identification	05/11/23	05/11/23		See Attached	
Chl/Pheo Ratio	05/25/23	05/26/23	SM10200 H	1.70	
Chlorophyll a	05/25/23	05/26/23	SM10200 H	2.24	ug/L
Golden Algae	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Midge count	05/04/23	05/04/23	SM10500 C	<40	#/sq. meter
Pheophytin a	05/25/23	05/26/23	SM10200 H	<0.10	ug/L
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	7.1	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.2	SU
Secchi Disk Depth	05/04/23	05/04/23	NALMS	1.37	meters
Temperature, Field	05/04/23	05/04/23	SM2550 B	24.1	C
Alkalinity, Total	05/16/23	05/16/23	SM 2320 B	140.	mg/L as CaCO3
Ammonia - N	05/11/23	05/11/23	SM4500NH3 D	0.08	mg/L as N
Nitrate + Nitrite - N	05/19/23	05/19/23	SM4500NO3 E	0.18	mg/L as N
Phosphorus, Total	05/26/23	05/27/23	365.3	0.013	mg/L as P
Total Hardness	05/16/23	05/16/23	SM2340C	214.	mg/L as CaCO3
Total Kjeldahl Nitrogen	05/11/23	05/11/23	SMNorg C,NH3 C/D	1.2	mg/L as N
E. coli, Colilert	05/04/23	05/05/23	SM 9223 B	8	MPN/100 mL
Total Dissolved Solids	05/10/23	05/12/23	SM2540 C	592.	mg/L
Turbidity	05/04/23	05/04/23	180.1	4.7	NTU

RESULTS

Client ID: Lake 2
ACT Lab No.: CF03266

Sample Type: Surface Water
Sample Time: 05/04/23 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>			
Algae Count	05/11/23	05/11/23	SM 10200 F	See Attached	cells/mL
Algae Identification	05/11/23	05/11/23		See Attached	
Chl/Pheo Ratio	05/25/23	05/26/23	SM10200 H	1.60	
Chlorophyll a	05/25/23	05/26/23	SM10200 H	1.20	ug/L
Golden Algae	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Midge count	05/04/23	05/04/23	SM10500 C	<40	#/sq. meter
Pheophytin a	05/25/23	05/26/23	SM10200 H	0.20	ug/L
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	6.5	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.1	SU
Secchi Disk Depth	05/04/23	05/04/23	NALMS	1.09	meters
Temperature, Field	05/04/23	05/04/23	SM2550 B	23.7	C
Alkalinity, Total	05/16/23	05/16/23	SM 2320 B	149.	mg/L as CaCO3
Ammonia - N	05/11/23	05/11/23	SM4500NH3 D	0.07	mg/L as N
Nitrate + Nitrite - N	05/19/23	05/19/23	SM4500NO3 E	0.19	mg/L as N
Phosphorus, Total	05/26/23	05/27/23	365.3	0.019	mg/L as P
Total Hardness	05/16/23	05/16/23	SM2340C	196.	mg/L as CaCO3
Total Kjeldahl Nitrogen	05/11/23	05/11/23	SMNorg C,NH3 C/D	1.3	mg/L as N
E. coli, Colilert	05/04/23	05/05/23	SM 9223 B	345	MPN/100 mL
Total Dissolved Solids	05/10/23	05/12/23	SM2540 C	548.	mg/L
Turbidity	05/04/23	05/04/23	180.1	8.4	NTU

RESULTS

Client ID: Lake 3
ACT Lab No.: CF03267

Sample Type: Surface Water
Sample Time: 05/04/23 08:20

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Algae Count	05/11/23	05/11/23	SM 10200 F	See Attached	cells/mL
Algae Identification	05/11/23	05/11/23		See Attached	
Chl/Pheo Ratio	05/25/23	05/26/23	SM10200 H	2.00	
Chlorophyll a	05/25/23	05/26/23	SM10200 H	1.60	ug/L
Golden Algae	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Midge count	05/04/23	05/04/23	SM10500 C	<40	#/sq. meter
Pheophytin a	05/25/23	05/26/23	SM10200 H	<0.10	ug/L
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	6.4	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.1	SU
Secchi Disk Depth	05/04/23	05/04/23	NALMS	0.91	meters
Temperature, Field	05/04/23	05/04/23	SM2550 B	24.1	C
Alkalinity, Total	05/16/23	05/16/23	SM 2320 B	162.	mg/L as CaCO3
Ammonia - N	05/11/23	05/11/23	SM4500NH3 D	0.08	mg/L as N
Nitrate + Nitrite - N	05/19/23	05/19/23	SM4500NO3 E	0.21	mg/L as N
Phosphorus, Total	05/26/23	05/27/23	365.3	0.023	mg/L as P
Total Hardness	05/16/23	05/16/23	SM2340C	205.	mg/L as CaCO3
Total Kjeldahl Nitrogen	05/11/23	05/11/23	SMNorg C,NH3 C/D	1.1	mg/L as N
E. coli, Colilert	05/04/23	05/05/23	SM 9223 B	43	MPN/100 mL
Total Dissolved Solids	05/10/23	05/12/23	SM2540 C	532.	mg/L
Turbidity	05/04/23	05/04/23	180.1	8.9	NTU

RESULTS

Client ID: Lake 4
ACT Lab No.: CF03268

Sample Type: Surface Water
Sample Time: 05/04/23 08:45

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>Result</u>	<u>Unit</u>
	<u>Start</u>	<u>End</u>			
Algae Count	05/11/23	05/11/23	SM 10200 F	See Attached	cells/mL
Algae Identification	05/11/23	05/11/23		See Attached	
Chl/Pheo Ratio	05/25/23	05/26/23	SM10200 H	1.80	
Chlorophyll a	05/25/23	05/26/23	SM10200 H	1.60	ug/L
Golden Algae	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Midge count	05/04/23	05/04/23	SM10500 C	<40	#/sq. meter
Pheophytin a	05/25/23	05/26/23	SM10200 H	<0.10	ug/L
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	6.8	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.2	SU
Secchi Disk Depth	05/04/23	05/04/23	NALMS	1.50	meters
Temperature, Field	05/04/23	05/04/23	SM2550 B	23.4	C
Alkalinity, Total	05/16/23	05/16/23	SM 2320 B	158.	mg/L as CaCO3
Ammonia - N	05/11/23	05/11/23	SM4500NH3 D	0.07	mg/L as N
Nitrate + Nitrite - N	05/19/23	05/19/23	SM4500NO3 E	0.19	mg/L as N
Phosphorus, Total	05/26/23	05/27/23	365.3	0.015	mg/L as P
Total Hardness	05/16/23	05/16/23	SM2340C	228.	mg/L as CaCO3
Total Kjeldahl Nitrogen	05/11/23	05/11/23	SMNorg C,NH3 C/D	1.2	mg/L as N
E. coli, Colilert	05/04/23	05/05/23	SM 9223 B	32	MPN/100 mL
Total Dissolved Solids	05/10/23	05/12/23	SM2540 C	604.	mg/L
Turbidity	05/04/23	05/04/23	180.1	5.6	NTU

Client ID: Lake 5
ACT Lab No.: CF03269

Sample Type: Surface Water
Sample Time: 05/04/23 08:55

<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	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	6.3	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.2	SU
Temperature, Field	05/04/23	05/04/23	SM2550 B	25.0	C
Turbidity	05/04/23	05/04/23	180.1	6.3	NTU

RESULTS

Client ID: Lake 6
ACT Lab No.: CF03270

Sample Type: Surface Water
Sample Time: 05/04/23 09:05

<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	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	8.4	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.7	SU
Temperature, Field	05/04/23	05/04/23	SM2550 B	24.2	C
Turbidity	05/04/23	05/04/23	180.1	19.	NTU

Client ID: Lake 7
ACT Lab No.: CF03271

Sample Type: Surface Water
Sample Time: 05/04/23 09:15

<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	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	9.3	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.9	SU
Temperature, Field	05/04/23	05/04/23	SM2550 B	23.4	C
Turbidity	05/04/23	05/04/23	180.1	4.1	NTU

Client ID: Lake 8
ACT Lab No.: CF03272

Sample Type: Surface Water
Sample Time: 05/04/23 09:30

<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	05/04/23	05/04/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/04/23	05/04/23	SM4500 O G	7.9	mg/L as O2
pH, Field	05/04/23	05/04/23	SM4500H+ B	8.2	SU
Temperature, Field	05/04/23	05/04/23	SM2550 B	23.4	C
Phosphorus, Total	05/26/23	05/27/23	365.3	0.045	mg/L as P
E. coli, Colilert	05/04/23	05/05/23	SM 9223 B	51	MPN/100 mL
Turbidity	05/04/23	05/04/23	180.1	4.4	NTU

Reviewed by:


Frederick A. Amalfi, Ph.D.
Laboratory Director

ALGAE IDENTIFICATION

AC&T Lab No.	CF-03265	Date Collected	05/04/23
Client I.D.	Lake 1	Collected By	AC&T

Divisions: bac=Bacillariophyta; chl=Chlorophyta; cry=Chrysophyta; cyn=Cyanophyta; eug=Euglenophyta; hap=Haptophyta; pyr=Pyrrhophyta
Forms: u=unicell; c=colony; f=filament; g= flagellate

Genus	Div.- Form	Rel. Count	Total per mL	Comp.	Genus	Div.- Form	Rel. Count	Total per mL.	Comp
<i>Achnanthes</i>	bac-u				<i>Microcystis</i>	cyn-c			
<i>Anabaena</i>	cyn-f				<i>Microspora</i>	chl-f			
<i>Ankistrodesmus</i>	chl-u				<i>Nanochloris</i>	chl-u			
<i>Aphanothece</i>	cyn-c				<i>Navicula</i>	bac-u	1	26	3.03%
<i>Asterionella</i>	bac-c				<i>Nitzschia</i>	bac-u			
<i>Botryococcus</i>	chl-c				<i>Oocystis</i>	chl-c			
<i>Carteria</i>	chl-ug				<i>Oscillatoria</i>	cyn-f	10	263	30.30%
<i>Cephalomonas</i>	chl-ug				<i>Pandorina</i>	chl-cg			
<i>Ceratium</i>	pyr-ug				<i>Pediastrum</i>	chl-c			
<i>Chlamydomonas</i>	chl-ug				<i>Peridinium</i>	pyr-ug			
<i>Chlorella</i>	chl-u	1	26	3.03%	<i>Phacotus</i>	chl-ug			
<i>Chlorococcum</i>	chl-c				<i>Phacus</i>	chl-ug			
<i>Chroococcus</i>	cyn-c				<i>Pinnularia</i>	bac-u			
<i>Chroomonas</i>	crp-ug	13	342	39.39%	<i>Pithophora</i>	chl-f			
<i>Closterium</i>	chl-u				<i>Planktosphaeria</i>	chl-c			
<i>Cocconeis</i>	bac-u				<i>Rhizoclonium</i>	chl-f			
<i>Coelastrum</i>	chl-c				<i>Rhoicosphenia</i>	bac-u			
<i>Cosmarium</i>	chl-u				<i>Rhopalodia</i>	bac-u			
<i>Cosmocladium</i>	chl-c				<i>Scenedesmus</i>	chl-c			
<i>Crucigenia</i>	chl-c				<i>Schroederia</i>	chl-u			
<i>Cryptomonas</i>	crp-ug				<i>Selanastrum</i>	chl-u			
<i>Cyclotella</i>	bac-u				<i>Sphaerocystis</i>	chl-c			
<i>Cymbella</i>	bac-u				<i>Spondylumorum</i>	chl-c			
<i>Denticula</i>	bac-u	4	105	12.12%	<i>Spirulina</i>	cyn-f			
<i>Dinobryon</i>	bac-c	3	79	9.09%	<i>Staurastrum</i>	chl-u			
<i>Dunaliella</i>	chl-u				<i>Stephanodiscus</i>	bac-u			
<i>Eremosphaeria</i>	chl-u				<i>Stigeoclonium</i>	chl-f			
<i>Euglena</i>	eug-ug				<i>Surirella</i>	bac-u			
<i>Fragilaria</i>	bac-u				<i>Synechococcus</i>	cyn-u			
<i>Frustulia</i>	bac-u				<i>Synechocystis</i>	cyn-c			
<i>Glenodinium</i>	pyr-ug				<i>Synedra</i>	bac-u	1	26	3.03%
<i>Golenkinia</i>	chl-c				<i>Synura</i>	cry-cg			
<i>Gomphonema</i>	bac-u				<i>Tetraedron</i>	chl-u			
<i>Gonium</i>	chl-cg				<i>Thoracomonas</i>	chl-u			
<i>Gonyaulax</i>	pyr-ug				<i>Trachelomonas</i>	eug-ug			
<i>Gymnodinium</i>	bac-u				<i>Vaucheria</i>	chl-f			
<i>Holopedium</i>	cyn-u				<i>Volvox</i>	chl-cg			
<i>Lyngbya</i>	cyn-f				<i>Zygnema</i>	chl-f			
<i>Mastogloia</i>	bac-u								
<i>Meridion</i>	bac-u								
<i>Merismopedia</i>	cyn-c								

check 100.00%

Aquatic Consulting & Testing, Inc.
1525 W. University Dr., Suite 106
Tempe, Arizona 85281

Count (cells/mL) 8.68E+02

ALGAE IDENTIFICATION

AC&T Lab No.	CF-03266	Date Collected	05/04/23
Client I.D.	Lake 2	Collected By	AC&T

Divisions: bac=Bacillariophyta; chl=Chlorophyta; cry=Chrysophyta; cyn=Cyanophyta; eug=Euglenophyta; hap=Haptophyta; pyr=Pyrrhophyta
Forms: u=unicell; c=colony; f=filament; g= flagellate

Genus	Div.-Form	Rel. Count	Total per mL	Comp.	Genus	Div.-Form	Rel. Count	Total per mL	Comp
<i>Achnanthes</i>	bac-u				<i>Microcystis</i>	cyn-c			
<i>Anabaena</i>	cyn-f				<i>Microspora</i>	chl-f			
<i>Ankistrodesmus</i>	chl-u				<i>Nanochloris</i>	chl-u			
<i>Aphanothece</i>	cyn-c				<i>Navicula</i>	bac-u	2	61	3.64%
<i>Asterionella</i>	bac-c				<i>Nitzschia</i>	bac-u			
<i>Botryococcus</i>	chl-c				<i>Oocystis</i>	chl-c			
<i>Carteria</i>	chl-ug				<i>Oscillatoria</i>	cyn-f	12	368	21.82%
<i>Cephalomonas</i>	chl-ug				<i>Pandorina</i>	chl-cg			
<i>Ceratium</i>	pyr-ug				<i>Pediastrum</i>	chl-c			
<i>Chlamydomonas</i>	chl-ug	1	31	1.82%	<i>Peridinium</i>	pyr-ug			
<i>Chlorella</i>	chl-u				<i>Phacotus</i>	chl-ug			
<i>Chlorococcum</i>	chl-c				<i>Phacus</i>	chl-ug			
<i>Chroococcus</i>	cyn-c				<i>Pinnularia</i>	bac-u			
<i>Chroomonas</i>	crp-ug	15	460	27.27%	<i>Pithophora</i>	chl-f			
<i>Closterium</i>	chl-u				<i>Planktosphaeria</i>	chl-c			
<i>Cocconeis</i>	bac-u				<i>Rhizoclonium</i>	chl-f			
<i>Coelastrum</i>	chl-c				<i>Rhoicosphenia</i>	bac-u			
<i>Cosmarium</i>	chl-u				<i>Rhopalodia</i>	bac-u			
<i>Cosmocladium</i>	chl-c				<i>Scenedesmus</i>	chl-c	12	368	21.82%
<i>Crucigenia</i>	chl-c				<i>Scytonema</i>	chl-f			
<i>Cryptomonas</i>	crp-ug				<i>Selanastrum</i>	chl-u			
<i>Cyclotella</i>	bac-u				<i>Sphaerocystis</i>	chl-c	8	245	14.55%
<i>Cymbella</i>	bac-u				<i>Spondylumorum</i>	chl-c			
<i>Diatoma</i>	bac-u	2	61	3.64%	<i>Spirulina</i>	cyn-f			
<i>Dinobryon</i>	bac-c				<i>Staurastrum</i>	chl-u			
<i>Dunaliella</i>	chl-u				<i>Stephanodiscus</i>	bac-u			
<i>Eremosphaeria</i>	chl-u				<i>Stigeoclonium</i>	chl-f			
<i>Euglena</i>	eug-ug				<i>Surirella</i>	bac-u			
<i>Fragilaria</i>	bac-u				<i>Synechococcus</i>	cyn-u			
<i>Frustulia</i>	bac-u				<i>Synechocystis</i>	cyn-c			
<i>Glenodinium</i>	pyr-ug				<i>Synedra</i>	bac-u	3	92	5.45%
<i>Golenkinia</i>	chl-c				<i>Synura</i>	cry-cg			
<i>Gomphonema</i>	bac-u				<i>Tetraedron</i>	chl-u			
<i>Gonium</i>	chl-cg				<i>Thoracomonas</i>	chl-u			
<i>Gonyaulax</i>	pyr-ug				<i>Trachelomonas</i>	eug-ug			
<i>Gymnodinium</i>	bac-u				<i>Vaucheria</i>	chl-f			
<i>Holopedium</i>	cyn-u				<i>Volvox</i>	chl-cg			
<i>Lyngbya</i>	cyn-f				<i>Zygnema</i>	chl-f			
<i>Mastogloia</i>	bac-u								
<i>Meridion</i>	bac-u								
<i>Merismopedia</i>	cyn-c								

check 100.00%

Aquatic Consulting & Testing, Inc.
1255 W. University Dr., Suite 106
Tempe, Arizona 85281

Count (cells/mL) 1.69E+03

ALGAE IDENTIFICATION

AC&T Lab No.	CF-03267	Date Collected	05/04/23
Client I.D.	Lake 3	Collected By	AC&T

Divisions: bac=Bacillariophyta; chl=Chlorophyta; cry=Chrysophyta; cyn=Cyanophyta; eug=Euglenophyta; hap=Haptophyta; pyr=Pyrrhophyta
Forms: u=unicell; c=colony; f=filament; g=flagellate

Genus	Div.-Form	Rel. Count	Total per mL	Comp.	Genus	Div.-Form	Rel. Count	Total per mL	Comp.
<i>Achnanthes</i>	bac-u				<i>Microcystis</i>	cyn-c			
<i>Anabaena</i>	cyn-f				<i>Microspora</i>	chl-f			
<i>Ankistrodesmus</i>	chl-u				<i>Nanochloris</i>	chl-u			
<i>Aphanothece</i>	cyn-c				<i>Navicula</i>	bac-u	1	21	10.00%
<i>Asterionella</i>	bac-c				<i>Nitzschia</i>	bac-u			
<i>Botryococcus</i>	chl-c				<i>Oocystis</i>	chl-c			
<i>Carteria</i>	chl-ug				<i>Oscillatoria</i>	cyn-f			
<i>Cephalomonas</i>	chl-ug				<i>Pandorina</i>	chl-cg			
<i>Ceratium</i>	pyr-ug				<i>Pediastrum</i>	chl-c			
<i>Chlamydomonas</i>	chl-ug	1	21	10.00%	<i>Peridinium</i>	pyr-ug			
<i>Chlorella</i>	chl-u	2	42	20.00%	<i>Phacotus</i>	chl-ug			
<i>Chlorococcum</i>	chl-c				<i>Phacus</i>	chl-ug			
<i>Chroococcus</i>	cyn-c	6	126	60.00%	<i>Pinnularia</i>	bac-u			
<i>Chroomonas</i>	crp-ug				<i>Pithophora</i>	chl-f			
<i>Closterium</i>	chl-u				<i>Planktosphaeria</i>	chl-c			
<i>Cocconeis</i>	bac-u				<i>Rhizoclonium</i>	chl-f			
<i>Coelastrum</i>	chl-c				<i>Rhoicosphenia</i>	bac-u			
<i>Cosmarium</i>	chl-u				<i>Rhopalodia</i>	bac-u			
<i>Cosmocladium</i>	chl-c				<i>Scenedesmus</i>	chl-c			
<i>Crucigenia</i>	chl-c				<i>Scytonema</i>	chl-f			
<i>Cryptomonas</i>	crp-ug				<i>Selanastrum</i>	chl-u			
<i>Cyclotella</i>	bac-u				<i>Sphaerocystis</i>	chl-c			
<i>Cymbella</i>	bac-u				<i>Spondylumorum</i>	chl-c			
<i>Diatoma</i>	bac-u				<i>Spirulina</i>	cyn-f			
<i>Dinobryon</i>	bac-c				<i>Staurastrum</i>	chl-u			
<i>Dunaliella</i>	chl-u				<i>Stephanodiscus</i>	bac-u			
<i>Eremosphaeria</i>	chl-u				<i>Stigeoclonium</i>	chl-f			
<i>Euglena</i>	eug-ug				<i>Surirella</i>	bac-u			
<i>Fragilaria</i>	bac-u				<i>Synechococcus</i>	cyn-u			
<i>Frustulia</i>	bac-u				<i>Synechocystis</i>	cyn-c			
<i>Glenodinium</i>	pyr-ug				<i>Synedra</i>	bac-u			
<i>Golenkinia</i>	chl-c				<i>Synura</i>	cry-cg			
<i>Gomphonema</i>	bac-u				<i>Tetraedron</i>	chl-u			
<i>Gonium</i>	chl-cg				<i>Thoracomonas</i>	chl-u			
<i>Gonyaulax</i>	pyr-ug				<i>Trachelomonas</i>	eug-ug			
<i>Gymnodinium</i>	bac-u				<i>Vaucheria</i>	chl-f			
<i>Holopedium</i>	cyn-u				<i>Volvox</i>	chl-cg			
<i>Lyngbya</i>	cyn-f				<i>Zygnema</i>	chl-f			
<i>Mastogloia</i>	bac-u								
<i>Meridion</i>	bac-u								
<i>Merismopedia</i>	cyn-c								

check 100.00%

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1525 W. University Dr., Suite 106
Tempe, Arizona 85281

Count (cells/mL) 2.10E+02

ALGAE IDENTIFICATION

AC&T Lab No.	CF-03268	Date Collected	05/04/23
Client I.D.	Lake 4	Collected By	AC&T

Divisions: bac=Bacillariophyta; chl=Chlorophyta; cry=Chrysophyta; cyn=Cyanophyta; eug=Euglenophyta; hap=Haptophyta; pyr=Pyrrhophyta
Forms: u=unicell; c=colony; f=filament; g= flagellate

Genus	Div.-Form	Rel. Count	Total per mL	Comp.	Genus	Div.-Form	Rel. Count	Total per mL	Comp.
<i>Achnanthes</i>	bac-u				<i>Microcystis</i>	cyn-c			
<i>Anabaena</i>	cyn-f	3	81	4.84%	<i>Microspora</i>	chl-f			
<i>Ankistrodesmus</i>	chl-u	2	54	3.23%	<i>Nanochloris</i>	chl-u			
<i>Aphanothece</i>	cyn-c				<i>Navicula</i>	bac-u	4	109	6.45%
<i>Asterionella</i>	bac-c				<i>Nitzschia</i>	bac-u			
<i>Botryococcus</i>	chl-c				<i>Oocystis</i>	chl-c			
<i>Carteria</i>	chl-ug				<i>Oscillatoria</i>	cyn-f	21	570	33.87%
<i>Cephalomonas</i>	chl-ug				<i>Pandorina</i>	chl-cg			
<i>Ceratium</i>	pyr-ug				<i>Pediastrum</i>	chl-c	8	217	12.90%
<i>Chlamydomonas</i>	chl-ug	5	136	8.06%	<i>Peridinium</i>	pyr-ug			
<i>Chlorella</i>	chl-u	7	190	11.29%	<i>Phacotus</i>	chl-ug			
<i>Chlorogonium</i>	chl-ug	1	27	1.61%	<i>Phacus</i>	chl-ug			
<i>Chroococcus</i>	cyn-c				<i>Pinnularia</i>	bac-u			
<i>Chroomonas</i>	crp-ug	4	109	6.45%	<i>Pithophora</i>	chl-f			
<i>Closterium</i>	chl-u				<i>Planktosphaeria</i>	chl-c			
<i>Cocconeis</i>	bac-u				<i>Rhizoclonium</i>	chl-f			
<i>Coelastrum</i>	chl-c				<i>Rhoicosphenia</i>	bac-u			
<i>Cosmarium</i>	chl-u	1	27	1.61%	<i>Rhopalodia</i>	bac-u			
<i>Cosmocladium</i>	chl-c				<i>Scenedesmus</i>	chl-c	2	54	3.23%
<i>Crucigenia</i>	chl-c				<i>Scytonema</i>	chl-f			
<i>Cryptomonas</i>	crp-ug				<i>Selanastrum</i>	chl-u			
<i>Cyclotella</i>	bac-u	1	27	1.61%	<i>Sphaerocystis</i>	chl-c			
<i>Cymbella</i>	bac-u				<i>Spondylumorum</i>	chl-c			
<i>Denticula</i>	bac-u	1	27	1.61%	<i>Spirulina</i>	cyn-f			
<i>Dinobryon</i>	bac-c				<i>Staurastrum</i>	chl-u			
<i>Dunaliella</i>	chl-u				<i>Stephanodiscus</i>	bac-u			
<i>Eremosphaeria</i>	chl-u				<i>Stigeoclonium</i>	chl-f			
<i>Euglena</i>	eug-ug				<i>Surirella</i>	bac-u			
<i>Fragilaria</i>	bac-u				<i>Synechococcus</i>	cyn-u			
<i>Frustulia</i>	bac-u				<i>Synechocystis</i>	cyn-c			
<i>Glenodinium</i>	pyr-ug				Synedra	bac-u	1	27	1.61%
<i>Golenkinia</i>	chl-c				<i>Synura</i>	cry-cg			
<i>Gomphonema</i>	bac-u				<i>Tetraedron</i>	chl-u			
<i>Gonium</i>	chl-cg				<i>Thoracomonas</i>	chl-u			
Gonyaulax	pyr-ug	1	27	1.61%	<i>Trachelomonas</i>	eug-ug			
<i>Gymnodinium</i>	bac-u				<i>Vaucheria</i>	chl-f			
<i>Holopedium</i>	cyn-u				<i>Volvox</i>	chl-cg			
<i>Lyngbya</i>	cyn-f				<i>Zygnema</i>	chl-f			
<i>Mastogloia</i>	bac-u								
<i>Meridion</i>	bac-u								
<i>Merismopedia</i>	cyn-c								

check 100.00%

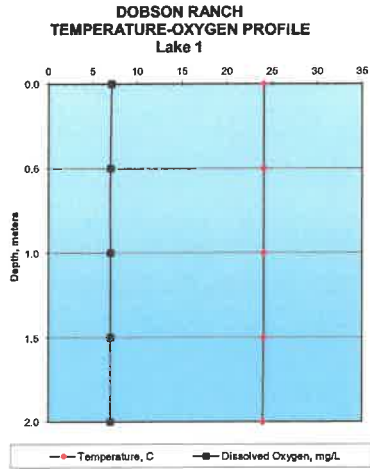
Aquatic Consulting & Testing, Inc.
1525 W. University Dr., Suite 106
Tempe, Arizona 85281

Count (cells/mL) 1.68E+03

Field Data for 05-04-23 Sampling Event
 Aquatic Consulting & Testing, Inc.

DOBSON RANCH LAKE 5

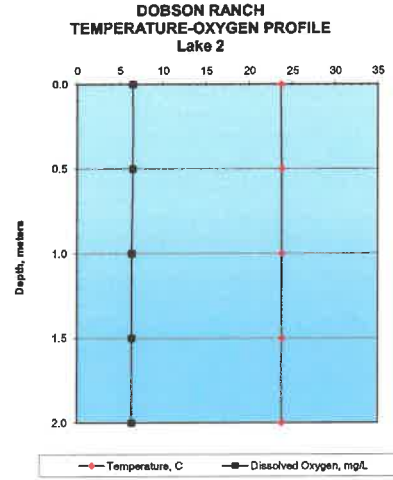
Depth_m	Temp_C	Oxygen_mg/L
0.0	24.1	7.1
0.5	24.1	7.0
1.0	24.1	7.0
1.5	24.1	7.0
2.0	24.0	7.0



Field Data for 05-04-23 Sampling Event
 Aquatic Consulting & Testing, Inc.

DOBSON RANCH LAKE 6

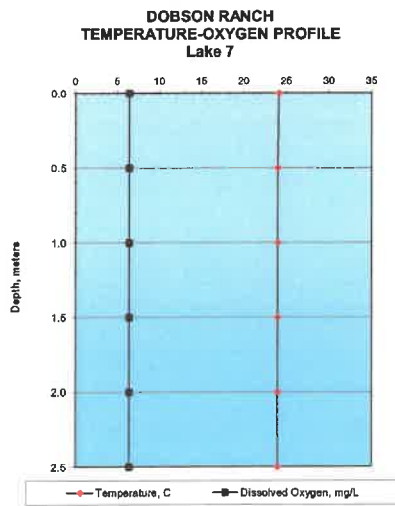
Depth_m	Temp_C	Oxygen_mg/L
0.0	23.7	6.5
0.5	23.8	6.5
1.0	23.8	6.4
1.5	23.8	6.4
2.0	23.8	6.4



Field Data for 05-04-23 Sampling Event
 Aquatic Consulting & Testing, Inc.

DOBSON RANCH LAKE 3

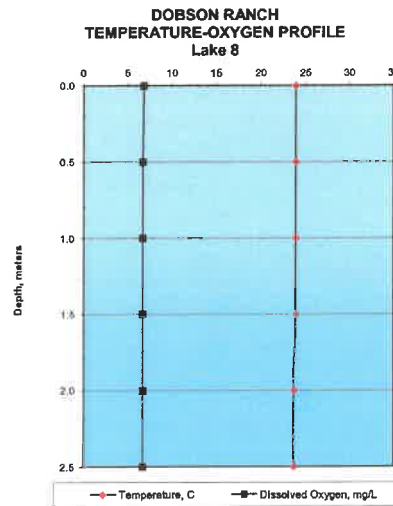
Depth_m	Temp_C	Oxygen_mg/L
0.0	24.1	6.4
0.5	24.0	6.4
1.0	24.0	6.4
1.5	24.0	6.4
2.0	24.0	6.4
2.5	24.0	6.4



Field Data for 05-04-23 Sampling Event
 Aquatic Consulting & Testing, Inc.

DOBSON RANCH LAKE 4

Depth_m	Temp_C	Oxygen_mg/L
0.0	23.9	6.8
0.5	23.9	6.7
1.0	23.9	6.7
1.5	23.9	6.7
2.0	23.7	6.7
2.5	23.7	6.7



Aquat. 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 1-4 Monthly Monitoring
 Dobson Ranch Association

AC&T Client Reporting Information:

Dobson Ranch Association
 2719 South Reyes
 Mesa, AZ 85202

 Attn: Fran Pawlak, Community Manager
 P: 4/80-831-8314

Page 1 of 1

Sample Location ID:	Date:	Time:	Matrix:	None Preserved	Ka2S2O3 (Starb)	HNO3 (Nitric)	H2SO4 (Sulfuric)	Lugols	Other:
Lake 1	5/4/23	710	SW	34	1	1	1	1	0532105
Lake 2		745	SW	34	1	1	1	1	60
Lake 3		820	SW	34	1	1	1	1	607
Lake 4		845	SW	34	1	1	1	1	608
Lake 5		855	SW	2					69
Lake 6		905	SW	2					70
Lake 7		915	SW	2					71
Lake 8		930	SW	2	1		1		72

Field Measurements:
 pH, Temp, O2

P-T	X	X	X	X	X	X	X	X	X
NO3+NO2	X	X	X	X	X	X	X	X	X
TKN-Elec	X	X	X	X	X	X	X	X	X
Ammonia (NH3)	X	X	X	X	X	X	X	X	X
Hardness	X	X	X	X	X	X	X	X	X
Alkalinity	X	X	X	X	X	X	X	X	X
TDS	X	X	X	X	X	X	X	X	X
E. Coll	X	X	X	X	X	X	X	X	X
#Chl/Phco	X	X	X	X	X	X	X	X	X
Algae - ID + #	X	X	X	X	X	X	X	X	X
Golden algae	X	X	X	X	X	X	X	X	X
Turb	X	X	X	X	X	X	X	X	X

3. RELINQUISHED BY:

Signature: *[Signature]*
 Print Name: Andrew Marvet
 Date: 5/4/23 Time: 1315

1. RELINQUISHED BY:

Signature: *[Signature]*
 Print Name: Andrew Marvet
 Date: 5/4/23 Time: 1315

2. RECEIVED BY:

Signature: *[Signature]*
 Print Name: M
 Date: 5/4/23 Time: 1315

4. RECEIVED BY:

Signature: *[Signature]*
 Print Name: M
 Date: 5/4/23 Time: 1315

Project Location:	A C & T Sample Receipt:	
Dobson Ranch	Total # Containers:	38
PO#:	Received Intact:	YES
Lakes Contract	# Bottles Preserved:	14
Notes:	Samples On Ice:	YES (NO)
	Ice Type:	WET
	Sample Receipt Temperature:	23°C



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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: 05/08/23
Date Reported: 05/17/23

Attn: Fran Pawlak, Community Mgr

Project: Lake Monitoring

RESULTS

Client ID: Lake 7
ACT Lab No.: CF03321

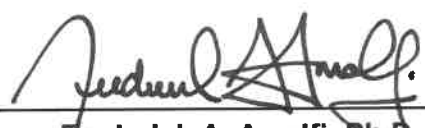
Sample Type: Surface Water
Sample Time: 05/08/23 11:00

<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MDL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	05/08/23	05/08/23	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

CHAIN OF CUSTODY

PWS ID # _____

PAGE OF _____

Client Name: Dobson Ranch
 Address: _____ Street
 _____ City, State, Zip
 Phone: _____
 Email: _____
 Contact: _____
 Sampler Signature: ZRN

Chemistry	Biology	WET	PO#
<input type="checkbox"/> Metals (See Below) <input type="checkbox"/> TDS <input type="checkbox"/> TSS <input type="checkbox"/> TS <input type="checkbox"/> SETT <input type="checkbox"/> TVS <input type="checkbox"/> VSS <input type="checkbox"/> HEM <input type="checkbox"/> TPHC <input type="checkbox"/> MBAS <input type="checkbox"/> CN <input type="checkbox"/> Sulfide <input type="checkbox"/> BOD <input type="checkbox"/> COD <input type="checkbox"/> New Source <input type="checkbox"/> Tot.P <input type="checkbox"/> O-P ₄ <input type="checkbox"/> Nitrate + Nitrite <input type="checkbox"/> Nitrite <input type="checkbox"/> TKN <input type="checkbox"/> Ammonia <input type="checkbox"/> THM's <input type="checkbox"/> HAAS <input type="checkbox"/> 524 <input type="checkbox"/> 624 <input type="checkbox"/> 8260 <input type="checkbox"/> 525 <input type="checkbox"/> 625 <input type="checkbox"/> 8270 <input type="checkbox"/> Perchlorate <input type="checkbox"/> Radio <input type="checkbox"/> Asbestos	<input type="checkbox"/> Total Coliform <input type="checkbox"/> Presence/Absence <input type="checkbox"/> MPN <input type="checkbox"/> E. Coll <input type="checkbox"/> Fecal Strep <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> MF <input type="checkbox"/> MICRO SCOPE ID <input type="checkbox"/> Plate Count <input checked="" type="checkbox"/> Algae ID/Count GA	<input type="checkbox"/> Acute <input type="checkbox"/> Chronic	Project _____ Remarks: _____ Laboratory Number _____

SAMPLE ID	SAMPLE Date	SAMPLE Time	SAMPLE TYPE	No. of Containers												
				HCl	Na ₂ S ₂ O ₈	H ₂ SO ₄	HNO ₃	NONE	NaOH	NaOH/ZnAc	Laboratory Number					
<u>Lake 7</u>	<u>05/08/23</u>	<u>1100</u>	<u>SW</u>												<u>1</u>	<u>CF03321</u>

Metals: Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Hg Mn Mo Ni Se Ag Na
 Sr Ti Sn Tl V Zn
 Sample Types: DW, GW, SW, WW, AQ, Soil, Sludge or Solid
 TOTAL DISSOLVED SDWA TCLP RCRA

1. Relinquished By: _____ Date: _____ Time: _____
 2. Relinquished By: P. H. L. Date: _____ Time: 1142
 3. Relinquished By: _____ Date: _____ Time: _____

1. Received By: _____ Date: _____ Time: _____
 2. Received By: my Date: 5/18/23 Time: 1142
 3. Received By: _____ Date: _____ Time: _____

Sample Receiving: ICE Y N
 Intact: Yes No
 Temp: 24°C Auth Init: _____
 Pres: _____ Yes/V No/Lab
 Sterile: _____ Yes No
 Total # containers: 1

Attn: Your signature on this document authorizes analysis regardless of sample condition at time of submittal



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P.O. Box 1510
Tempe, Arizona 85281
Phone: (480) 921-8044 • Fax: (480) 921-0049

Lic. No. AZ0003

LABORATORY REPORT

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

Date Submitted: 05/18/23
Date Reported: 06/05/23

Attn: Lynelle Glysson, Community Mgr

Project: Monthly Lake 1-8 Monitoring

RESULTS

Client ID: Lake 1
ACT Lab No.: CF03587

Sample Type: Surface Water
Sample Time: 05/18/23 08:50

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	8.3	mg/L as O ₂
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.8	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	27.0	C
Turbidity	05/18/23	05/18/23	180.1	1.9	NTU

Client ID: Lake 2
ACT Lab No.: CF03588

Sample Type: Surface Water
Sample Time: 05/18/23 09:00

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	7.7	mg/L as O ₂
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.3	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	23.1	C
Turbidity	05/18/23	05/18/23	180.1	5.7	NTU

Client ID: Lake 3
ACT Lab No.: CF03589

Sample Type: Surface Water
Sample Time: 05/18/23 09:10

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	7.2	mg/L as O ₂
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.3	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	27.5	C
Turbidity	05/18/23	05/18/23	180.1	7.1	NTU

RESULTS

Client ID: Lake 4
ACT Lab No.: CF03590

Sample Type: Surface Water
Sample Time: 05/18/23 09:20

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	7.8	mg/L as O2
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.4	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	27.4	C
Turbidity	05/18/23	05/18/23	180.1	5.6	NTU

Client ID: Lake 5
ACT Lab No.: CF03591

Sample Type: Surface Water
Sample Time: 05/18/23 09:40

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	6.7	mg/L as O2
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.2	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	27.4	C
Turbidity	05/18/23	05/18/23	180.1	4.4	NTU

Client ID: Lake 6
ACT Lab No.: CF03592

Sample Type: Surface Water
Sample Time: 05/18/23 09:50

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	8.6	mg/L as O2
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.6	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	28.0	C
Turbidity	05/18/23	05/18/23	180.1	10.	NTU

RESULTS

Client ID: Lake 7
ACT Lab No.: CF03593

Sample Type: Surface Water
Sample Time: 05/18/23 10:00

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	8.7	mg/L as O2
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.7	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	28.1	C
Turbidity	05/18/23	05/18/23	180.1	3.9	NTU

Client ID: Lake 8
ACT Lab No.: CF03594

Sample Type: Surface Water
Sample Time: 05/18/23 10:05

<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	05/18/23	05/18/23	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	05/18/23	05/18/23	SM4500 O G	8.2	mg/L as O2
pH, Field	05/18/23	05/18/23	SM4500H+ B	8.2	SU
Temperature, Field	05/18/23	05/18/23	SM2550 B	28.7	C
Phosphorus, Total	05/26/23	05/27/23	365.3	0.031	mg/L as P
E. coli, Colilert	05/18/23	05/19/23	SM 9223 B	272	MPN/100 mL
Turbidity	05/18/23	05/18/23	180.1	2.9	NTU

Reviewed by: _____


Frederick A. Amalfi, Ph.D.
Laboratory Director

1525 W. University Drive, Suite 106

Tempe, AZ 85281

480-921-8044 fax: 480-921-0049

lab@quaticconsulting.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 Paqliak, Community Manager

P: 480-831-8314

E:

AC&T Sampler:

Sample Location ID:	Date:	Time:	Matrix:
Lake 1	5/18/23	850	SW
Lake 2		900	SW
Lake 3		910	SW
Lake 4		920	SW
Lake 5		940	SW
Lake 6		950	SW
Lake 7		1000	SW
Lake 8		1005	SW

Sample Containers # / Preservation:		Field Measurements:		AC&T Laboratory Sample Identification											
None Preserved	NA2S2O3 (Sterile)	HNO3 (Nitric)	H2SO4 (Sulfuric)	Lugole	Other:	P-1	NO3+NO2	TKN-Elec	Ammonia (NH3)	E. Coll	#Chl/Pheo	Algae ID #	Golden algae	Turb	pH, Temp, O2
<input checked="" type="checkbox"/>															
<input checked="" type="checkbox"/>															CF03587
<input checked="" type="checkbox"/>															588
<input checked="" type="checkbox"/>															589
<input checked="" type="checkbox"/>															590
<input checked="" type="checkbox"/>															591
<input checked="" type="checkbox"/>															592
<input checked="" type="checkbox"/>															593
<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>					594

Project Location:		A C & T Sample Receipt:		1. RELINQUISHED BY:		3. RELINQUISHED BY:	
Dobson Ranch	Total # Containers: 8	YES	NO	Signature: <i>Andrew M. Vetter</i>	Signature:		
PO#:	Received Intact: 2	# Bottles Preserved: 14	Non: NO	Print Name: Andrew M. Vetter	Print Name:		
Lakes Contract	Samples On Ice: YES	Ice Type: WET	BLUE	Date: 5/18/23	Date:		
Notes:				Time: 12:11	Time:		
	Sample Receipt Temperature: 26°C						

DOBSON RANCH LAKES Bi-Monthly Lake Inspection

Date: 5/4/23

By: gh

Lake	Temp	Dis. oxygen	pH	Clarity	Algae	Submerged weeds	Fish behavior	Waterfowl density	Insect activity	Mechanical issues
1	24.1c	7.1 mg/L	8.7su	54 ^u SDz 4.7 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. <u>23</u> No/A <u>14</u>	<input type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
2	23.7c	6.5 mg/L	8.1su	43 ^u SDz 8.4 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>14</u> No/A <u>23</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
3	24.1c	6.4 mg/L	8.1su	36 ^u SDz 8.9 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 <u>37</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
4	23.4c	6.8 mg/L	8.2su	51 ^u SDz 5.6 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 <u>37</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
5	25.0c	6.3 mg/L	8.2su	40 ^u SDz 6.3 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>16</u> No/A <u>4</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
6	24.7c	8.4 mg/L	8.7su	SDz 19.4 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>18</u> No/A <u>3.0</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
7	23.4c	9.3 mg/L	8.9su	SDz 4.4 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>21</u> No/A <u><1</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
8	23.4c	7.9 mg/L	8.2su	SDz 4.4 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>16</u> No/A <u>6.9</u>	<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: 5/18/23

By: Am

Lake	Temp	Dis. oxygen	pH	Clarity	Algae	Submerged weeds	Fish behavior	Waterfowl density	Insect activity	Mechanical issues
1	<u>27.0</u> C	<u>8.3</u> mg/L	<u>8.8</u> SU	SDz <u>1.9</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>21</u> No/A <u>1.3</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
2	<u>23.1</u> C	<u>7.7</u> mg/L	<u>8.3</u> SU	SDz <u>5.7</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 type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>15</u> No/A <u>8.5</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
3	<u>27.5</u> C	<u>7.2</u> mg/L	<u>8.3</u> SU	SDz <u>7.1</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>3</u> No/A <u>2.1</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
4	<u>27.9</u> C	<u>7.8</u> mg/L	<u>8.4</u> SU	SDz, <u>3.6</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 type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>16</u> No/A <u>3.3</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
5	<u>27.4</u> C	<u>6.7</u> mg/L	<u>8.2</u> SU	SDz <u>4.4</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 type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>16</u> No/A <u>4</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
6	<u>28.0</u> C	<u>8.6</u> mg/L	<u>8.6</u> SU	SDz <u>10.2</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>15</u> No/A <u>2.5</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	
7	<u>28.1</u> C	<u>7.7</u> mg/L	<u>8.7</u> SU	SDz <u>3.9</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 type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>23</u> No/A <u>2.1</u>	<input checked="" type="checkbox"/> Normal <input type="checkbox"/> Infestation	Fountain <input checked="" type="checkbox"/> Operating <input type="checkbox"/> No service
8	<u>28.7</u> C	<u>6.0</u> mg/L	<u>8.7</u> SU	SDz <u>2.9</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 type="checkbox"/> Normal <input type="checkbox"/> Distress <input type="checkbox"/> Dead	No. <u>12</u> No/A <u>4.8</u>	<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: