



# 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

18 May 2020

Ms. Debbie Tribioli  
The Oasis at Anozira  
c/o Kinney Management Services  
6303 South Rural Road  
Tempe, Arizona 85283

Ref: Oasis Lake, April 2020

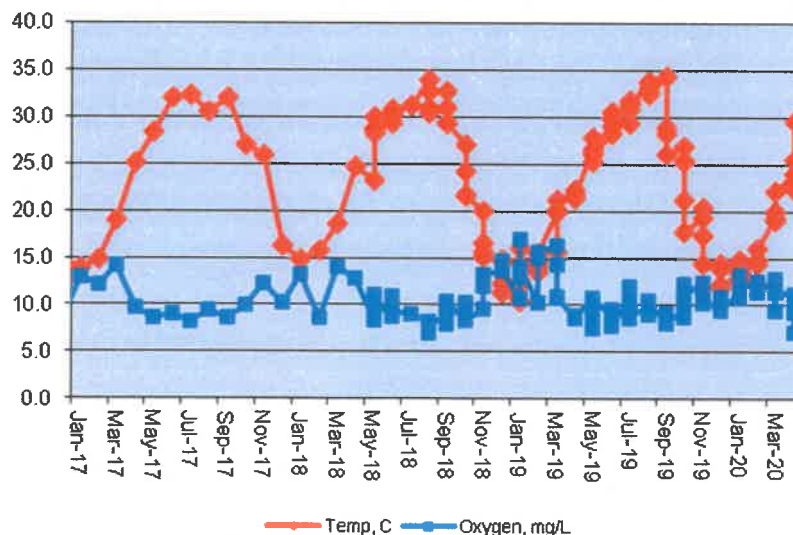
Dear Ms. Tribioli:

The following report summarizes water quality data collected for Oasis Lake on 01 April 2020. Similar data have been reported each month and are used in this report to generate the graphs that are used for tracking changes in water quality. The report includes field data sheets summarizing weekly lake and mechanical system conditions during the month.

## Chemical and Physical Composition

**Temperature, Oxygen, and pH:** Water temperature increased to 24.1 C (75 F) and the dissolved oxygen concentration was greater than 100 percent saturation (11.2 mg/L). Operation of the floating fountains, as well as the trial nanobubble oxygenation system, helped maintain dissolved oxygen at a level that was more than satisfactory for the fishery.

2017-2020 Temperature and Oxygen

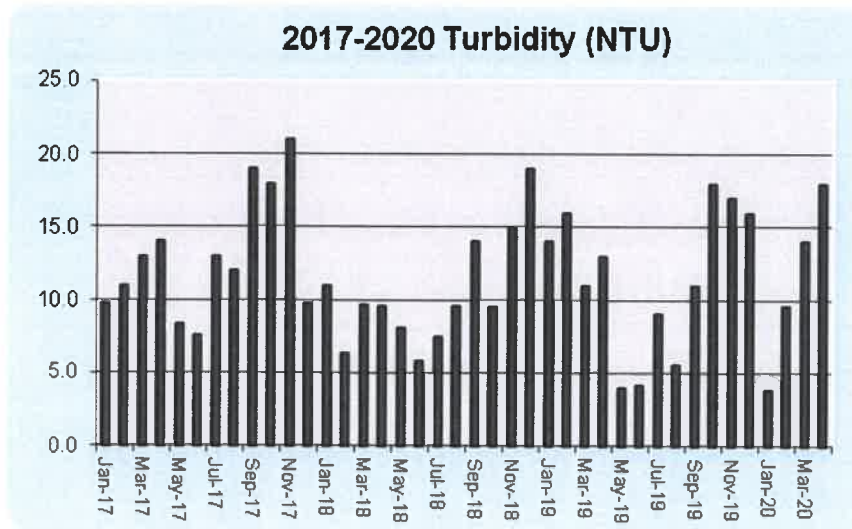


The table below shows the USEPA criteria for dissolved oxygen in warm water fisheries.

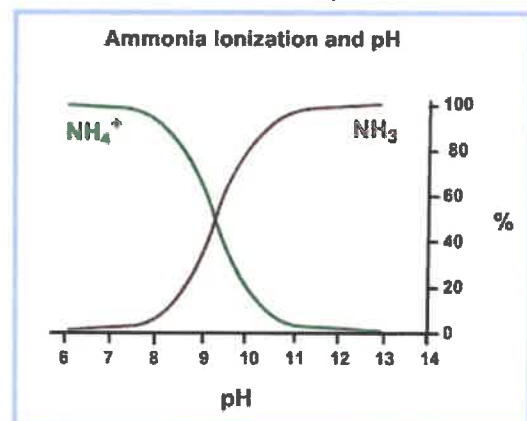
Criterion	Early life stages	Other life stages
Daily mean	>6.0	>4.0
Daily minimum	>5.0	>3.0

Water temperature tolerance varies among fish species. However, the maximum weekly temperature tolerance of most common urban lake fish species is 32 to 35 C.

**Turbidity:** The turbidity of the lake water increased to 18 NTU. Water turbidity is impacted by algae density and dissolved and particulate matter in the water, including storm water runoff and dye that is periodically added for algae and weed management. As turbidity increases, clarity decreases. The trend shows a consistent increase over the last four months.



**pH:** The lake water pH varied from 8.2 to 8.8 SU during the month. Water pH is influenced by the chemical makeup of the water and the amount of algae in the lake. In a very simplified explanation for the role of algae, carbonic acid in the water is formed from dissolution of carbon dioxide. Carbonic acid tends to make the water more acidic and pH decreases. However, algae utilize carbon dioxide during photosynthesis during daylight, making less carbon dioxide available to form carbonic acid, and pH increases. The more algae present, the greater the increase in pH that usually occurs. Data indicate that pH was similar to measurements last month. pH changes may also result from differences in SRP canal feed water composition.

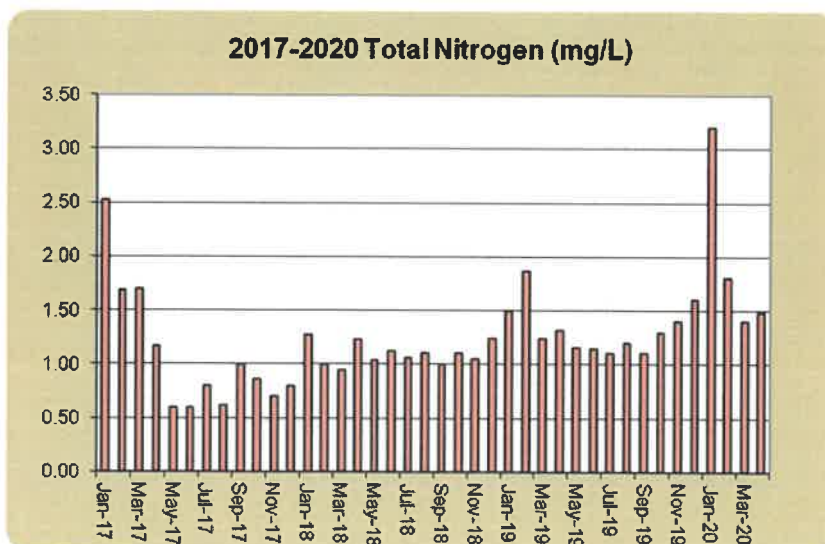
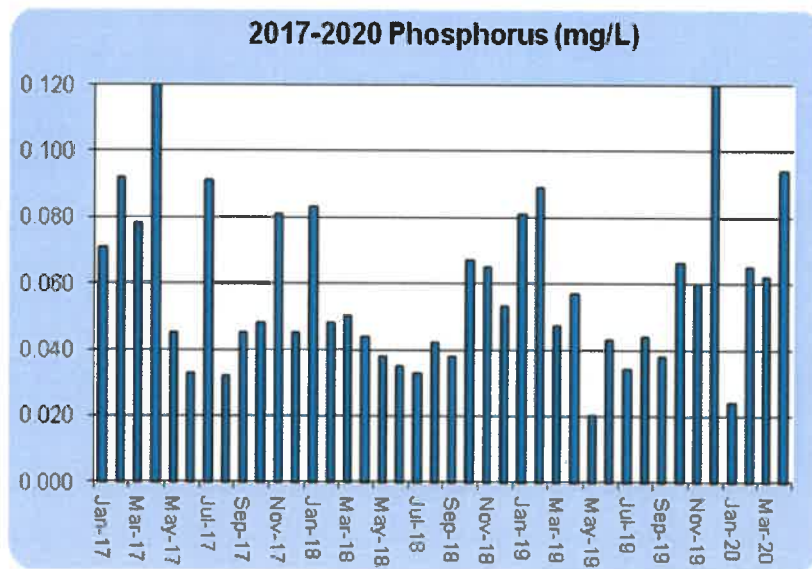


High pH can be problematic in terms of toxicity if high concentrations of ammonia are present in the water. Ammonia is in equilibrium between two forms;

ammonium ion and ammonia gas. At pH concentrations above 9.0 SU and a water temperature increases, ammonia converts to the gas which is toxic to many aquatic organisms. At the measured water temperatures, measured pH values would not result in toxicity. No signs of fish stress were observed.

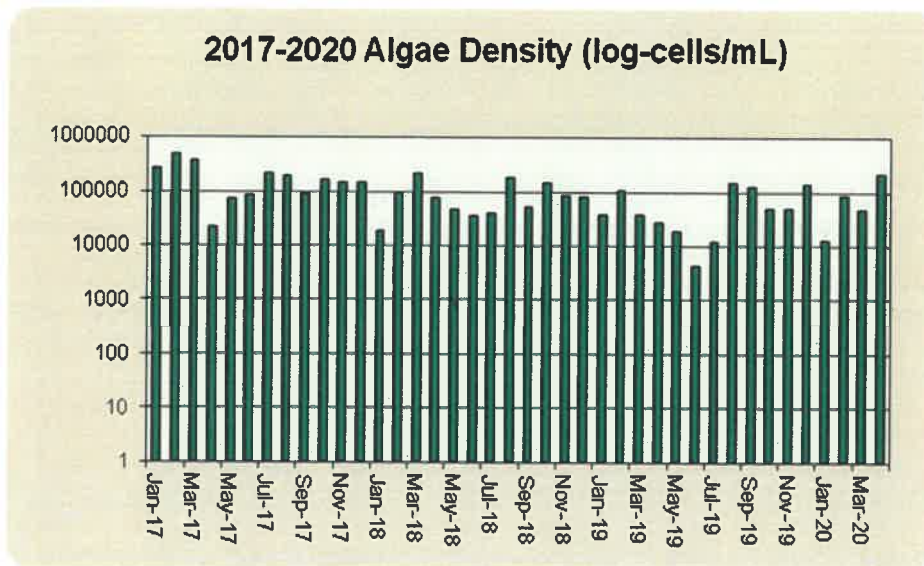
**Nutrients:** Nitrogen and phosphorus are the primary nutrients that stimulate algae and submerged plant growth. Phosphorus is typically the nutrient that dictates how much plant growth can be sustained in a lake. Usually if the total phosphorus concentration is below 0.030 mg/L, low levels of suspended algae occur. A nitrogen concentration of about 10 to 15 times the phosphorus (0.30–0.45 mg/L) is typically needed to support algal growth.

The phosphorus concentration increased to 0.094 mg/L as P. The total nitrogen concentration increased slightly to 1.49 mg/L as N. Nitrate, immediately available to algal cells, was at a concentration of 0.09 mg/L. An increase in nutrient concentrations was evident and an increase in algae growth would be expected and occurred.

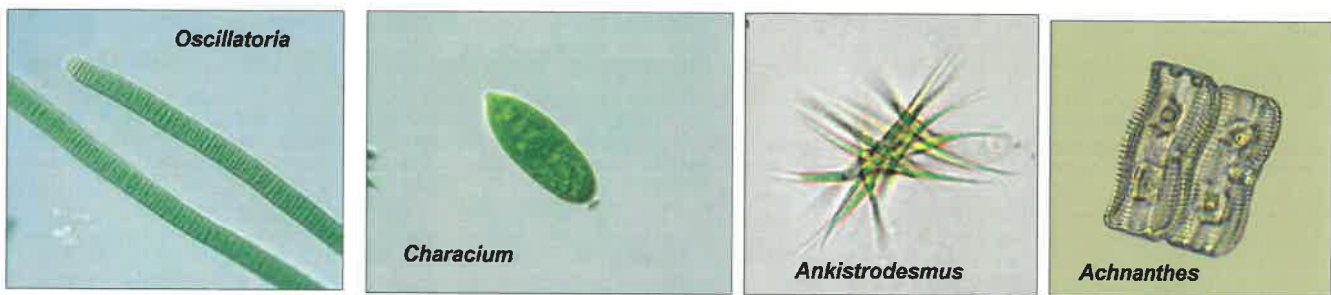


## Biological Composition

**Phytoplankton (algae):** The amount and types of algae in a lake dictate the aesthetic and operational quality of the water. Algae density affects the clarity and color of the water, two very important aesthetic criteria. The species composition dictates the form of growth observed; floating mats, suspended cells, stringy attached filaments, etc. It also impacts the choice, frequency, and dosage of herbicides used for water quality management.



As predicted, the total algae density in the lake increased to  $4.72 \times 10^5$  cells per mL, a density now considered slightly elevated for an urban reservoir in metro-Phoenix. The blue-green (Cyanophyta) filamentous alga, *Oscillatoria*, was replaced by *Characium*, a green unicell), as the dominant form. The green algae, *Ankistrodesmus* and the diatom, *Achnanthes*, were also present in substantial numbers.



Golden algae was intermittently detected through the month. A few dead fish were recovered and an algaecide was applied for management of the toxic algae. Golden algae have been identified in over 20 lake systems in metro-Phoenix so far this season. The golden alga (*P. parvum*), produces toxins that rupture unprotected cells. The toxin release is believed to benefit golden algae by killing other species of algae, thereby making resources (nutrients) more available to the golden



algae population. Unfortunately, the cells of fish gills are also unprotected because that is where oxygen absorption occurs. Thus, the toxin also results in asphyxiation of fish. Susceptibility to the toxin varies amongst fish species.

**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 life cycle is shown diagrammatically below. 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 to consume the larvae and/or application of bacterial or chemical larvicides. Because fish have not been stocked for three years or more, a maintenance stocking proposal has been presented to the Board.



Few adult midge flies were detected during the month.

**Fishery:** No significant loss of fish occurred during the month. However, following the continued detection of golden algae on several dates, an application of copper-based algaecide was made to reduce the number of golden algae cells and amount of toxin that could be produced.

**Waterfowl:** Ducks and geese can be a beautiful sight on a small urban pond or lake. They seem to make the lake look more like a natural lake than an artificial reservoir. They are fascinating creatures. However, when ducks and geese become too numerous, several lake management and aesthetic problems can develop. These problems are listed below.

- Bird wastes are unattractive and cause slippery conditions.
- Cleaning waste from sidewalks and turf is an additional maintenance item.
- Geese and other waterfowl can become aggressive toward humans.
- Waterfowl can damage turf areas.
- Waterfowl add nitrogen and phosphorus to the water.
- Bird wastes contain bacteria that are a health risk to humans and pets.
- Diving birds consume fish that are stocked in the lack for management purposes.



Arizona Game and Fish Department has developed criteria for waterfowl on small urban lakes (see table). Based on the Arizona Game & Fish Department scale, the lake condition in terms of waterfowl has remained in the “good to excellent” category.

Problematic cormorants and Canada geese were observed during the month. Cormorants are diving birds that feed on small fish. Canada geese can destroy turf and, along with other birds, contribute fecal matter to the common areas and water. See photos above.

Ranking	Waterfowl Density
Excellent	<3/acre
Good	3-4/acre
Fair	5-6/acre
Poor	>6/acre

### **Bacteria**

In terms of public health protection, the *E. coli* bacteria concentration was relatively low (32 per 100 mL) and met incidental or partial body contact (PBC) and full body contact (FBC) recreational standards. The table below displays the numeric standards from the State Water Quality Standards (R18-11-109 A; 2016).

Designated use	<i>E. coli</i> single sample max. no/100 mL
Full body contact (swimming)	235
Partial body contact (boating, fishing)	575

### **Mechanical Systems and Field Observations**

Weekly field inspection forms are attached to this report. In-lake and entry fountains and nanobubble aeration systems operated during the month.

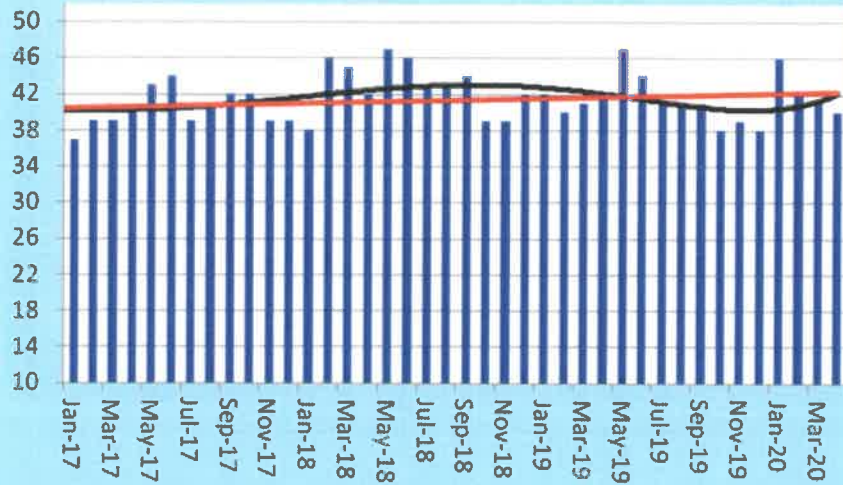
Endothall and peroxide-based algaecide applications were made, as needed, to the three entry fountains to reduce algae growth on the wetted rock surfaces.

### **Lake Report Card**

The water quality data are summarized on the attached Oasis Lake Report Card. Each salient parameter has been qualitatively evaluated and then assigned a numeric value for quantitative comparison and tracking purposes. The April score decreased to 40, but remained in the “good” range. The reduced score occurred as a result of the algal density increase.

Report card scores for the past three years have been graphically summarized below. Polynomial regression analysis (black line) still indicates a somewhat cyclic pattern. Linear regression analysis (red line) indicates an overall increasing trend in score.

### 2017-2020 Report Card Scores



Respectfully,

AQUATIC CONSULTING & TESTING, INC.

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





## **LABORATORY REPORTS**



## **FIELD INSPECTION FORMS**



## **PESTICIDE APPLICATION DOCUMENTS**



## OASIS LAKE REPORT CARD

DATE OF EVALUATION:

Apr-20      CONDITION **EXCELLENT**      SCORE **40**

PREVIOUS EVALUATION:

Mar-20      CONDITION **EXCELLENT**      SCORE **41**

CONDITION	RESULT	RATIONALE	SCORE				
			4 pts	3 pts	2 pts	1 pt	
EXCELLENT	GOOD	FAIR	POOR	SCORE	SCORE		
Turbidity (NTU)	18.0	aesthetics	<5	5-10	11-20	>20	2
Dissolved oxygen (mg/L)	>7	aquatic life, sediment nutrient release, odors	>7.0	5.6-6.9	4.0-5.5	<4.0	4
Nitrogen, total (mg/L)	1.49	algae and macrophyte growth	<0.5	0.5-1.0	1.1-2.0	>2.0	2
Phosphorus, total (mg/L)	0.094	algae and macrophyte growth	<0.03	0.03-0.05	0.06-0.10	>0.10	2
Algae density (no./mL)	2.10 x 10 <sup>5</sup>	aesthetics	<5 x 10 <sup>4</sup>	5x10 <sup>4</sup> - 9x10 <sup>4</sup>	1 x 10 <sup>5</sup> -5x 10 <sup>6</sup>	>5 x 10 <sup>5</sup>	2
Algae form (dominant)	Green unicell and blue-grn filaments	aesthetics, treatability	greens; no floating mats	diatoms; no floating mats	blue-greens; no floating mats	blue-greens; floating mats common	3
Macrophytes (% cover)	<1	aesthetics, boating	none	<10%	11-20%	>20%	4
pH (SU) avg.	8.8	swimming, fishery, ammonia toxicity	6.5-8.0	8.0-8.5	8.6-9.0	>9.0	2
E. coli bacteria (#/100 mL) avg.	32	public health protection	<20	21-80	81-125	>125	3
Midge flies	no nuisances	quality of life	no nuisances	minor nuisances	moderate nuisances	significant nuisances	4
Waterfowl (no. per acre)	1	nutrient and bacteria loading	<2	2-5	6-10	>10	4
Fishery	normal	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
Shoreline/banks	limited edge growths	aesthetics	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

### SCORING KEY:

Excellent	Good	Fair	Poor
42-48	36-41	30-35	<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**

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.

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



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Lic. No. AZ0003

## LABORATORY REPORT

**Client:** Oasis at Anozira  
c/o Kinney Management Services  
6303 S. Rural Road  
Tempe, Arizona 85283

**Date Submitted:** 04/01/20  
**Date Reported:** 05/18/20

**Attn:** Debbie Tribioli

**Project:** Monthly Lake Monitoring

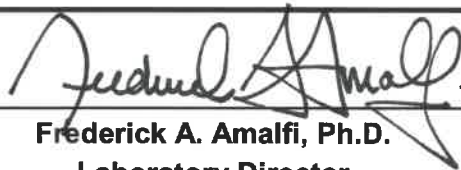
## RESULTS

**Client ID:** Lake  
**ACT Lab No.:** CC02735

**Sample Type:** Surface Water  
**Sample Time:** 04/01/20 12:10

<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	04/30/20	04/30/20	SM 10200 F	See Attached	cells/mL
Algae Identification	04/30/20	04/30/20		See Attached	
Golden Algae	04/01/20	04/01/20	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	04/01/20	04/01/20	SM4500 O G	11.2	mg/L as O <sub>2</sub>
pH, Field	04/01/20	04/01/20	SM4500H+ B	8.8	SU
Temperature, Field	04/01/20	04/01/20	SM2550 B	24.1	C
Nitrate + Nitrite - N	04/11/20	04/11/20	SM4500NO <sub>3</sub> E	0.09	mg/L as N
Phosphorus, Total	05/01/20	05/02/20	365.3	0.094	mg/L as P
Total Kjeldahl Nitrogen	04/03/20	04/03/20	SMNorg C,NH <sub>3</sub> C/D	1.4	mg/L as N
E. coli, Colilert	04/01/20	04/02/20	SM 9223 B	32	MPN/100 mL
Turbidity	04/01/20	04/01/20	180.1	18.	NTU

Reviewed by:

  
Frederick A. Amalfi, Ph.D.  
Laboratory Director

## ALGAE IDENTIFICATION

AC&T Lab No.	CC02735	Date Collected	04/01/20
Client I.D.	Oasis	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	38	35754	17.04%	<i>Microcystis</i>	cyn-c			
<i>Anabaena</i>	cyn-f				<i>Microspora</i>	chl-f			
<i>Ankistrodesmus</i>	chl-u	42	39517	18.83%	<i>Mougeotia</i>	chl-f			
<i>Aphanocapsa</i>	cyn-c				<i>Navicula</i>	bac-u			
<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	8	7527	3.59%	<i>Oscillatoria</i>	cyn-f	45	42340	20.18%
<i>Cephalomonas</i>	chl-ug				<i>Pandorina</i>	chl-cg			
<i>Characium</i>	chl-u	53	49867	23.77%	<i>Pediastrum</i>	chl-c			
<i>Chlamydomonas</i>	chl-ug	4	3764	1.79%	<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				<i>Pithophora</i>	chl-f			
<i>Closterium</i>	chl-u				<i>Prymnesium</i>	hap-ug			
<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	6	5645	2.69%
<i>Crucigenia</i>	chl-c				<i>Scytonema</i>	chl-f			
<i>Cryptomonas</i>	crp-ug				<i>Selanastrum</i>	chl-u			
<i>Cylindrospermopsis</i>	cyn-f	19	17877	8.52%	<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>Stauroneis</i>	bac-u			
<i>Dunaliella</i>	chl-u				<i>Stephanodiscus</i>	bac-u			
<i>Epithemia</i>	bac-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	8	7527	3.59%
<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>Tetrastrum</i>	chl-c			
<i>Gonyaulax</i>	pyr-ug				<i>Trachelomonas</i>	eug-ug			
<i>Gyrosigma</i>	bac-u				<i>Vaucheria</i>	chl-f			
<i>Hydrodictyon</i>	chl-c				<i>Volvox</i>	chl-cg			
<i>Lynngbya</i>	cyn-f				<i>Zygnema</i>	chl-f			
<i>Melosira</i>	bac-f								
<i>Meridion</i>	bac-u								
<i>Merismopedia</i>	cyn-c								

check 100.00%

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Count (cells/mL) 2.10E+05





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## GOLDEN ALGAE REPORT

**Client:** Oasis at Anozira  
c/o Kinney Management Services  
6303 S. Rural Road  
Tempe, Arizona 85283

**Date Submitted:** 04/08/20  
**Date Reported:** 04/10/20

**Attn:** Debbie Tribioli

**Project:** Monthly Lake Monitoring

### RESULTS

**Client ID:** Lake  
**ACT Lab No.:** CC03024

**Sample Type:** Surface Water  
**Sample Time:** 04/08/20 11:50

<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	04/08/20	04/08/20	P/C Microscopy	1	Present 2	Pres/Abs	MEW

#### Explanation of Terms:

Absent = No golden algae\* were detected in the submitted sample.

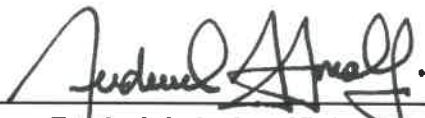
Present 1 = Golden algae\* were detected, but rarely observed in the submitted sample.

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.

*lee*

Reviewed by:   
Frederick A. Amalfi, Ph.D.  
Laboratory Director





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## GOLDEN ALGAE REPORT

**Client:** Oasis at Anozira  
c/o Kinney Management Services  
6303 S. Rural Road  
Tempe, Arizona 85283  
**Attn:** Debbie Tribioli

**Date Submitted:** 04/15/20  
**Date Reported:** 04/17/20

**Project:** Monthly Lake Monitoring

### RESULTS

**Client ID:** Lake  
**ACT Lab No.:** CC03233


**Sample Type:** Surface Water  
**Sample Time:** 04/15/20 12:00

<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	04/15/20	04/15/20	P/C Microscopy	1	Absent	Pres/Abs	MEW

#### Explanation of Terms:

- Absent = No golden algae\* were detected in the submitted sample.
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- Present 3 = Golden algae\* were detected and were the dominant algae in the submitted sample.

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Laboratory Director



**Aquatic Consulting & Testing, Inc.**

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**Chain of Custody**

**Client Project Info:**

**Golden Algae Screen**  
 Oasis at Anozira

**AC&T Client Reporting Information:**

Oasis at Anozira  
 c/o Kinney Management Services  
 Attn: Debbie Tribioli  
 6303 South Rural Road  
 Tempe, AZ 85283  
 P: 480-820-3451  
 E: debbie@kinneymanagement.com

**AC&T Sampler:**

Sample Location ID: *Lake* Date: *4/15/20* Time: *1200* Matrix: *SW*

*Andrew Marvett*

Sample Containers # / Preservation:					Other:	Lugols	H2SO4 (Sulfuric)	HNO3 (Nitric)	Na2S2O3 (Sterile)	Non Preserved	1	CC-03233
Field Measurements:												
pH, Temp, O2												
Golden Algae												
Algae Count & ID												

AC&T Client Reporting Information:					Other:	Lugols	H2SO4 (Sulfuric)	HNO3 (Nitric)	Na2S2O3 (Sterile)	Non Preserved	1	CC-03233
Field Measurements:												
pH, Temp, O2												
Golden Algae												
Algae Count & ID												

Project Location:		A C & T Sample Receipt:		1. RELINQUISHED BY:		3. RELINQUISHED BY:	
Oasis at Anozira	Total # Containers:	1	Signature:	<i>Andrew Marvett</i>	Signature:		
PO#:	Custody Seals:	YES <input checked="" type="checkbox"/>	Print Name:	<i>Andrew Marvett</i>	Print Name:		
Lake Contract	Samples Intact:	YES <input checked="" type="checkbox"/>	Date:	<i>4/15/20</i>	Date:		
Notes:	Samples On Ice:	YES <input checked="" type="checkbox"/>	Time:	<i>1415</i>	Time:		
Golden Algae Seasonal Monitoring (Oct - May)	Ice Type:	WET <input checked="" type="checkbox"/> BLUE <input type="checkbox"/>	Signature:	<i>ng</i>	Signature:		
	Sample Receipt Temperature:	<i>75.0</i>	Print Name:	<i>ms</i>	Print Name:		
			Date:	<i>4/15/20</i>	Date:		
			Time:	<i>1415</i>	Time:		

AC&T Client Reporting Information:		A C & T Sample Receipt:		1. RELINQUISHED BY:		3. RELINQUISHED BY:	
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# 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:** Oasis at Anozira  
c/o Kinney Management Services  
6303 S. Rural Road  
Tempe, Arizona 85283  
**Attn:** Debbie Triboli

**Date Submitted:** 04/22/20  
**Date Reported:** 04/29/20

**Project:** Golden Algae Screen

### RESULTS

**Client ID:** Lake  
**ACT Lab No.:** CC03396

**Sample Type:** Surface Water  
**Sample Time:** 04/22/20 12:30

<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	04/22/20	04/22/20	P/C Microscopy	1	Present 1	Pres/Abs	DC

#### 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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## GOLDEN ALGAE REPORT

**Client:** Oasis at Anozira  
c/o Kinney Management Services  
6303 S. Rural Road  
Tempe, Arizona 85283  
**Attn:** Debbie Tribioli

**Date Submitted:** 04/29/20  
**Date Reported:** 05/08/20

**Project:** Golden Algae Screen

### RESULTS

**Client ID:** Lake  
**ACT Lab No.:** CC03563

**Sample Type:** Surface Water  
**Sample Time:** 04/29/20 12:00

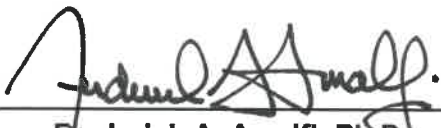
<u>Parameter</u>	<u>Analysis Date</u>		<u>Method No.</u>	<u>MDL</u>	<u>Result</u>	<u>Unit</u>	<u>Analyst</u>
	<u>Start</u>	<u>End</u>					
Golden Algae	04/29/20	04/29/20	P/C Microscopy	1	Absent	Pres/Abs	MEW

#### 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.

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Reviewed by:   
Frederick A. Amalfi, Ph.D.  
Laboratory Director





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**Tempe, Arizona 85281**  
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**PESTICIDE TREATMENT NOTICE & RECORD**

<b>Client:</b> The Oasis at Anozira
<b>Attn:</b> Debbie Tribioli The Oasis at Anozira C/O Kinney Management Services 6303 South Rural Road Tempe, Az 85283

<b>Location:</b> Lake on Anozira Parkway
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<b>Date:</b> 03-11-20	<b>Time:</b> 7:30	<b>Conditions:</b> <u>X clear</u> pt cloudy overcast <u>cold</u> mild hot
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<b>Material:</b>	<b>Reg. No. (*restricted)</b>	<b>Tot. Qty:</b>	<b>Acres/Volume:</b>
Phycomycin	68660-9-8959	3 lb	0.03 Aft
<b>Target Pest:</b> algae		<b>Degree of infestation:</b> low-mod	

<b>Application method/calculations:</b> 100 lb/Aft x 0.03 Aft = 3 lb Phyco	
<b>Dosage/rate</b> 100 lb/Aft	<b>Percent active ingredient:</b> 85% sodium peroxycarbonate

<b>Applicator:</b> Amalfi	<b>Cert. No.</b> 900496
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<b>Remarks/follow-up:</b>
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**Precautionary Statement:**

**Warning-Pesticides can be harmful. Keep children and pets away from pesticide applications until dry, dissipated, or aerated. For more information contact Aquatic Consulting & Testing, Inc. at 480-921-8044 and ask for Dr. Rick Amalfi. AC&T License No. 4418 F. A. Amalfi QP#1360 Cert. No. 900496**



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**Tempe, Arizona 85281**  
**Phone: 480-921-8044 Fax 480-921-0049**

### PESTICIDE TREATMENT NOTICE & RECORD

<b>Client:</b> The Oasis at Anozira
<b>Attn:</b> Debbie Tribioli The Oasis at Anozira C/O Kinney Management Services 6303 South Rural Road Tempe, Az 85283

<b>Location:</b> Lake on Anozira Parkway
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<b>Date:</b> 03-18-20	<b>Time:</b> 7:30	<b>Conditions:</b> <u>X clear</u> pt cloudy overcast <u>cold</u> mild hot
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<b>Material:</b>	<b>Reg. No. (*restricted)</b>	<b>Tot. Qty:</b>	<b>Acres/Volume:</b>
Phycomycin	68660-9-8959	3 lb	0.03 Aft
<b>Target Pest:</b> algae	<b>Degree of infestation:</b> low-mod		

<b>Application method/calculations:</b> 100 lb/Aft x 0.03 Aft = 3 lb Phyco	
<b>Dosage/rate</b> 100 lb/Aft	<b>Percent active ingredient:</b> 85% sodium peroxycarbonate

<b>Applicator:</b> Amalfi	<b>Cert. No.</b> 900496
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<b>Remarks/follow-up:</b>
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**Precautionary Statement:**

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### PESTICIDE TREATMENT NOTICE & RECORD

Client: The Oasis at Anozira
Attn: Debbie Tribioli The Oasis at Anozira C/O Kinney Management Services 6303 South Rural Road Tempe, Az 85283

Location: Entry features ( February March 2020 )
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Date: 04-01-20	Time: 09:00	Conditions: <u>X clear</u> pt cloudy overcast cold <u>X mild</u> mild
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Material:	Reg. No. (*restricted)	Tot. Qty:	Acres/Volume:
Hydrothol	4581-174	2 quart	0.03 Aft

Target Pest: algae

Degree of infestation: low

**Application method/calculations:**

2.25 G/Aft x 0.03 Aft = 0.0675 Gal (0.5 pt)

Dosage/rate 1.5 ppm

Percent active ingredient: 53% endothol

Applicator: Murrett	Cert. No. 061093
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Remarks/follow-up: algae
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**Precautionary Statement:**

Warning-Pesticides can be harmful. Keep children and pets away from pesticide applications until dry, dissipated, or aerated. For more information contact Aquatic Consulting & Testing, Inc. at 480-921-8044 and ask for Dr. Rick Amalfi. AC&T License No. 4418 F. A. Amalfi QP#1360 Cert. No. 900496







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### PESTICIDE TREATMENT NOTICE & RECORD

Client: The Oasis at Anozira
Attn: Debbie Tribioli The Oasis at Anozira C/O Kinney Management Services 6303 South Rural Road Tempe, Az 85283

Location: Entry features ( April 2020 )
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Date: 04-029-20	Time: 09:00	Conditions: <u>X clear</u> pt cloudy overcast cold <u>X mild</u> mild
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Material:	Reg. No. (*restricted)	Tot. Qty:	Acres/Volume:
Hydrothol	4581-174	2 quart	0.03 Aft

Target Pest: algae	Degree of infestation: low
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<b>Application method/calculations:</b> 2.25 G/Aft x 0.03 Aft = 0.0675 Gal (0.5 pt)	
Dosage/rate 1.5 ppm	Percent active ingredient: 53% endothol

Applicator: Murrett	Cert. No. 061093
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Remarks/follow-up: algae
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**Precautionary Statement:**

**Warning-Pesticides can be harmful. Keep children and pets away from pesticide applications until dry, dissipated, or aerated. For more information contact Aquatic Consulting & Testing, Inc. at 480-921-8044 and ask for Dr. Rick Amalfi. AC&T License No. 4418 F. A. Amalfi QP#1360 Cert. No. 900496**