



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

20 February 2019

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

Ref: Oasis Lake, January 2019

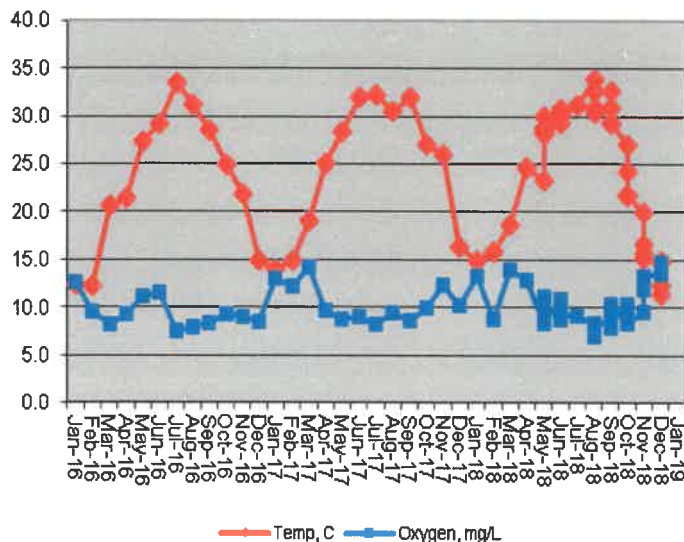
Dear Ms. Tribioli:

The following report summarizes water quality data collected for Oasis Lake on 09 January 2019. 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 decreased to 12.2 C (54 F) and the dissolved oxygen concentration was stable at 13.2 mg/L. At the time of sampling, the oxygen saturation was greater than 100 percent. Despite minor issues with portions of the aeration system, the operation of the floating fountains helped maintain dissolved oxygen at a level that was more than satisfactory for the fishery.

2016-2019 Temperature and Oxygen



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

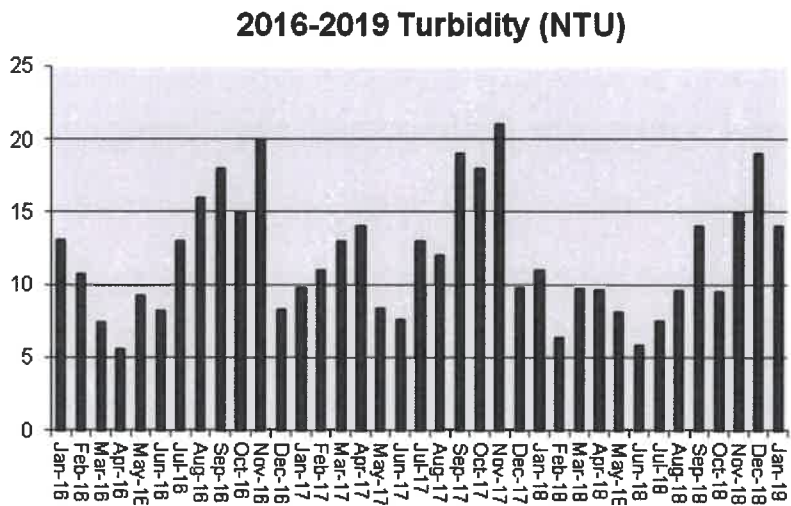
Criterion	Early life stages	Other life stages
Daily mean	>6.0	>4.0
Daily minimum	>5.0	>3.0

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.

Please note that tilapia, fish that have not been intentionally stocked in the lake, sometimes become part of the fish community. Tilapia are African cichlids and cannot tolerate water temperatures below 55 F. The fish die, sink to the bottom, and begin to float to the surface one to two weeks later. As water temperatures have now reached the critical temperature, if tilapia are present in the lake, they are likely to die.



Turbidity: The turbidity of the lake water decreased to 14 NTU. The decrease has been attributed to reduced algae density. Water turbidity is impacted by 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.



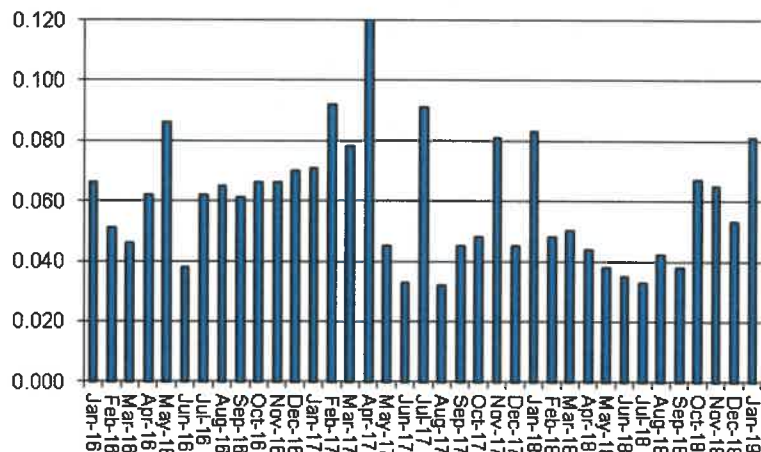
pH: The lake water pH increased to 8.8 SU. Water pH is influenced by the chemical makeup of the water and the amount of algae in the lake. In a very simplified explanation for the role of algae, carbonic acid in the water is formed from dissolution of carbon dioxide. Carbonic acid tends to make the water 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.

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 and pH, toxicity would not be expected. No signs of fish stress were observed.

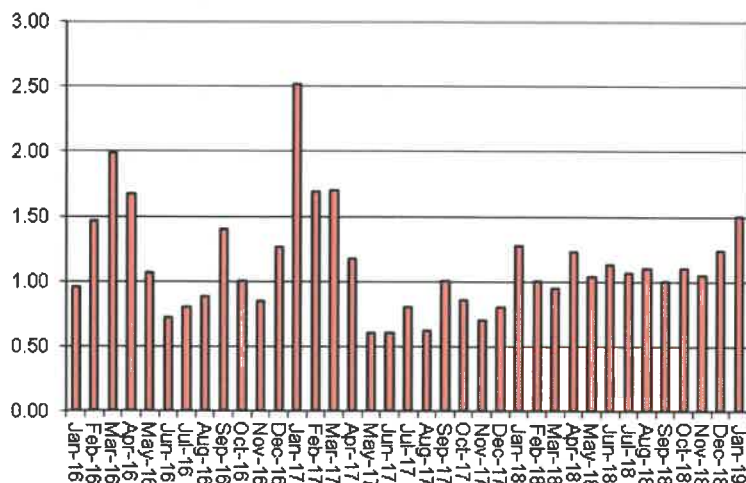
Nutrients: Nitrogen and phosphorus are the primary nutrients that stimulate algae and submerged plant growth. Phosphorus is typically the nutrient that dictates how much plant growth can be sustained in a lake. Usually if the total phosphorus concentration is below 0.030 mg/L, low levels of suspended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

The phosphorus concentration increased to 0.081 mg/L as P. The nitrogen concentration also increased to 1.50 mg/L as N. Usually a change in nutrient concentrations is reflected in changes in algae growth. In this case, an increase in algae density would typically be expected. However, the algae density decreased and the composition of the phytoplankton community changed (see below). Unusually cold weather may have limited growth.

2016-2019 Phosphorus (mg/L)



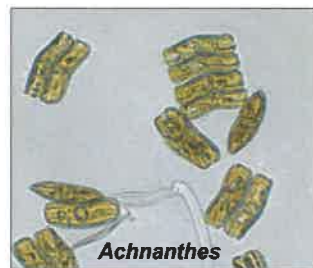
2016-2019 Total Nitrogen (mg/L)



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.

The total algae density in the lake decreased to 3.73×10^4 cells per mL, a density considered moderate for an urban reservoir in metro-Phoenix. The diatom (Bacillariophyta), *Achnanthes*, became the dominant form. Diatoms often become abundant during cold weather. Blue-green (Cyanophyta) algae comprised about 50 percent of the algal population. Many blue-green algae can become problematic in terms of producing floating mats and attached stringers, but no problems were encountered. The blue-green algae appear to be decreasing, resulting in reduced turbidity.



Tests conducted during the month indicated no presence of golden algae. The golden alga (*Prymnesium 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. The situation continues to be monitored closely.

A one-half lake surface area algaecide application was made toward the end of the month to reduce increased algae growth that was detected about two weeks following the monthly sample collection (record is attached). Submerged weeds were not detected in the lake. Weeds have been controlled by stocking of the grass carp (White Amur, *Ctenopharyngodon idellus*) and by aquatic dye additions.



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 at right. 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 to consume the larvae and/or application of bacterial or chemical larvicides. Because these fish have not been stocked for three years or more, a maintenance stocking of goldfish or sunfish is recommended.



Although water temperatures increased, few adult midge flies were detected during the month.

Fishery: No significant loss of fish occurred during the month.

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 the following criteria for waterfowl on small urban lakes.

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

Based on the Arizona Game & Fish Department scale, the lake condition in terms of waterfowl has been in the "good to excellent" category from late summer through mid-winter. Cormorants were occasionally observed during the month and Canada geese appear to be increasing. Cormorants are diving birds that feed on small fish. Canada geese destroy turf and, along with other



birds, contribute fecal matter to the common areas and water.

In terms of public health protection, the *E. coli* bacteria concentration decreased dramatically and met the State full body contact (swimming) standard (maximum of 235 per 100 mL) and the incidental or partial body contact standard (maximum of 575 per 100 mL).

Mechanical Systems and Field Observations

Weekly field inspection forms are attached to this report. The entry water features that were taken out of service for cleaning and repairs were returned to operation by the second week of the month.

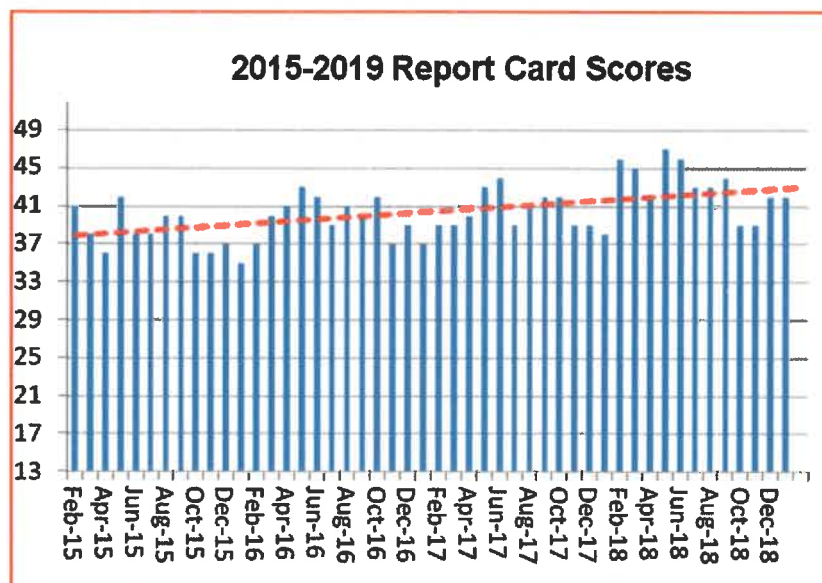
Chemical/Biological Product Applications

A single algaecide application was made to the lake on 23 January. Algaecide was also applied to all three entry features at the end of the month.

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 overall December score was 42, improved from the November value. Lower *E. coli* and phosphorus concentrations and lower pH were the primary reasons for the improvement in report card score.

Report card scores for the past three years are summarized above. Data still indicate a cyclic pattern and a long-term overall increasing trend in score, despite the recent decline.



Respectfully,

AQUATIC CONSULTING & TESTING, INC.



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





LABORATORY REPORTS



FIELD INSPECTION FORMS



PESTICIDE APPLICATION DOCUMENTS (none)

OASIS LAKE REPORT CARD

DATE OF EVALUATION:

Jan-19	CONDITION	GOOD	SCORE	42
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PREVIOUS EVALUATION:

Dec-18	CONDITION	GOOD	SCORE	42
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CONDITION	RESULT	RATIONALE	4 pts			3 pts			2 pts			1 pt						
			EXCELLENT	GOOD	FAIR	POOR	SCORE	EXCELLENT	GOOD	FAIR	POOR	SCORE	EXCELLENT	GOOD	FAIR	POOR	SCORE	
Turbidity (NTU)	14.0	aesthetics	<5	5-10	11-20	>20												
Dissolved oxygen (mg/L)	>10	aquatic life, sediment nutrient release, odors	>7.0	5.6-6.9	4.0-5.5	<4.0												
Nitrogen, total (mg/L)	1.50	algae and macrophyte growth	<0.5	0.5-1.0	1.1-2.0	>2.0												
Phosphorus, total (mg/L)	0.081	algae and macrophyte growth	<0.03	0.03-0.05	0.06-0.10	>0.10												
Algae density (no./mL)	3.73 x 10 ⁴	aesthetics	<5 x 10 ⁴	5x10 ⁴ - 9x10 ⁴	1 x 10 ⁵ -5x 10 ⁶	>5 x 10 ⁵												
Algae form (dominant)	diatoms	aesthetics, treatability	greens; no floating mats	diatoms; no floating mats	blue-greens; no floating mats	blue-greens; floating mats common												
Macrophytes (% cover)	<1	aesthetics, boating	none	<10%	11-20%	>20%												
pH (SU) avg.	8.5	swimming, fishery, ammonia toxicity	6.5-8.0	8.0-8.5	8.6-9.0	>9.0												
E. coli bacteria (#/100 mL) avg.	38	public health protection	<20	21-80	81-125	>125												
Midge flies	no nuisances	quality of life	no nuisances	minor nuisances	moderate nuisances	significant nuisances												
Waterfowl (no. per acre)	2	nutrient and bacteria loading	<2	2-5	6-10	>10												
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												
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												

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: 01/09/19
Date Reported: 02/20/19

Attn: Debbie Tribioli

Project: Monthly Lake Monitoring

RESULTS

Client ID: Lake
ACT Lab No.: CB00306

Sample Type: Surface Water
Sample Time: 01/09/19 11:50

<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	02/20/19	02/20/19	SM 10200 F	See Attached	cells/mL
Algae Identification	02/20/19	02/20/19		See Attached	
Golden Algae	01/09/19	01/09/19	P/C Microscopy	Absent	Pres/Abs
Oxygen, Dissolved Field	01/09/19	01/09/19	SM4500 O G	13.2	mg/L as O ₂
pH, Field	01/09/19	01/09/19	SM4500H+ B	8.8	SU
Temperature, Field	01/09/19	01/09/19	SM2550 B	12.2	C
Nitrate + Nitrite - N	01/20/19	01/20/19	SM4500NO ₃ E	0.50	mg/L as N
Phosphorus, Total	01/31/19	01/31/19	365.3	0.081	mg/L as P
Total Kjeldahl Nitrogen	01/15/19	01/15/19	SMNorg C,NH ₃ C/D	1.0	mg/L as N
E. coli, Colilert	01/09/19	01/10/19	SM 9223 B	38	MPN/100 mL
Turbidity	01/09/19	01/09/19	180.1	14.	NTU

Reviewed by:

Frederick A. Amalfi, Ph.D.

Laboratory Director

ALGAE IDENTIFICATION

AC&T Lab No.	CB00306	Date Collected	01/09/19
Client I.D.	Oasis at Anozira	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
Achnanthes	bac-u	70	15551	41.67%	Microcystis	cyn-c	8	1777	4.76%
Anabaena	cyn-f				Microspora	chl-f			
Ankistrodesmus	chl-u				Mougeotia	chl-f			
Aphanocapsa	cyn-c				Navicula	bac-u			
Asterionella	bac-c				Nitzschia	bac-u			
Botryococcus	chl-c				Oocystis	chl-c			
Carteria	chl-ug				Oscillatoria	cyn-f	45	9997	26.79%
Cephalomonas	chl-ug				Pandorina	chl-cg			
Ceratium	pyr-ug				Pediastrum	chl-c			
Chlamydomonas	chl-ug	4	889	2.38%	Peridinium	pyr-ug	2	444	1.19%
Chlorella	chl-u	1	222	0.60%	Phacotus	chl-ug			
Chlorococcum	chl-c				Phacus	chl-ug			
Chroococcus	cyn-c				Pinnularia	bac-u			
Chroomonas	crp-ug				Pithophora	chl-f			
Closterium	chl-u				Prymnesium	hap-ug			
Cocconeis	bac-u				Rhizoclonium	chl-f			
Coelastrum	chl-c				Rhoicosphenia	bac-u			
Cosmarium	chl-u				Rhopalodia	bac-u			
Cosmocladium	chl-c				Scenedesmus	chl-c	4	889	2.38%
Crucigenia	chl-c				Scytonema	chl-f			
Cryptomonas	crp-ug				Selanastrum	chl-u			
Cyclotella	bac-u				Sphaerocystis	chl-c			
Cymbella	bac-u				Spondylumorum	chl-c			
Diatoma	bac-u				Spirulina	cyn-f			
Dictyosphaerium	chl-c				Stauroneis	bac-u			
Dunaliella	chl-u				Stephanodiscus	bac-u			
Epithemia	bac-u				Stigeoclonium	chl-f			
Euglena	eug-ug				Surirella	bac-u			
Fragilaria	bac-u				Synechococcus	cyn-u			
Frustulia	bac-u				Synechocystis	cyn-c			
Glenodinium	pyr-ug				Synedra	bac-u			
Golenkinia	chl-c				Synura	cry-cg			
Gomphonema	bac-u				Tetraedron	chl-u	2	444	1.19%
Gonium	chl-cg				Tetrastrum	chl-c			
Gonyaulax	pyr-ug				Trachelomonas	eug-ug			
Gyrosigma	bac-u				Vaucheria	chl-f			
Hydrodictyon	chl-c				Volvox	chl-cg			
Lyngbya	cyn-f				Zygnema	chl-f			
Melosira	bac-f								
Meridion	bac-u								
Merismopedia	cyn-c	32	7109	19.05%					

check 100.00%

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Count (cells/mL) 3.73E+04

Aquatic Consulting & Testing, Inc.

1525 W. University Dr. Ste. #106
 Tempe, Arizona 85281
 (480) 921-8044 Fax (480) 921-0049

Chain of Custody

Client Project Info:

Monthly Lake Monitoring
 Oasis at Anozira

AC&T Client Reporting Information:

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

AC&T Sampler: *Andrew Murrett*

Sample Location ID: **Lake**
 Date: **1-9-19** Time: **1150** Month: **SW**

AC&T Client Reporting Information:		AC&T Sampler:		Sample Location ID:		Date:		Time:		Month:																	
NO3+NO2	X	Total Phosphorous (P-T)	X	Total Kjeldahl Nitrogen (TKN)	X	Total E.Coli-MPN	X	Turbidity	X	Algae Count & ID	X	Golden Algae	X	Field Measurements: pH, Temp, O2	X	Non Preserved	3	Na2S2O3 (Sterile)	2	HNO3 (Nitr)	1	H2SO4 (Sulfuric)	1	Lugole	1	Other:	
<p style="text-align: center;">AC&T Laboratory Sample Identification</p>																											
<p style="text-align: right;">CB-00306</p>																											

Project Location:	A C & T Sample Receipt:	1. RELINQUISHED BY:		2. RECEIVED BY:		3. RELINQUISHED BY:		4. RECEIVED BY:	
Oasis at Anozira	Total # Containers: 7	Signature: <i>Andrew Murrett</i>	Signature:	Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
PO#:	Custody Seals: YES NO	Print Name: <i>Andrew Murrett</i>	Print Name:	Print Name:	Print Name:	Print Name:	Print Name:	Print Name:	Print Name:
Lake Contract	Samples Intact: YES NO	Date: 1/9/19	Date:	Date:	Date:	Date:	Date:	Date:	Date:
Notes:	Samples On Ice: YES NO	Time: 1455	Time:	Time:	Time:	Time:	Time:	Time:	Time:
<i>preserved</i>	Ice Type: WET BLUE	Signature: <i>lgr</i>	Signature:	Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
	Sample Receipt Temperature: 12°C	Print Name: <i>Mickelson</i>	Print Name:	Print Name:	Print Name:	Print Name:	Print Name:	Print Name:	Print Name:
		Date: 01/09/2019	Date:	Date:	Date:	Date:	Date:	Date:	Date:
		Time: 1455	Time:	Time:	Time:	Time:	Time:	Time:	Time:



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Lic. No. AZ0003

GOLDEN ALGAE REPORT

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

Date Submitted: 01/23/19
Date Reported: 01/31/19

Project: Monthly Lake Monitoring

RESULTS

Client ID: Lake
ACT Lab No.: CB00783


Sample Type: Surface Water
Sample Time: 01/23/19 09:00

<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	01/23/19	01/23/19	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.*

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

Aquatic Consulting & Testing, Inc.

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 Tempe, Arizona 85281
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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 Triboli
 6303 South Rural Road
 Tempe, AZ 85283
 P: 480-820-3451
 E: debbie@kinneymanagement.com

AC&T Sampler:

Sample Location ID: _____ Date: 1/23/19 Time: 9:00 Metric: SW

Lake

1/23/19 9:00 SW

Sample Containers # / Preservation:	AC&T Laboratory Sample Identification													
	Non Preserved	Na2S2O3 (Sterile)	HNO3 (NRTC)	H2SO4 (Sulfuric)	Lugols	Other:	Golden Algae	Field Measurements: pH, Temp, O2	Algae Count & ID	Turbidity	Total E.Coli-MPN	Total Kjeldahl Nitrogen (TKN)	Total Phosphorous (P-T)	NO3+NO2
1							X							

CB-00783

Project Location:	A C & T Sample Receipt:	1. RELINQUISHED BY:	3. RELINQUISHED BY:
Oasis at Anozira	Total # Containers: 1	Signature: <i>Andrew Triboli</i>	Signature: _____
PO#:	Custody Seals: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Print Name: Andrew Triboli	Print Name: _____
Lake Contract	Samples Intact: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Date: 1/23/19	Date: _____
Notes:	Samples On Ice: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Time: 14:17	Time: _____
Golden Algae Seasonal Monitoring (Oct - May)	Ice Type: WET <input type="checkbox"/> BLUE <input checked="" type="checkbox"/>	Signature: <i>John</i>	Signature: _____
	Sample Receipt Temperature: 9°C	Print Name: John	Print Name: _____
		Date: JAN 23 2019	Date: _____
		Time: 14:17	Time: _____



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Lic. No. AZ0003

GOLDEN ALGAE REPORT

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

Date Submitted: 01/30/19
Date Reported: 01/31/19

Project: Monthly Lake Monitoring

RESULTS

Client ID: Lake
ACT Lab No.: CB00977


Sample Type: Surface Water
Sample Time: 01/30/19 10:40

<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	01/30/19	01/30/19	P/C Microscopy	1	Absent	Pres/Abs	MEW

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- 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

OASIS AT ANOZIRA FIELD INSPECTION FORM (

wpdoc/lists&forms)

Date: 1/3/19
By: _____

Aeration System Operation

operational Problem

Details: 2 out

Lake Surface

Lake surface cleaning

Floating Fountains West East South

operational Problem Details: _____

Pump house housekeeping leaks ventilation lighting Notes _____

Compressors operational Problem Details: _____

Pumps operational Problem Details: _____

Entry Fountains

Elliot North: operational Screens cleared Problem Details: being repaired

Elliot South: operational Screens cleared Problem Details: _____

Los Feliz: operational Screens cleared Problem Details: _____

Monthly Chemistry & Biology

- Dissolved oxygen 10.7
- Temperature 10.4
- pH 8.5
- Algae ID and count
- Ammonia-N
- Organic N (TKN)
- Phosphorus
- Turbidity
- E. coli*
- Golden algae (seasonal)



OASIS AT ANOZIRA FIELD INSPECTION FORM (

wpdoc/lists&forms)

Date: 1/9/19
By: Am

Aeration System Operation

operational Problem

Details: 5 of 7 out

Lake Surface

Lake surface cleaning

Floating Fountains West East South

operational Problem Details: _____

Pump house

housekeeping leaks ventilation lighting Notes _____

Compressors

operational Problem Details: _____

Pumps

operational Problem Details: _____

Entry Fountains

Elliot North: operational Screens cleared Problem Details: _____

Elliot South: operational Screens cleared Problem Details: _____

Los Feliz: operational Screens cleared Problem Details: _____

Monthly Chemistry & Biology

- Dissolved oxygen 13.2
- Temperature 12.2
- pH 8.8
- Algae ID and count
- Ammonia-N
- Organic N (TKN)
- Phosphorus
- Turbidity
- E. coli
- Golden algae (seasonal)



OASIS AT ANOZIRA FIELD INSPECTION FORM (

wpdoc/lists&forms)

Date: 1/17/18
By: AM

Aeration System Operation

operational Problem

Lake Surface

Lake surface cleaning

Details: 1 out other working poorly

Floating Fountains West East South

operational Problem Details: _____

Pump house housekeeping leaks ventilation lighting Notes _____

Compressors operational Problem Details: _____

Pumps operational Problem Details: _____

Entry Fountains

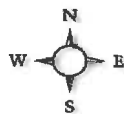
Elliot North: operational Screens cleared Problem Details: _____

Elliot South: operational Screens cleared Problem Details: _____

Los Feliz: operational Screens cleared Problem Details: _____

Monthly Chemistry & Biology

- Dissolved oxygen 17.0
- Temperature 16.1
- pH 8.6
- Algae ID and count
- Ammonia-N
- Organic N (TKN)
- Phosphorus
- Turbidity
- E. coli*
- Golden algae (seasonal)



OASIS AT ANOZIRA FIELD INSPECTION FORM (

wpdoc/lists&forms)

Date: 1/23/19
By: Am

Aeration System Operation

operational Problem

Details: 1 art (10 gallons Citrine Ultra)

Lake Surface

Lake surface cleaning

Floating Fountains West East South

operational Problem Details: _____

Pump house housekeeping leaks ventilation lighting Notes _____

Compressors operational Problem Details: _____

Pumps operational Problem Details: _____

Entry Fountains

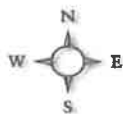
Elliot North: operational Screens cleared Problem Details: _____

Elliot South: operational Screens cleared Problem Details: _____

Los Feliz: operational Screens cleared Problem Details: _____

Monthly Chemistry & Biology

- Dissolved oxygen 12.7
- Temperature 13.0
- pH 8.6
- Algae ID and count
- Ammonia-N
- Organic N (TKN)
- Phosphorus
- Turbidity
- E. coli*
- Golden algae (seasonal)



OASIS AT ANOZIRA FIELD INSPECTION FORM (

wpdoc/lists&forms)

Date: 1/30/19

By: Am

Aeration System Operation

operational Problem

Details: All Not Working

Lake Surface

Lake surface cleaning

Floating Fountains West East South

operational Problem Details: _____

Pump house

housekeeping leaks ventilation lighting Notes _____

Compressors

operational Problem Details: _____

Pumps

operational Problem Details: _____

Entry Fountains

Elliot North: operational Screens cleared Problem

Details: Hydrothol

Elliot South: operational Screens cleared Problem

Details: Hydrothol

Los Feliz: operational Screens cleared Problem

Details: Hydrothol

Monthly Chemistry & Biology

Dissolved oxygen 14.1

Temperature 14.4

pH 8.9

Algae ID and count

Ammonia-N

Organic N (TKN)

Phosphorus

Turbidity

E. coli

Golden algae (seasonal)





AQUATIC CONSULTING & TESTING, INC.
1525 West University Drive, Suite 106
Tempe, Arizona 85281
Phone: 480-921-8044 Fax 480-921-0049

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: Lake on Anozira Parkway
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Date: 01-23-19	Time: 08:30	Conditions: <input checked="" type="checkbox"/> clear <input type="checkbox"/> pt cloudy <input type="checkbox"/> overcast <input type="checkbox"/> cold <input checked="" type="checkbox"/> mild <input type="checkbox"/> hot
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Material:	Reg. No. (*restricted)	Tot. Qty:	Acres/Volume:
Citrine Ultra	8959-53	10 gal	16 Aft

Target Pest: golden algae	Degree of infestation: low
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Application method/calculations: 0.6 gal/Aft x 16 Aft= 10 gal

Dosage/rate 0.2 ppm Cu	Percent active ingredient: 9% copper
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Applicator: Murrett	Cert. No. 061093
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Remarks/follow-up: algae

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



AQUATIC CONSULTING & TESTING, INC.
1525 West University Drive, Suite 106
Tempe, Arizona 85281
Phone: 480-921-8044 Fax 480-921-0049

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

Date: 01-30-19	Time: 09:00	Conditions: <input checked="" type="checkbox"/> <u>clear</u> pt cloudy overcast <input checked="" type="checkbox"/> <u>cold</u> mild hot
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Material:	Reg. No. (*restricted)	Tot. Qty:	Acres/Volume:
Hydrothol	4581-174-82695	0.5 pt	0.03 Aft

Target Pest: golden algae	Degree of infestation: low
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Application method/calculations: 2.25 G/Aft x 0.03 Aft = 0.0675 Gal (0.5 pt)
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Dosage/rate 1.5 ppm	Percent active ingredient: 9% copper
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Applicator: Murrett	Cert. No. 061093
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Remarks/follow-up: algae

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