



January 21, 2021

Reference No. 11225022-01

Mr. Bruce Bernard
Manager of Field Operations
Calvin, Giordano & Associates, Inc.
1800 Eller Drive, Suite 600
Fort Lauderdale, FL 33316

Dear Mr. Bernard:

Re: **Water Quality Monitoring – October 2021
Lakes 4, 5, 12, 14, 22, and 32 – Treviso Bay
Naples, Collier County, Florida**

GHD Services Inc. (GHD) is pleased to present the results of our water quality sampling services for Lakes 4, 5, 12, 14, 22, and 32 – Treviso Bay.

1. Water Quality Sampling - October 2021

The October 2021 sampling event consisted of the collection of six (6) surface water samples, one each from six (6) different lakes within the Treviso Bay residential community as identified on **Figure 1**.

Samples were collected using direct-dip methods from lakes 4, 5, 12, 14, 22, and 32 at locations having a minimum water depth of three (3) feet to minimize disturbance of sediments. Where applicable, samples were collected from near the outfall structure/weir, particularly if there is flow over the weir. If the water depth is too shallow near the outfall structure/weir, samples are collected using a long-reach sampling pole from the bank of the lake. See **Figure 1** for locations of outfall structures/weirs. Of note, there is no visible outfall structure/weir in Lake 5.

Conductivity, dissolved oxygen, pH, and temperature were measured in the field with a calibrated YSI Pro Plus multi-parameter water quality meter. Turbidity and total water depth were also measured at each location. Surface Water Field Sheets are attached. Field data is summarized in **Table 1**.

The collected samples are capped, labeled, packed on ice, and transported to Benchmark EnviroAnalytical, Inc., in North Port, Florida. Benchmark EnviroAnalytical, Inc. is certified by the State of Florida and NELAP (National Environmental Laboratory Accreditation Conference). Laboratory analysis are conducted for 5-Day Biochemical Oxygen Demand (BOD5), Total Suspended Solids (TSS), Total Nitrogen, nitrogen speciation (ammonia, TKN, and nitrate + nitrite), Total Phosphorus, Ortho Phosphorus (Field Filtered) and Chlorophyll-a.

All samples collected during the October 2021 sampling event were prepared and analyzed within the method required holding times. The laboratory data have been reviewed with respect to authenticity,



precision, limits of detection, and accuracy of the data. The laboratory analytical results are summarized in the attached **Table 1**. The laboratory report and data compliance memorandum are also attached.

Trend graphs have been prepared for each monitor location for laboratory analytical results and select field measurements.

2. Analytical Summary

The October 2021 sampling event represents the third sampling event for the select six (6) lakes in Treviso Bay.

The observed concentrations/measurements of Biological oxygen demand (BOD), dissolved oxygen, total phosphorus, orthophosphate, total suspended solids (TSS), chlorophyll *a*, pH, turbidity, and total nitrogen appear to be within typical ranges.

Biological oxygen demand (BOD) remained undetected from the last sampling event at Lakes 4, 12, and 22. BOD increased from the last sampling event at Lakes 5, 14, and 32, with Lake 5 rising to the highest BOD recorded at 1.97 mg/L (a 32% increase). All other Lakes remain within historical levels. We will continue to monitor closely and see if a trend develops.

The dissolved oxygen readings at the monitoring locations fluctuate throughout the year as anticipated given the temperature of the water and biological activity. In general, the dissolved oxygen remains above the action level for dissolved oxygen percent (%) of a minimum of 38%, however, Lake 12 decreased just below the action level at 35.5%. Dissolved oxygen ranged from 35.5% at Lake 12 to ~100% at Lake 22.

Total nitrogen at Lakes 4 and 5 increased last month to 0.75 and 0.97 mg/L, respectively, but remain within historical levels. All other sample locations decreased in total nitrogen, with an apparent downward trend in total nitrogen at Lakes 12, 14, 22 and 32 over the last 4 sampling events. Lakes 12, 22, and 32 hit all-time lows at 0.45, 0.50, and ~0.03 mg/L, respectively.

Total phosphorus decreased at Lake 4 but increased at all other locations. All results remain within historical levels. We will continue to monitor closely and see if any other trends develop.

Total suspended solids (TSS) slightly decreased at Lake 4 but increased at all other locations. All results remain within historical level. We will continue to monitor closely and see if any other trends develop.

Chlorophyll-*a* increased at Lakes 5, 14 and 32, and slightly decreased at Lakes 4, 12, and 22. The increases are 316%, 25% and 36% higher than previous highest recorded Chlorophyll-*a* result at those locations, respectively. The significant increase in Chlorophyll-*a* at Lake 5 may be caused by recent vegetation growth near the sample locations. We will continue to monitor closely and see if a trend develops.

Orthophosphate results show a constant or slight increase at all sample locations, except at Lake 4, which decreased to the lowest results yet, at 0.004 mg/L. The remaining results were within historical levels.



Total kjeldahl nitrogen (TKN) decreased at Lakes 12, 14, 22 and 32 and slightly increased at Lakes 4 and 5. The TKN results at Lake 32 showed a decrease to the lowest level recorded, at ~0.03 mg/L. Lakes 14, 22 and 32 appear to be trending downwards over the last 4 sampling events.

The pH collected at all sample locations during October 2021 ranged from 7.58 at Lake 12 to 8.72 at Lake 32.

3. Annual Review

Throughout the samplings events conducted in 2021, water quality conditions have remained relatively stable throughout the year, with notable trends highlighted below. Considering the climate of the Site, typically water quality is expected to dilute in the warmer, wetter months, and concentrate in the drier, cooler months.

The parameters measured during the sampling events in February, June and October showed stable conditions at most Lakes for BOD, TSS, DO, Total Phosphorus, TSS, Orthophosphate, Total kjeldahl nitrogen, Turbidity, Conductivity, Water Depth and Temperature.

Specifically, a notable downward trend was seen over the last 3 sampling events for DO at Lake 12, for Total Nitrogen at Lakes 12, 22 and 32, and Chlorophyll a at Lakes 4 and 12.

Specifically, a notable upward trend was seen over the last 3 sampling events for Total Nitrogen at Lake 4 and Chlorophyll a at Lakes 5, 14 and 32.

4. Conclusions and Recommendations

It appears water quality conditions have remained relatively stable between February and October 2021. We will continue to monitor closely and see if any significant trends develop.

Based on the annual review, a check of Lake 12 is advised to determine if algae growth is inhibiting oxygen and Chlorophyll a in the water.

The next tri-annual sampling event is planned for February 2022.

Please call if you have questions or need additional information.

Sincerely,

GHD



A handwritten signature in black ink, appearing to read 'C Haydon'.

Connor Haydon
Environmental Engineer

A handwritten signature in blue ink, appearing to read 'Lori Coolidge'.

Lori Coolidge, P.G.
Principal Geologist

Encl: Attachments: Table 1
Figure 1
Trend Graphs
Laboratory Analytical Reports
Surface Water Field Sheets
Laboratory Data Compliance Memo

Table

Table 1

**Analytical Results Summary
Surface Water Quality Monitoring
Treviso Bay, Naples, Florida
October 2021**

Sample Location/Sample ID:		Lake 4					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	06/30/2021	10/27/2021
Field Parameters	Units						
Total Water Depth	Feet	3	2.7	2.34	1.2	1.80	3.5
Sample Depth	Feet	1.5	1.5	1.5	0.5	1	1.5
Conductivity, field	umhos/cm	908	1129	514	666	755	646
Dissolved oxygen (DO), field	mg/L	6.07	4.36	2.78	3.50	3.82	3.99
Dissolved oxygen (DO), field	%	70.6	56.4	34.7	41.7	49.3	50.6
pH, field	s.u.	7.27	8.4	7.79	8.04	7.9	7.59
Temperature, field	Deg C	22.68	29.1	26.8	24.3	28.6	27.5
Turbidity, field	NTU	1.02	2.33	1.84	2.70	2.91	1.24
Secchi Disk	Depth						
Wet Parameters	Units						
Ammonia-N	mg/L	0.010 I	0.008 U	0.181	0.008 U	0.084	0.083
TAN criteria calculation	mg/L	1.39	0.23	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.651	0.812	1.19	0.870	0.431	0.668
Total nitrogen	mg/L	0.770	0.818	1.23	0.05 U	0.451	0.754
Nitrite/Nitrate	mg/L	0.119	0.006 I	0.043	0.130	0.020 I	0.086
Ortho phosphorus (Field Filtered)	mg/L	0.039	0.043	0.026	0.008	0.020	0.004 I
Total phosphorus	mg/L	0.046	0.045	0.024 I	0.084	0.022 I	0.015 I
Chlorophyll	mg/m3	4.58	10.4	4.87	18.4	7.73	3.57
Total suspended solids (TSS)	mg/L	1.75 I	3.00	2.20 I	0.570 U	1.93 I	0.667 I
Biochemical oxygen demand (total BOD5)	mg/L	1 U	1.0 U	1 U	1.08 I	1 U	1 U

Sample Location/Sample ID:		Lake 14					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters	Units						
Total Water Depth	Feet	2.5	2.41	2.81	2.2	1.83	2.3
Sample Depth	Feet	1.5	1.5	1.5	1.5	1	1.5
Conductivity, field	umhos/cm	14.67	2066	999	967	1223	1119
Dissolved oxygen (DO), field	mg/L	5.79	4.36	5.45	4.13	4.31	4.92
Dissolved oxygen (DO), field	%	66.7	57.6	67.8	48.8	54.1	63.7
pH, field	s.u.	7.71	8.33	8.44	8.55	8.28	8.43
Temperature, field	Deg C	22.04	29.6	26.4	23.7	28.6	28.2
Turbidity, field	NTU	2.07	7.06	3.44	2.83	2.60	3.80
Secchi Disk	Depth						
Wet Parameters	Units						
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.041
TAN criteria calculation	mg/L	0.99	0.25	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.816	0.926	1.35	0.908	0.750	0.738
Total nitrogen	mg/L	0.816	0.926	1.35	0.908	0.750	0.738
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.007 I	0.031	0.004 I	0.002 U	0.002 U	0.007 I
Total phosphorus	mg/L	0.029 I	0.044	0.025 I	0.020 I	0.008 U	0.011 I
Chlorophyll	mg/m3	8.51	10.3	11.7	5.95	16.0	20.0
Total suspended solids (TSS)	mg/L	4.50	3.75	7.50	4.40	3.60	6.00
Biochemical oxygen demand (total BOD5)	mg/L	1.55 I	1.0 U	2.32 I	1.59 I	1.03 I	1.61 I

Notes:

- U - Not detected at the associated reporting limit
- I - Reported value is between method detection limit and the practical quantitation limit
- NS - Not sampled during noted event
- * DO values at or above 100% are possible super-saturation conditions due to high water temperatures and/or high volume of algae.

Table 1

**Analytical Results Summary
Surface Water Quality Monitoring
Treviso Bay, Naples, Florida
October 2021**

Sample Location/Sample ID:		Lake 5					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters							
	Units						
Total Water Depth	Feet	7	7.5	7.50	6.2	NM	NM
Sample Depth	Feet	1.5	1.5	1.5	1.5	surface	1.5
Conductivity, field	umhos/cm	405	630	561	284	389	308
Dissolved oxygen (DO), field	mg/L	9.25	4.46	6.72	5.60	4.48	5.60
Dissolved oxygen (DO), field	%	107.9	59.3	83.9	67.5	59.4	72.5
pH, field	s.u.	7.61	7.78	8.61	8.71	8.26	8.62
Temperature, field	Deg C	22.95	30.1	27.2	25.1	30.2	28.8
Turbidity, field	NTU	1.36	2.45	3.54	6.43	1.94	4.53
Secchi Disk	Depth						
Wet Parameters							
	Units						
Ammonia-N	mg/L	0.008 U	0.009 I	0.030 I	0.008 U	0.053	0.085
TAN criteria calculation	mg/L	1.04	0.54	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.654	0.750	1.04	0.828	0.638	0.910
Total nitrogen	mg/L	0.654	0.750	1.04	0.828	0.638	0.976
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.066
Ortho phosphorus (Field Filtered)	mg/L	0.024	0.053	0.026	0.007 I	0.002 U	0.020
Total phosphorus	mg/L	0.044	0.063	0.027 I	0.014 I	0.008 U	0.046
Chlorophyll	mg/m3	6.71	8.71	9.27	6.17	9.17	29.3
Total suspended solids (TSS)	mg/L	5.00	2.25 I	6.20	4.80	1.00 I	6.67
Biochemical oxygen demand (total BOD5)	mg/L	1.11 I	1.0 U	1.49 I	1.11 I	1 U	1.97 I
Sample Location/Sample ID:		Lake 22					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters							
	Units						
Total Water Depth	Feet	3	2.27	2.74	2.6	3.58	3.5
Sample Depth	Feet	1.5	surface	overflow	1.5	1.5	1.5
Conductivity, field	umhos/cm	656	1057	453	450	978	462
Dissolved oxygen (DO), field	mg/L	8.62	5.96	4.20	5.14	3.83	8.24
Dissolved oxygen (DO), field	%	99.6	52.6	54.0	61.0	45.7	105.8
pH, field	s.u.	7.73	8.28	8.27	8.76	7.98	8.50
Temperature, field	Deg C	22.42	29.9	26.8	24.4	28.1	28.3
Turbidity, field	NTU	1.17	1.06	1.52	1.38	2.21	1.75
Secchi Disk	Depth						
Wet Parameters							
	Units						
Ammonia-N	mg/L	0.008 U	0.008 U	0.026 I	0.008 U	0.008 U	0.036
TAN criteria calculation	mg/L	0.94	0.27	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.648	1.05	1.23	0.807	0.678	0.499
Total nitrogen	mg/L	0.648	1.05	1.23	0.807	0.678	0.499
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.005 I	0.019	0.007 I	0.002 U	0.002 U	0.002 I
Total phosphorus	mg/L	0.024 I	0.027 I	0.030 I	0.008 U	0.008 U	0.021 I
Chlorophyll	mg/m3	4.31	5.00	6.48	2.34	4.06	3.35
Total suspended solids (TSS)	mg/L	1.00 I	3.00	2.25 I	1.60 I	0.570 U	1.67 I
Biochemical oxygen demand (total BOD5)	mg/L	1 U	3.00	1.00	1 U	1 U	1 U

Notes:

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- I - Reported value is between method detection limit and
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- * DO values at or above 100% are possible super-satura

Table 1

**Analytical Results Summary
Surface Water Quality Monitoring
Treviso Bay, Naples, Florida
October 2021**

Sample Location/Sample ID:		Lake 12					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters	Units						
Total Water Depth	Feet	1	1.95	2.30	2	2.24	2
Sample Depth	Feet	overflow	surface	overflow	1.5	1.5	1.5
Conductivity, field	umhos/cm	959	1382	658	583	817	777
Dissolved oxygen (DO), field	mg/L	10.03	5.25	2.69	5.69	8.65	2.84
Dissolved oxygen (DO), field	%	116.7	69.0	33.1	66.2	40.9	35.5
pH, field	s.u.	7.54	8.31	7.74	8.63	8.65	7.58
Temperature, field	Deg C	22.43	29.2	25.8	23.1	28.1	26.9
Turbidity, field	NTU	1.75	1.46	0.58	5.48	1.32	1.66
Secchi Disk	Depth						
Wet Parameters	Units						
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.032
TAN criteria calculation	mg/L	1.15	0.26	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.708	0.710	0.927	1.85	0.570	0.446
Total nitrogen	mg/L	0.708	0.710	0.927	1.86	0.570	0.446
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.006 U	0.008 I	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.012	0.034	0.005 I	0.002 I	0.002 U	0.002 I
Total phosphorus	mg/L	0.020 I	0.040	0.011 I	0.047	0.008 U	0.019 I
Chlorophyll	mg/m3	5.55	5.55	2.19	34.9	10.3	5.44
Total suspended solids (TSS)	mg/L	1.25 I	1.50 I	0.769 I	124	0.570 U	1.00 I
Biochemical oxygen demand (total BOD5)	mg/L	1 U	1.0 U	1 U	4.07	1 U	1 U

Sample Location/Sample ID:		Lake 32					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters	Units						
Total Water Depth	Feet	3	3.28	3.87	2.3	2.98	1.9
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1
Conductivity, field	umhos/cm	426	680	298	296	508	298
Dissolved oxygen (DO), field	mg/L	8.4	4.27	6.44	5.08	5.71	5.54
Dissolved oxygen (DO), field	%	99.5	56.3	80.3	61.0	71.8	71.8
pH, field	s.u.	8.15	8.15	8.16	8.49	8.27	8.72
Temperature, field	Deg C	23.8	29.7	27.0	24.7	29.1	28.7
Turbidity, field	NTU	0.47	2.75	3.31	9.56	3.28	3.18
Secchi Disk	Depth						
Wet Parameters	Units						
Ammonia-N	mg/L	0.008 U	0.008 U	0.045	0.008 U	0.008 U	0.028 I
TAN criteria calculation	mg/L	0.49	0.33	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.483	0.897	1.65	0.791	0.639	0.05 U
Total nitrogen	mg/L	0.483	0.897	1.67	0.791	0.639	0.05 U
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.018 I	0.006 U	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.018	0.035	0.008	0.002 I	0.002 U	0.008
Total phosphorus	mg/L	0.022 I	0.058	0.041	0.010 I	0.013 I	0.014 I
Chlorophyll	mg/m3	2.00	7.08	7.29	3.73	11.8	16.1
Total suspended solids (TSS)	mg/L	0.750 I	5.25	4.00	1.20 I	3.40	3.67
Biochemical oxygen demand (total BOD5)	mg/L	1 U	1.0 U	1.25 I	1 U	1 U	1.23 I

Notes:

- U - Not detected at the associated reporting limit
- I - Reported value is between method detection limit and
- NS - Not sampled during noted event
- * DO values at or above 100% are possible super-saturations

Figure



NOTE: LAKE 5 DOES NOT HAVE AN ABOVE WATER LEVEL OUTFALL STRUCTURE/WEIR.



WATER QUALITY SAMPLING REPORT
LAKES 4, 5, 12, 14, 22, AND 32 - TREVISO BAY
NAPLES, COLLIER COUNTY, FLORIDA

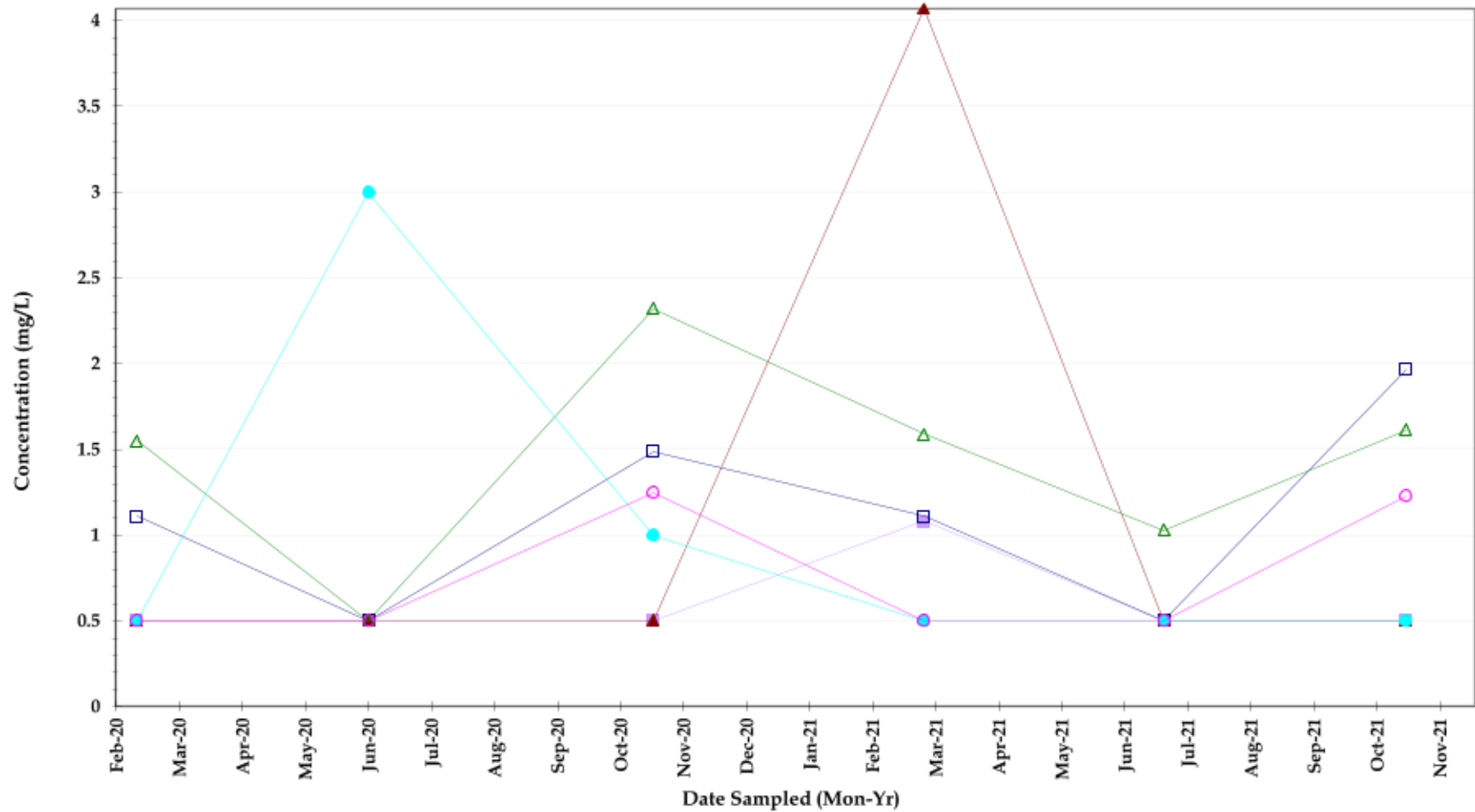
11225022-01

30-June-21

SAMPLE LOCATION MAP

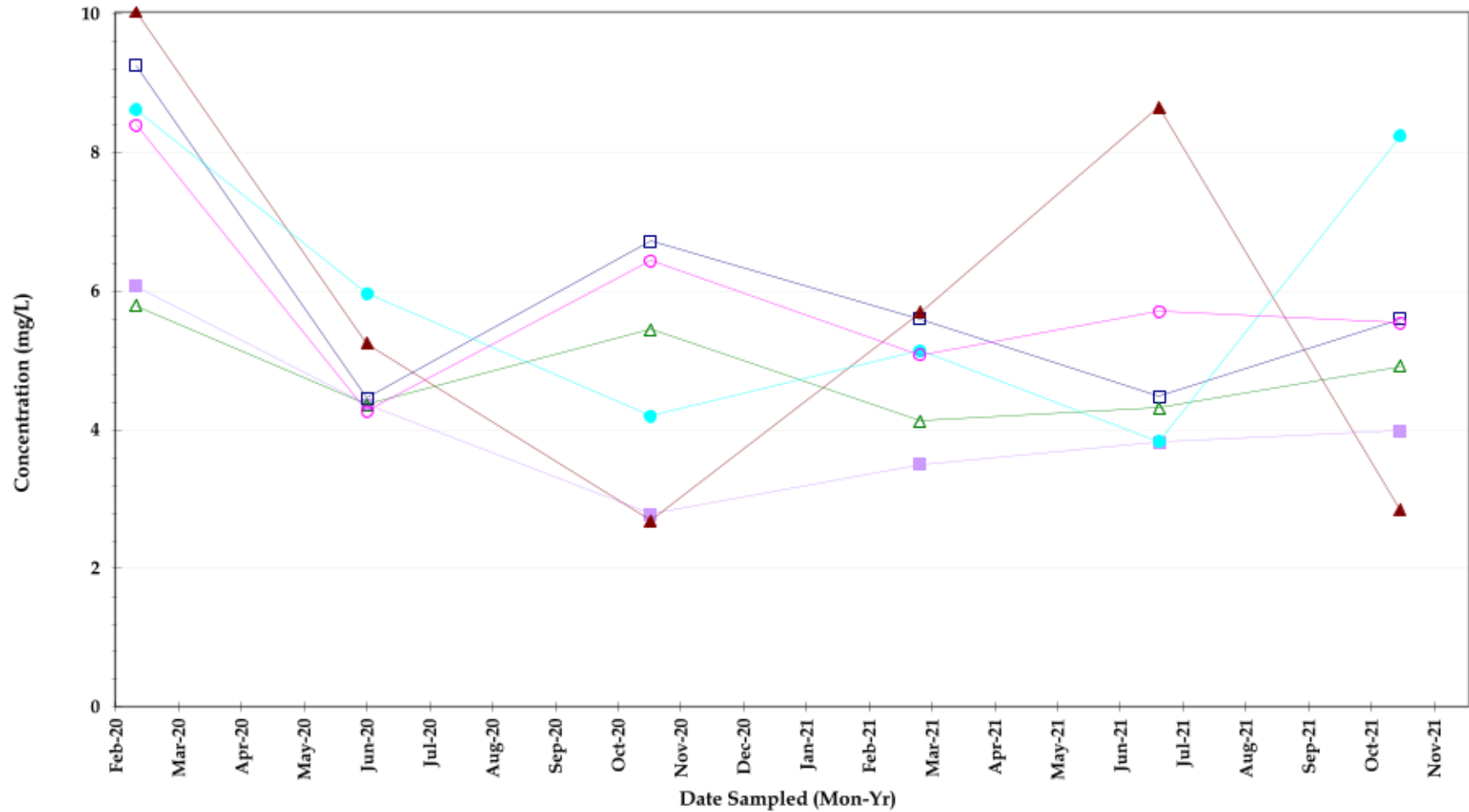
FIGURE NO. 1

Trend Graphs



Biochemical Oxygen Demand

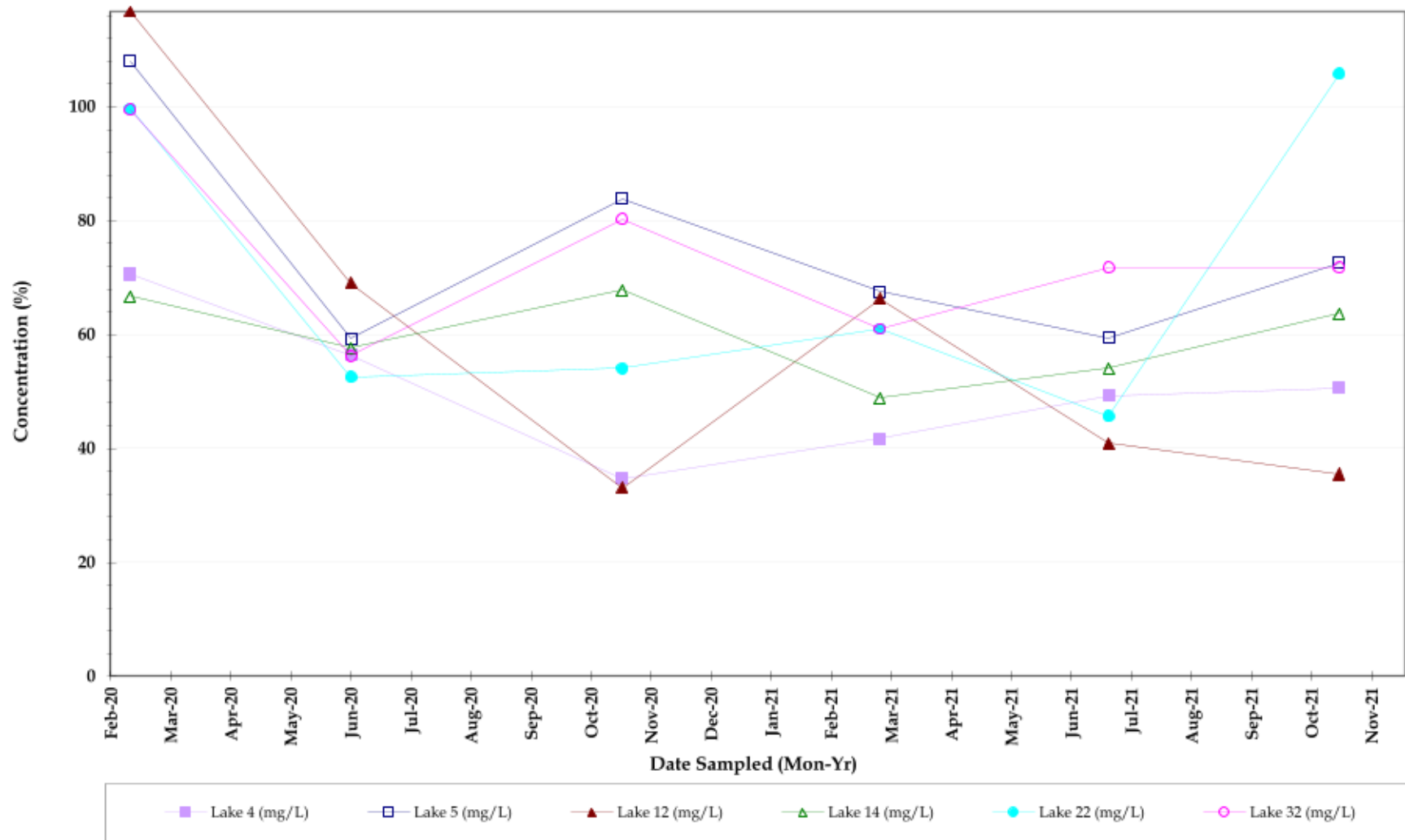
Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Dissolved Oxygen (mg/L)



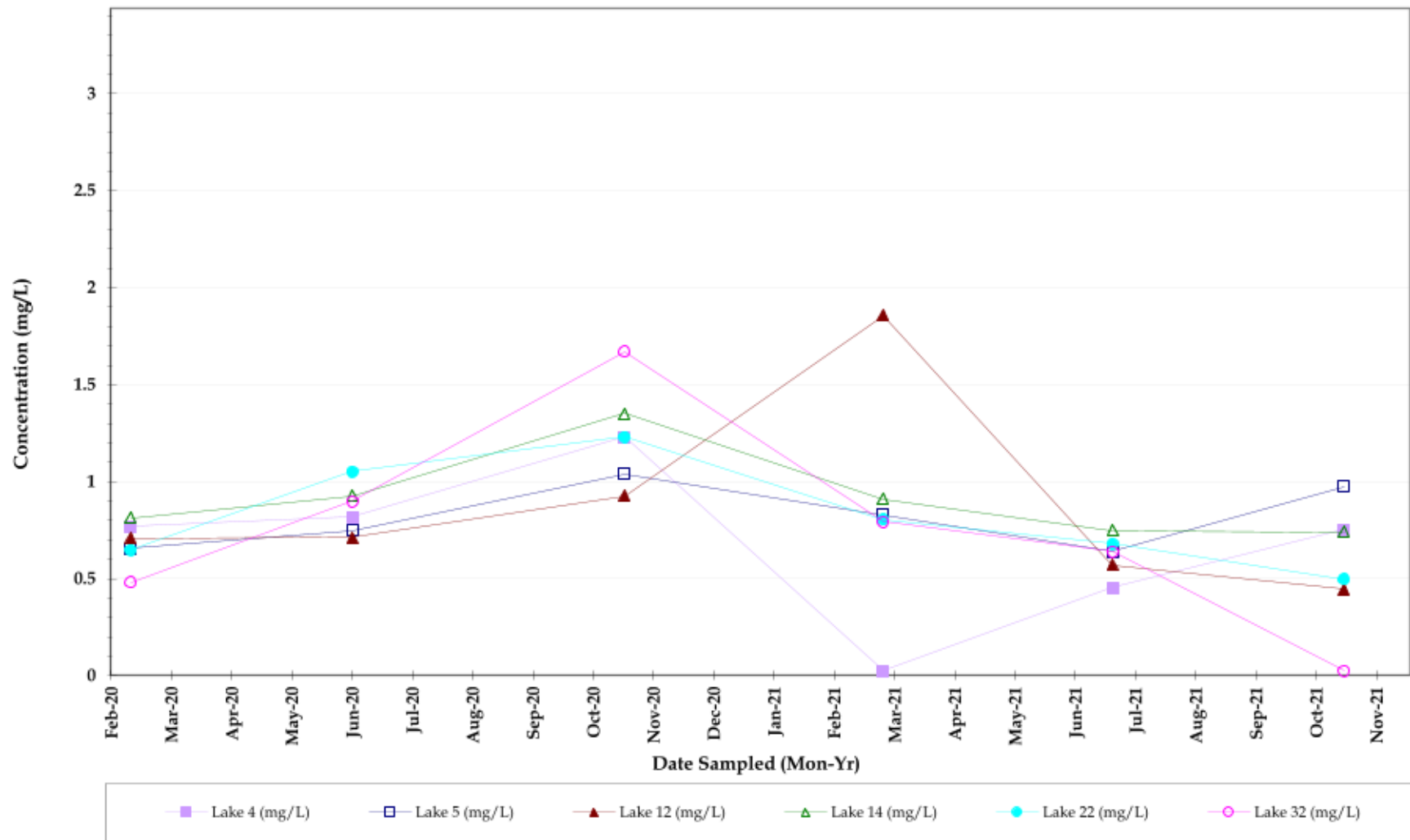
Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Dissolved Oxygen (%)

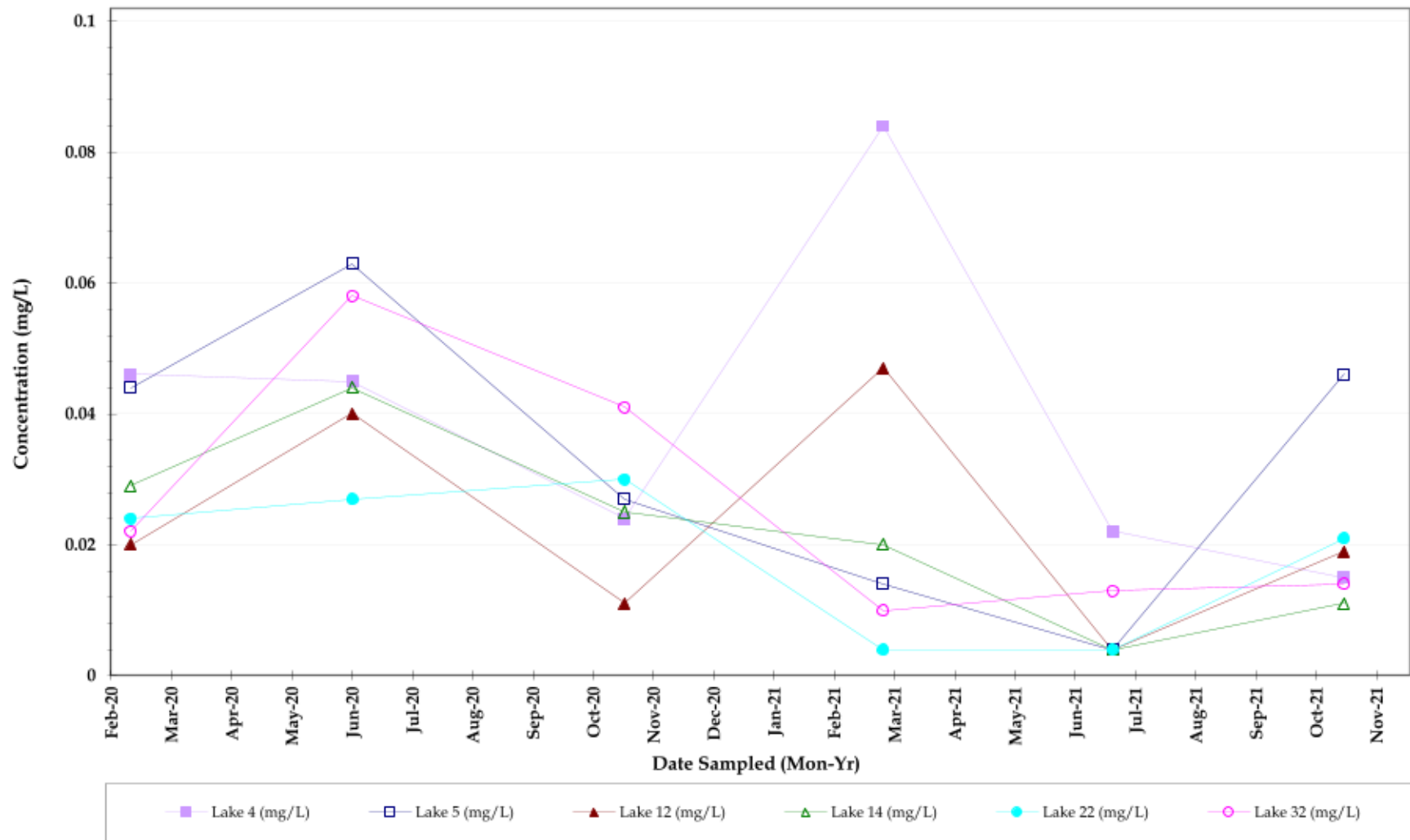


Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Total Nitrogen

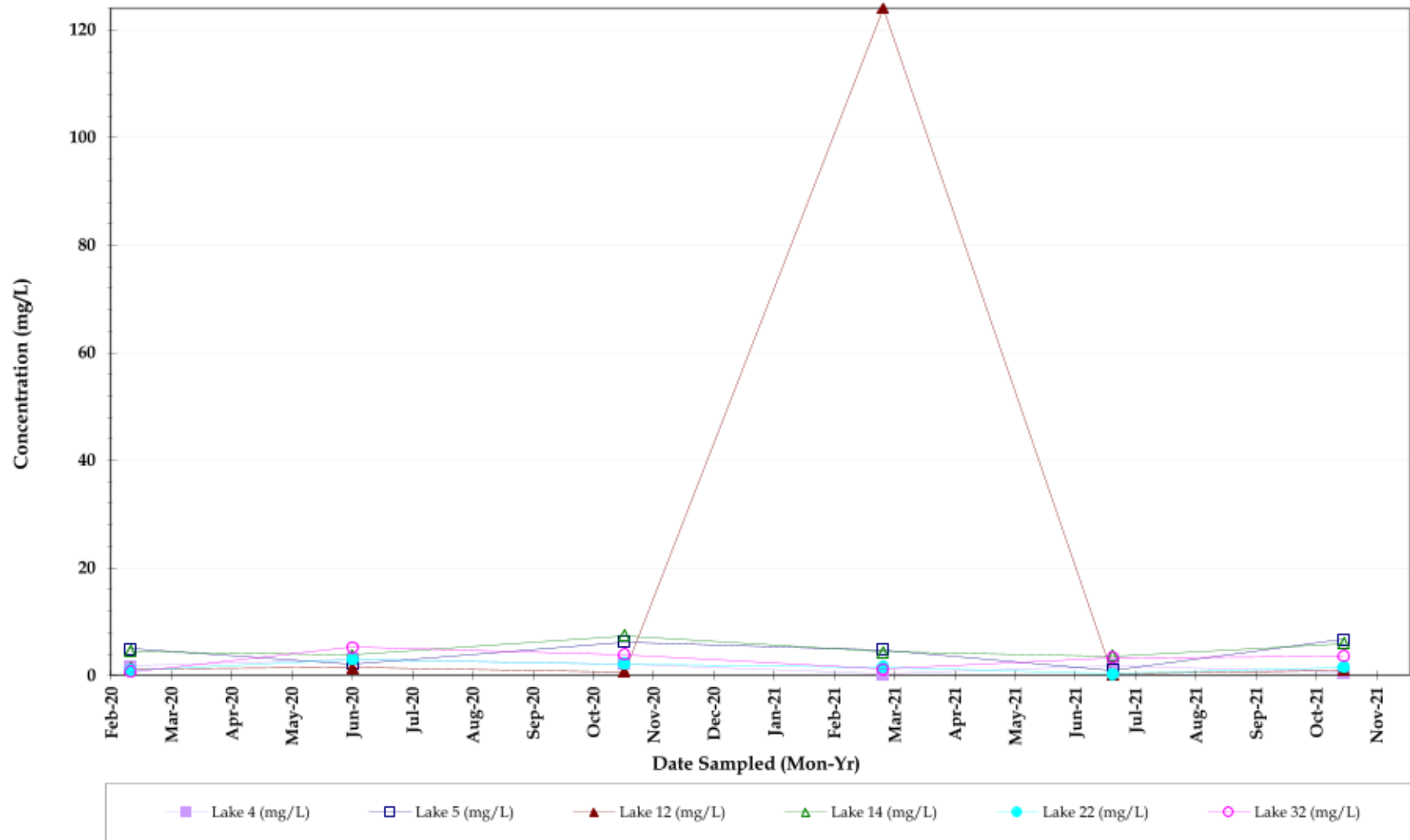
Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Total Phosphorus



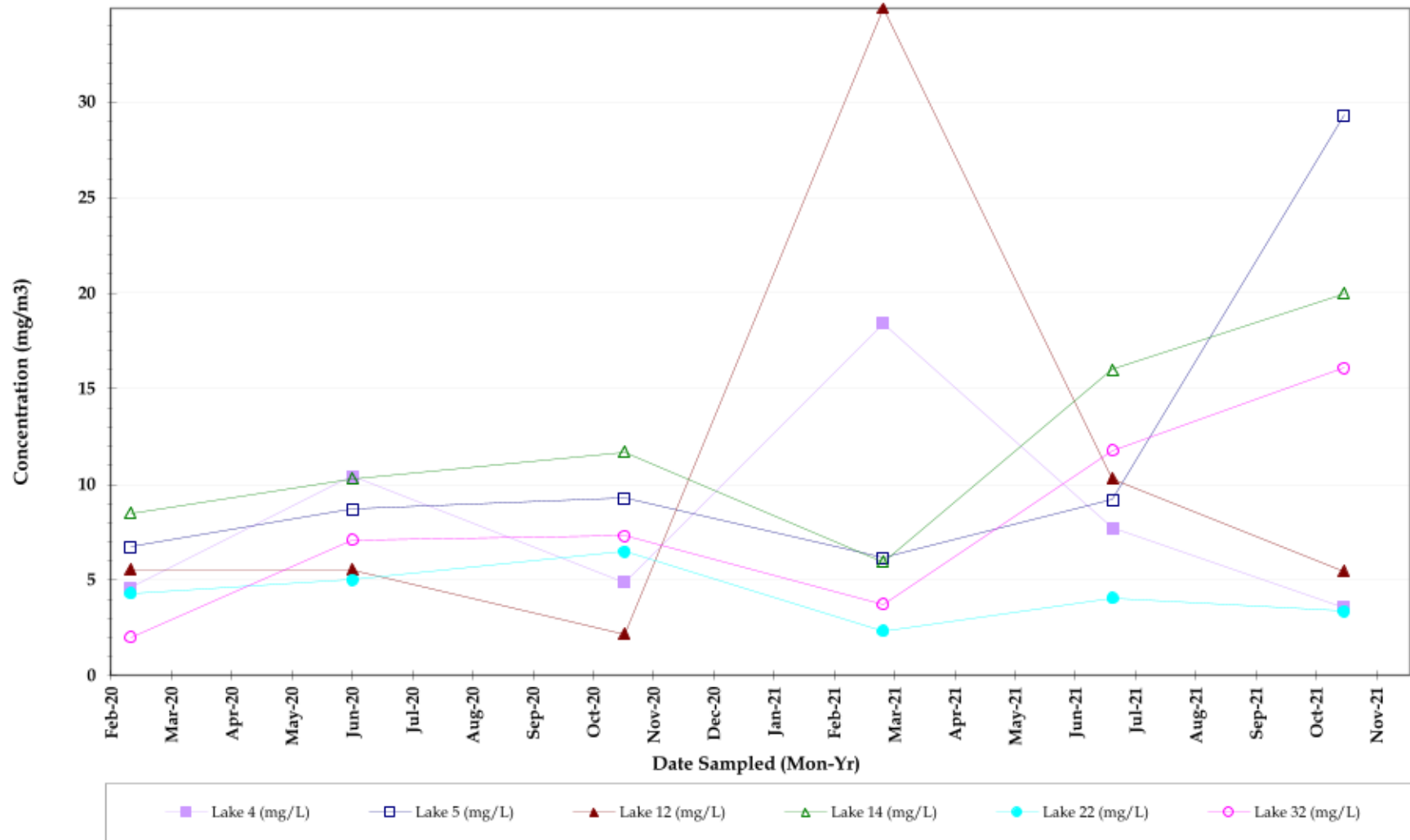
Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Total Suspended Solids

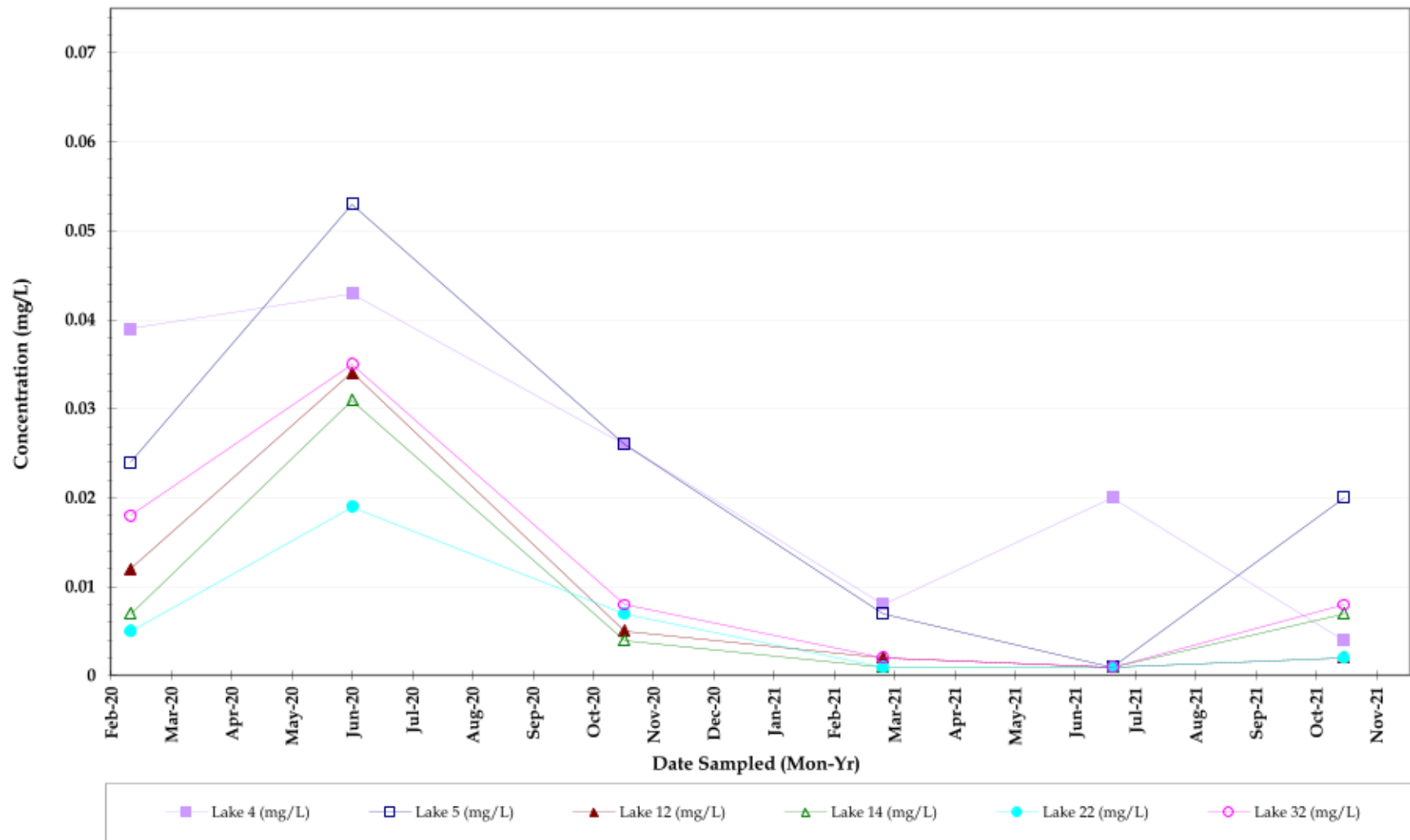


Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Chlorophyll a

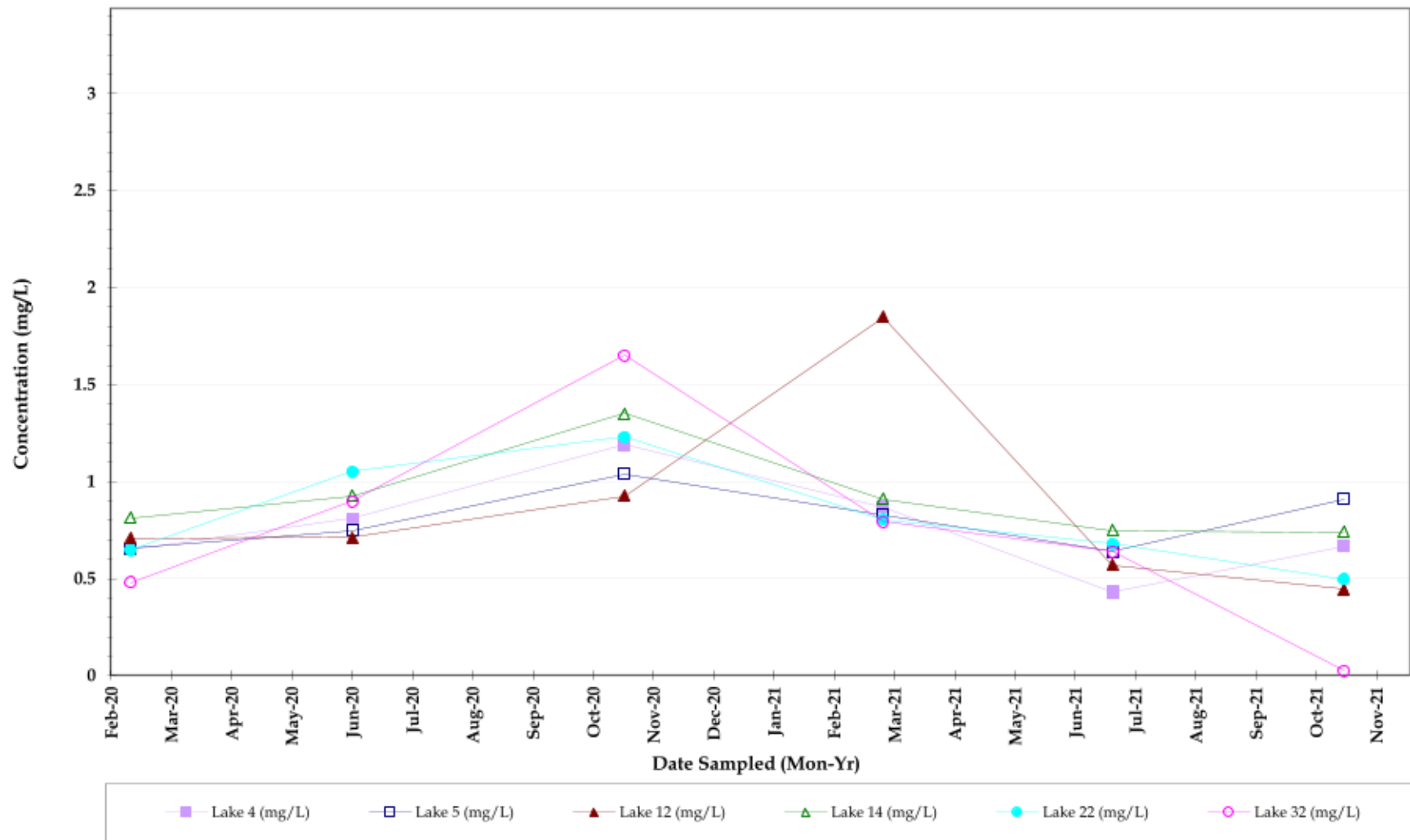
Treviso Bay
 Water Quality Surface Water Sample results
 OCTOBER 2021



Orthophosphate



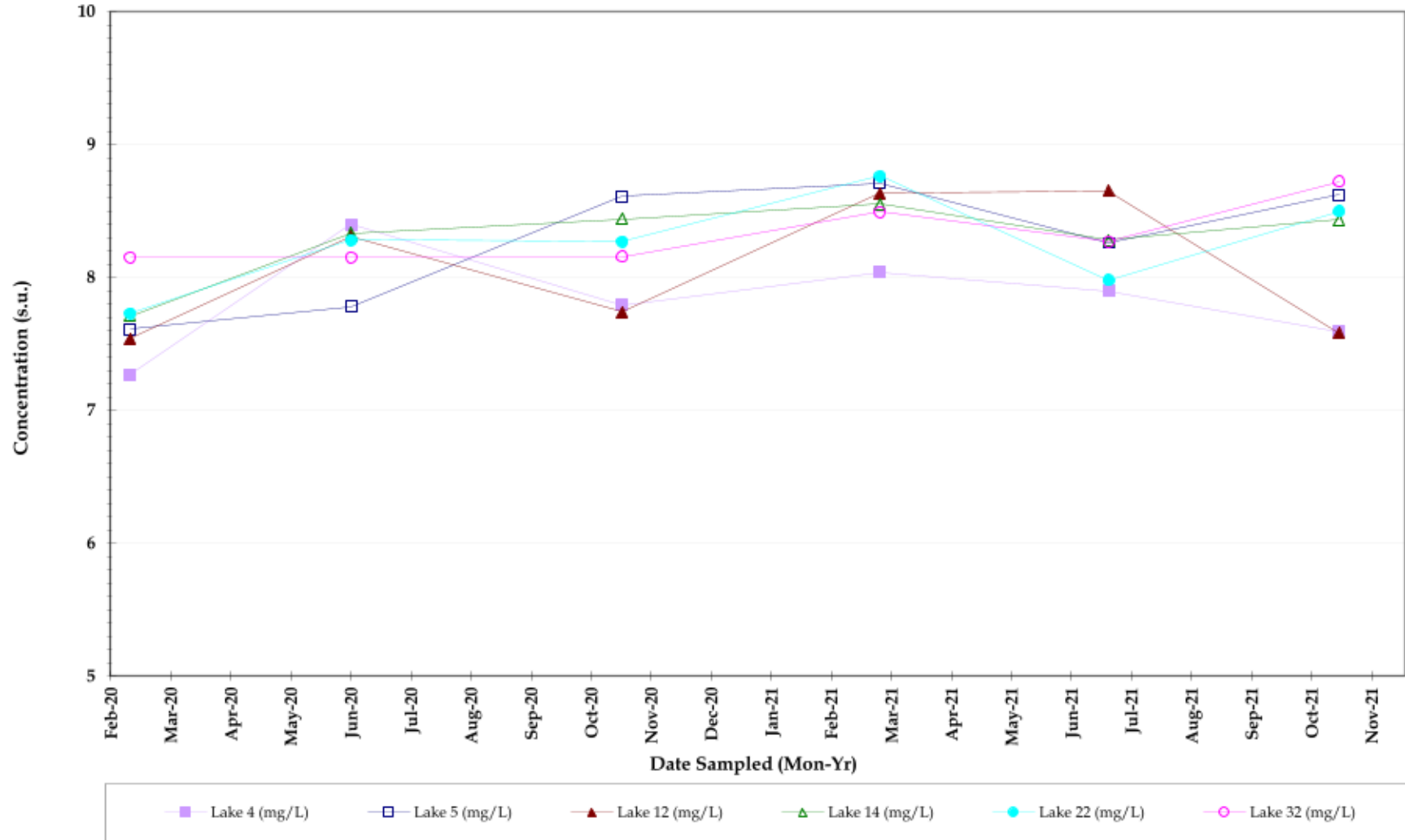
Treviso Bay
 Water Quality Surface Water Sample results
 OCTOBER 2021



Total kjeldahl nitrogen (TKN)



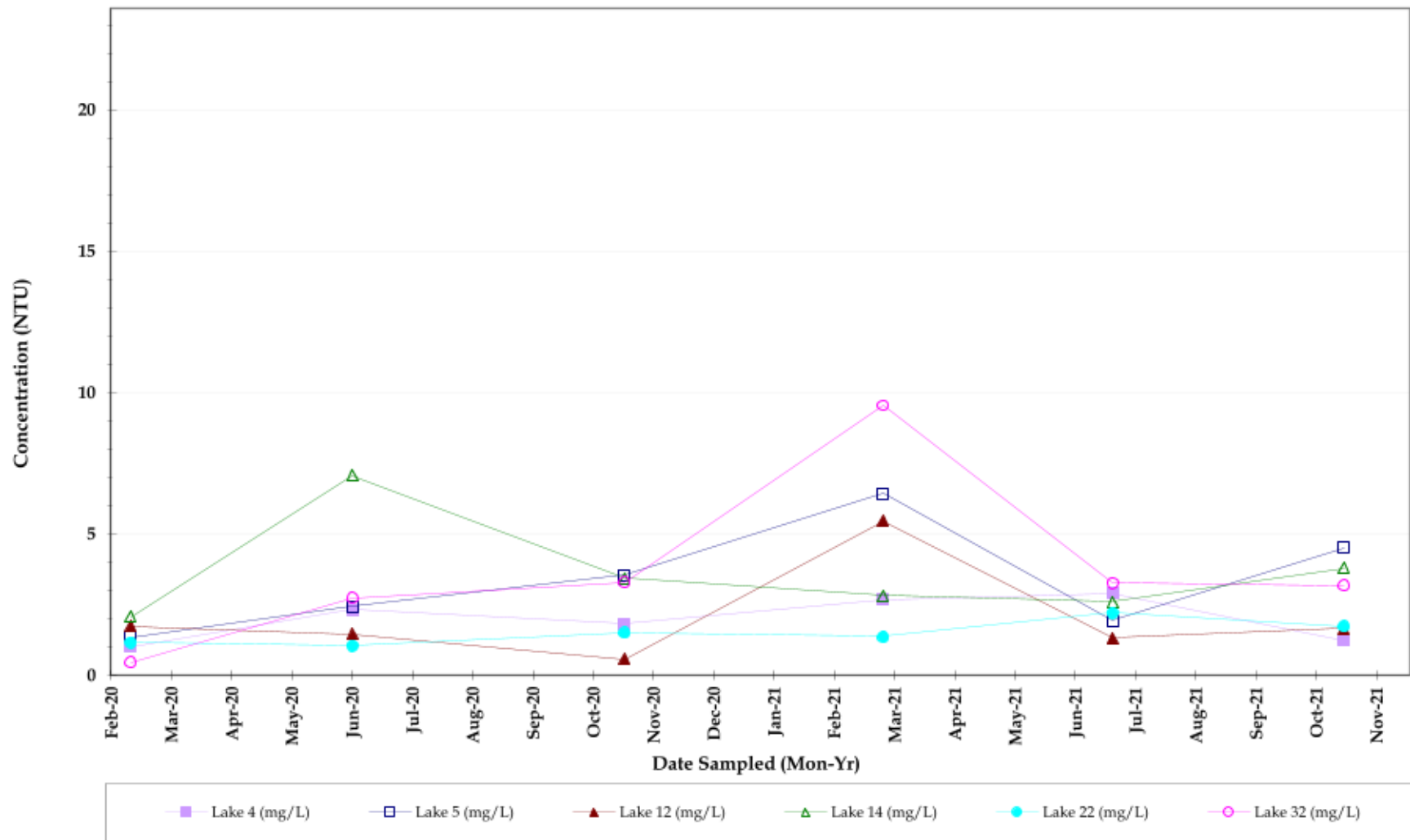
Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



pH, Field



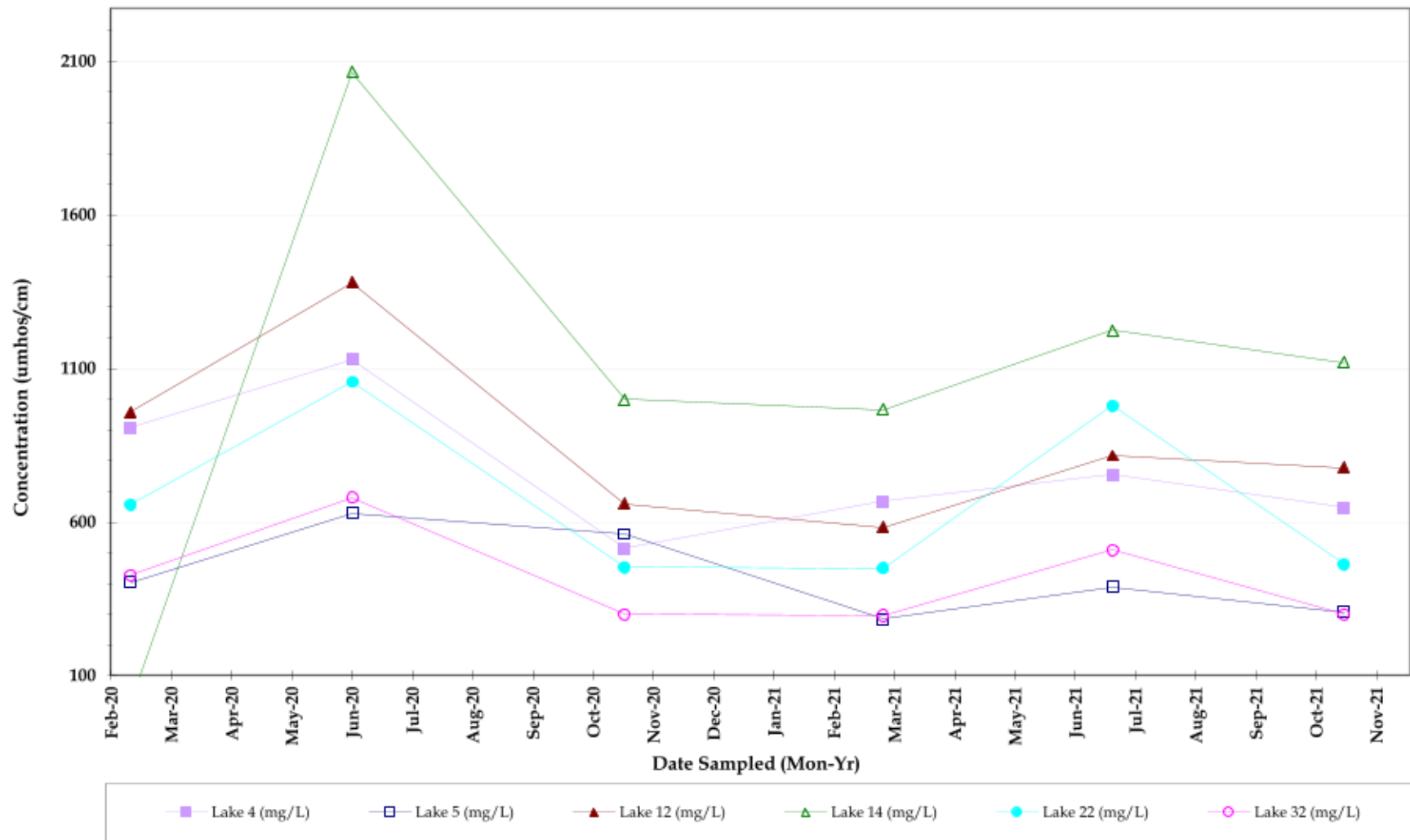
Treviso Bay
 Water Quality Surface Water Sample results
 OCTOBER 2021



Turbidity



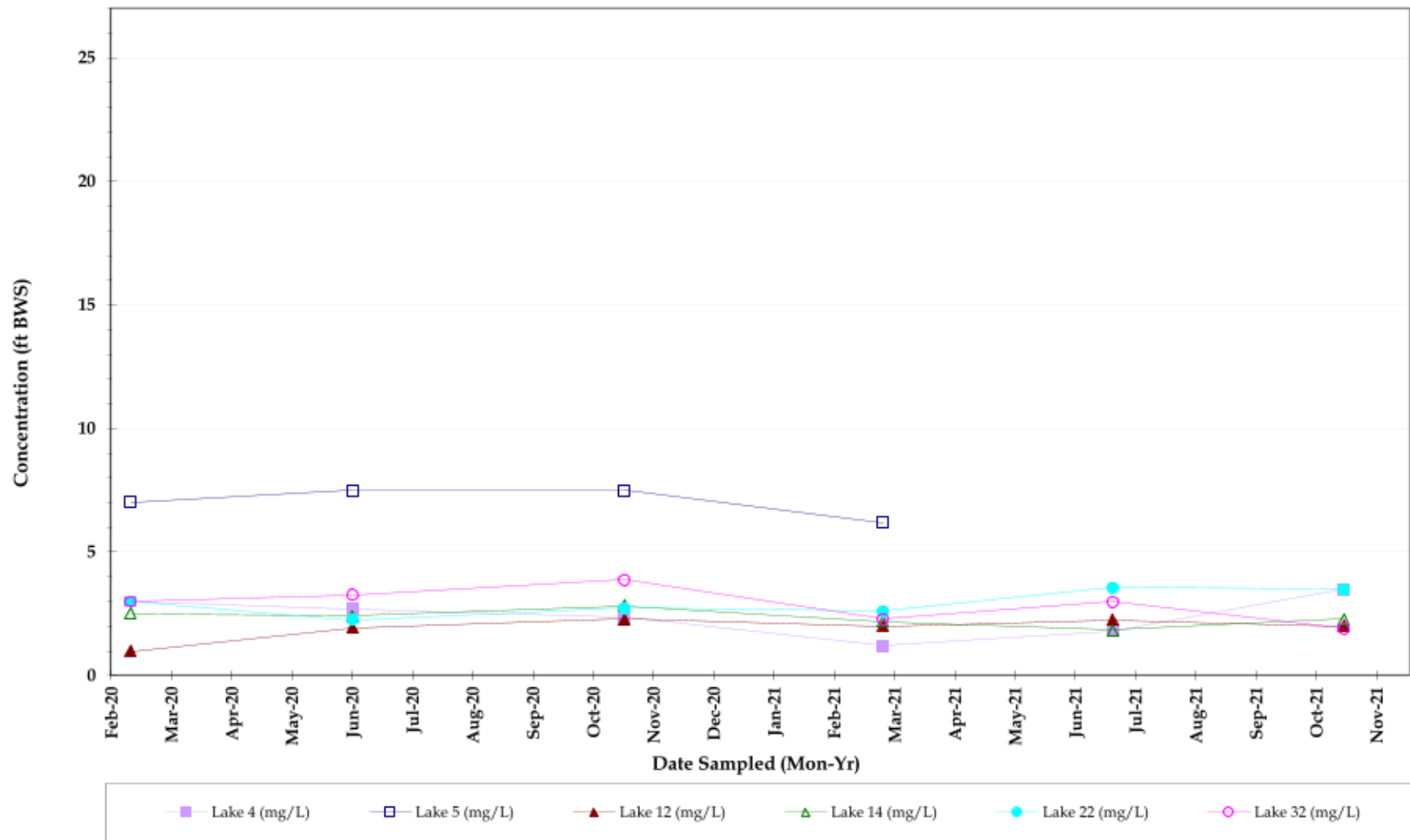
Treviso Bay
 Water Quality Surface Water Sample results
 OCTOBER 2021



Conductivity

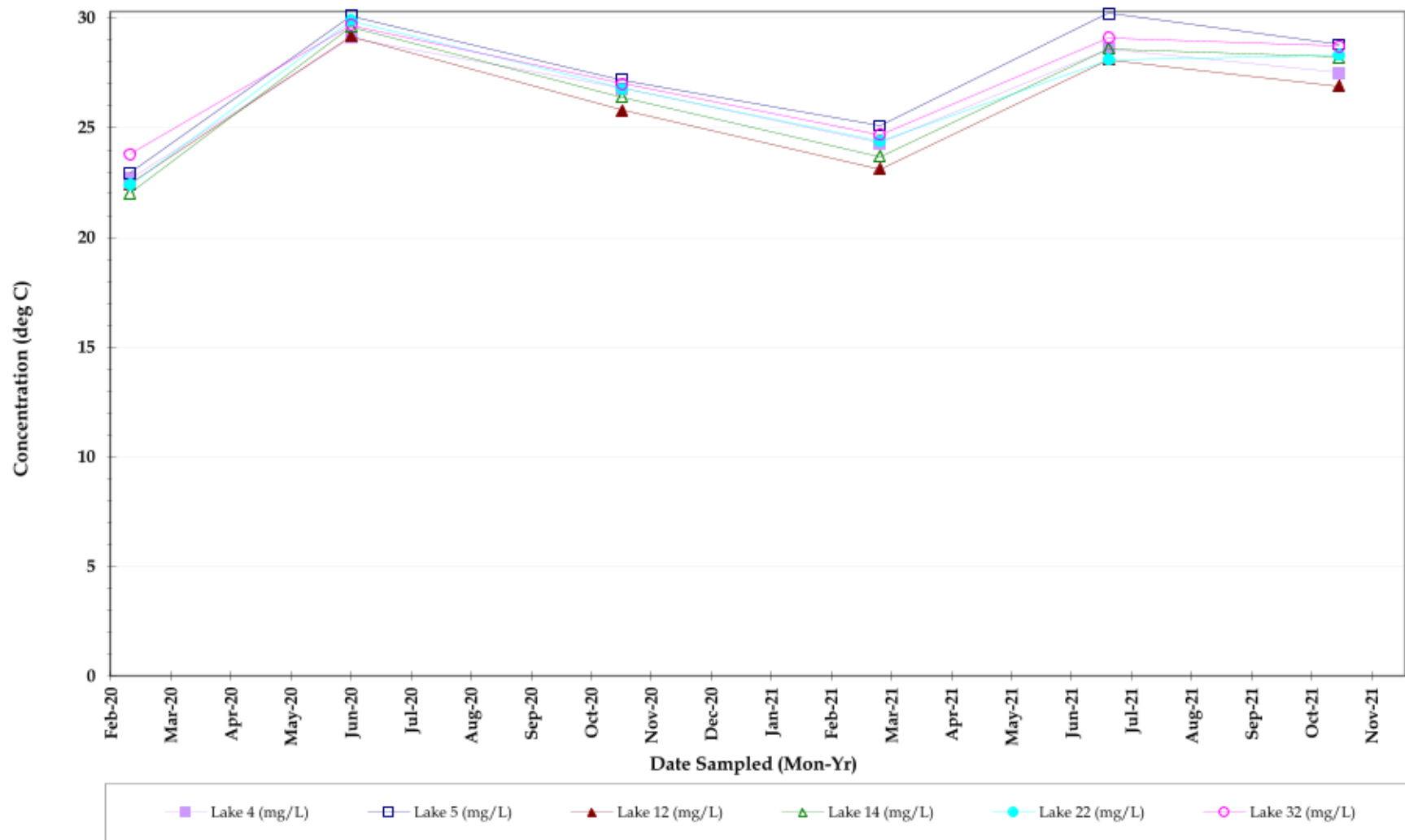


Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Water Depth

Treviso Bay
Water Quality Surface Water Sample results
OCTOBER 2021



Temperature, sample

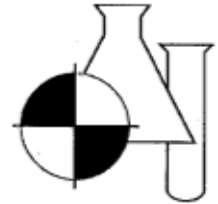


Treviso Bay
 Water Quality Surface Water Sample results
 OCTOBER 2021

Laboratory Analytical Report

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 21101654

G H D Services, Inc.
2675 Winkler Ave., Ste.180
Fort Myers, FL 33901

Project Name : TREVISO LAKES WQM
Project #: 11147356-01
Date Received : 10/28/2021
Time Received : 1450

Submission Number:	21101654	Sample Date:	10/27/2021
Sample Number:	001	Sample Time:	0930
Sample Description:	Lake 4	Sample Method:	Grab

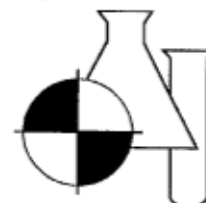
Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.083	MG/L	0.008	0.032	350.1	11/02/2021 12:20	CW
TOTAL KJELDAHL NITROGEN	0.668	MG/L	0.05	0.20	351.2	11/12/2021 09:49	HR
ORTHO PHOSPHORUS AS P	0.004 I	MG/L	0.002	0.008	365.3	10/29/2021 09:12	KA
TOTAL PHOSPHORUS AS P	0.015 I	MG/L	0.008	0.032	365.3	11/04/2021 15:05	KA
CHLOROPHYLL A	3.57	MG/M3	0.25	1.00	445.0	11/05/2021 09:30	PN
TOTAL SUSPENDED SOLIDS	0.667 I	MG/L	0.570	2.280	SM2540D	10/29/2021 13:40	PG
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	10/28/2021 16:00	LD/LD
NITRATE+NITRITE AS N	0.086	MG/L	0.006	0.024	SYSTEAS EASY	11/02/2021 13:40	CW
TOTAL NITROGEN	0.754	MG/L	0.05	0.20	SYSTEAS+351	11/12/2021 09:49	HR/CW

Submission Number:	21101654	Sample Date:	10/27/2021
Sample Number:	002	Sample Time:	0945
Sample Description:	Lake 12	Sample Method:	Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.032	MG/L	0.008	0.032	350.1	11/02/2021 12:22	CW
TOTAL KJELDAHL NITROGEN	0.446	MG/L	0.05	0.20	351.2	11/12/2021 10:07	HR
ORTHO PHOSPHORUS AS P	0.002 I	MG/L	0.002	0.008	365.3	10/28/2021 17:28	KA
TOTAL PHOSPHORUS AS P	0.019 I	MG/L	0.008	0.032	365.3	11/04/2021 15:06	KA
CHLOROPHYLL A	5.44	MG/M3	0.25	1.00	445.0	11/05/2021 09:30	PN
TOTAL SUSPENDED SOLIDS	1.00 I	MG/L	0.570	2.280	SM2540D	10/29/2021 13:40	PG
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	10/28/2021 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAS EASY	11/02/2021 13:41	CW
TOTAL NITROGEN	0.446	MG/L	0.05	0.20	SYSTEAS+351	11/12/2021 10:07	HR/CW

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NELAC Certification #E84167

Submission Number: 21101654
Sample Number: 003
Sample Description: Lake 14

Sample Date: 10/27/2021
Sample Time: 1000
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.041	MG/L	0.008	0.032	350.1	11/02/2021 12:24	CW
TOTAL KJELDAHL NITROGEN	0.738	MG/L	0.05	0.20	351.2	11/12/2021 10:33	HR
ORTHO PHOSPHORUS AS P	0.007 I	MG/L	0.002	0.008	365.3	10/28/2021 17:29	KA
TOTAL PHOSPHORUS AS P	0.011 I	MG/L	0.008	0.032	365.3	11/04/2021 14:13	KA
CHLOROPHYLL A	20.0	MG/M3	0.25	1.00	445.0	11/05/2021 09:30	PN
TOTAL SUSPENDED SOLIDS	6.00	MG/L	0.570	2.280	SM2540D	10/29/2021 13:40	PG
BIOCHEMICAL OXYGEN DEMAND	1.61 I	MG/L	1	4	SM5210B	10/28/2021 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.008	0.024	SYSTEAS EASY	11/02/2021 13:42	CW
TOTAL NITROGEN	0.738	MG/L	0.05	0.20	SYSTEAS+351	11/12/2021 10:33	HR/CW

Submission Number: 21101654
Sample Number: 004
Sample Description: Lake 22

Sample Date: 10/27/2021
Sample Time: 1020
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.036	MG/L	0.008	0.032	350.1	11/02/2021 12:26	CW
TOTAL KJELDAHL NITROGEN	0.499	MG/L	0.05	0.20	351.2	11/12/2021 10:39	HR
ORTHO PHOSPHORUS AS P	0.002 I	MG/L	0.002	0.008	365.3	10/28/2021 17:31	KA
TOTAL PHOSPHORUS AS P	0.021 I	MG/L	0.008	0.032	365.3	11/04/2021 15:07	KA
CHLOROPHYLL A	3.35	MG/M3	0.25	1.00	445.0	11/05/2021 09:30	PN
TOTAL SUSPENDED SOLIDS	1.67 I	MG/L	0.570	2.280	SM2540D	10/29/2021 13:40	PG
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	10/28/2021 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAS EASY	11/02/2021 13:43	CW
TOTAL NITROGEN	0.499	MG/L	0.05	0.20	SYSTEAS+351	11/12/2021 10:39	HR/CW

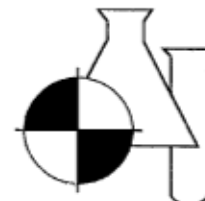
Submission Number: 21101654
Sample Number: 005
Sample Description: Lake 32

Sample Date: 10/27/2021
Sample Time: 1040
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.028 I	MG/L	0.008	0.032	350.1	11/02/2021 12:35	CW
TOTAL KJELDAHL NITROGEN	0.05 U	MG/L	0.05	0.20	351.2	11/12/2021 10:55	HR
ORTHO PHOSPHORUS AS P	0.008	MG/L	0.002	0.008	365.3	10/28/2021 17:32	KA
TOTAL PHOSPHORUS AS P	0.014 I	MG/L	0.008	0.032	365.3	11/04/2021 14:14	KA
CHLOROPHYLL A	16.1	MG/M3	0.25	1.00	445.0	11/05/2021 09:30	PN

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TOTAL SUSPENDED SOLIDS	3.67	MG/L	0.570	2.280	SM2540D	10/29/2021	13:40	PG
BIOCHEMICAL OXYGEN DEMAND	1.23 I	MG/L	1	4	SM5210B	10/28/2021	16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAS EASY	11/02/2021	13:44	CW
TOTAL NITROGEN	0.05 U	MG/L	0.05	0.20	SYSTEAS+351	11/12/2021	10:55	HR/CW

Submission Number: 21101654

Sample Date: 10/27/2021

Sample Number: 006

Sample Time: 1100

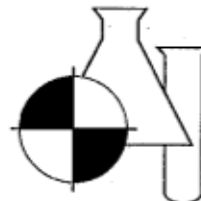
Sample Description: Lake 5

Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.085	MG/L	0.008	0.032	350.1	11/02/2021 12:37	CW
TOTAL KJELDAHL NITROGEN	0.910	MG/L	0.05	0.20	351.2	11/12/2021 10:40	HR
ORTHO PHOSPHORUS AS P	0.020	MG/L	0.002	0.008	365.3	10/28/2021 17:33	KA
TOTAL PHOSPHORUS AS P	0.046	MG/L	0.008	0.032	365.3	11/04/2021 15:08	KA
CHLOROPHYLL A	29.3	MG/M3	0.25	1.00	445.0	11/05/2021 09:30	PN
TOTAL SUSPENDED SOLIDS	6.67	MG/L	0.570	2.280	SM2540D	10/29/2021 13:40	PG
BIOCHEMICAL OXYGEN DEMAND	1.97 I	MG/L	1	4	SM5210B	10/28/2021 16:00	LD/LD
NITRATE+NITRITE AS N	0.066	MG/L	0.006	0.024	SYSTEAS EASY	11/02/2021 13:45	CW
TOTAL NITROGEN	0.976	MG/L	0.05	0.20	SYSTEAS+351	11/12/2021 10:40	HR/CW

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NELAC Certification #E84167

Dale D. Dixon

Dale D. Dixon / Laboratory Director

11/15/2021

Date

Tülay Tanrisever - Technical Director/QC Officer

Kara Peterson - QA Officer

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.
B = Results based upon colony counts outside the ideal range.
H = Value based on field kit determination. Results may not be accurate.
I = Reported value is between the laboratory MDL and the PQL.
J1 = Estimated value. Surrogate recovery limits exceeded.
J2 = Estimated value. No quality control criteria exists for component.
J3 = Estimated value. Quality control criteria for precision or accuracy not met.
J4 = Estimated value. Sample matrix interference suspected.
J5 = Estimated value. Data questionable due to improper lab or field protocols.
K = Off-scale low. Value is known to be < the value reported.
L = Off-scale high. Value is known to be > the value reported.
N = Presumptive evidence of presence of material.
O = Sampled, but analysis lost or not performed.
Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.
U = Analyte analyzed but not detected at the value indicated.
V = Analyte detected in sample and method blank. Results for this analyte in associated samples may be biased high. Standard, Duplicate and Spike values are within control limits. Reported data are usable.
Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.
! = Data deviate from historically established concentration ranges.
? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
* = Not reported due to interference.
Oil & Grease - If client does not send sufficient sample quantity for spike evaluation surface water samples are supplied by the laboratory.

NOTES:

MBAS calculated as LAS; molecular weight = 340.
PQL = 4xMDL.
ND = Not detected at or above the adjusted reporting limit.
G1 = Accuracy standard does not meet method control limits, but does meet lab control limits that are in agreement with USEPA generated data. USEPA letter available upon request.
G2 = Accuracy standard exceeds acceptable control limits. Duplicate and spike values are within control limits. Reported data are usable.

COMMENTS:

Chlorophyll A lab filtered at E65086 on 10/28/21 at 0823.

For questions or comments regarding these results, please contact us at (941) 723-9986.

Results relate only to the samples.

Benchmark EA South
 1001 Corporate Avenue, Suite 102
 North Port, FL 34289
 (941) 625-3137 / (800) 736-9986
 (941) 423-7336 fax
 Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #7

Benchmark EA, Inc.
 1711 12th St. East
 Palmetto, FL 34221
 (941) 723-9986 / (800) 736-9986
 (941) 723-6061-fax
 Sample Temperature checked upon receipt at BEA with Temperature Gun ID #RAYL000570277

Client: **GHD Services, Inc. (HSA ENG)**
 2675 Winkler Ave. Suite 180
 Ft. Myers FL 33901
 Erik Isem (239) 215-3914 Shannon Tucker 239-210-8653
 Email EDD Reports to: Andrew Wyatt (Andrew.Wyatt@ghd.com)

Kit Shipped to client via UPS Standard in 1 large cooler

2020 PO# 34043122
 Connor Hayden connor.hayden@ghd.com

Chain of Custody Form: Treviso Lakes WQM
 Project Number: 11147356 - 01

Station ID	Sample Type ¹	Sample Matrix ²	NO ₃ -NO ₂ (353.2) TKN (351.2) NH ₃ (350.1) TP (365.3) T-N (Calc.)	BOD ₅ (SM5210B)	Ortho-Phos (Laboratory Filtered) (365.3)	TSS (SM2540D)	Chlorophyll a (445.0)	Laboratory Submission #
Lake 4	Grab	SW	10/27/21 0930	0930	0930	0930	0930	2/10/1654
Lake 13	Grab	SW	0945	0945	0945	0945	0945	2
Lake 14	Grab	SW	1000	1000	1000	1000	1000	3
Lake 22	Grab	SW	1020	1020	1020	1020	1020	4
Lake 32	Grab	SW	1040	1040	1040	1040	1040	5
Lake 5	Grab	SW	1100	1100	1100	1100	1100	6

Legend:
 1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
 3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 4. The client is responsible for documentation of the sampling event. Please use special sampling events on the sample container form.

Instructions:
 1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), soil, sediments (SDMNT), or sludge (SLDG).
 3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4. "Under 'Preservative', list any preservatives that were added to the sample container.
 The maximum temperature during storage should be 6°C (42.8°F).

Collector	Date & Time	Received By:	Date & Time
1		2	
3	10/27/21 1344	4	10/27/21 1347
5	10/28/21	6	10/28/21 1155
7	10/28/21	8	10/28/21 1450

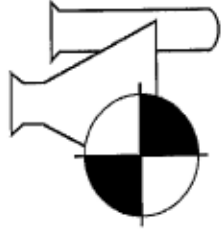
Laboratory Sample Acceptability: pH < 10
BEAS Temperature: 9.1°C
BEA Temperature: 1.2°C

Signature: [Signatures of Collectors and Receivers]

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EnviroAnalytical, Inc.

QC REPORT



NELAC CERTIFICATION #E84167

Submission Number: 21101654

Project Name: TREVISO LAKES WQM

SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
21101548	002 350.1	AMMONIA NITROGEN	599559	11/02/2021 14:44	LR		0.066	0.068	2.12		
21101702	006 350.1	AMMONIA NITROGEN	599857	11/02/2021 12:08	LR		0.095	0.103	5.43		
	350.1	AMMONIA NITROGEN		11/02/2021 15:17	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		11/02/2021 11:04	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		11/02/2021 11:34	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		11/02/2021 12:00	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		11/02/2021 12:27	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		11/02/2021 14:54	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		11/02/2021 14:42	PQL	0.03	0.036				119.0
21101555	001 350.1	AMMONIA NITROGEN	599567	11/02/2021 12:04	SPK	1.00	1.080			1.110	103.0
21101555	002 350.1	AMMONIA NITROGEN	599568	11/02/2021 12:31	SPK	1.00	1.070			1.050	97.4
21101711	001 350.1	AMMONIA NITROGEN	599878	11/02/2021 11:10	SPK	1.00	1.070			0.938	86.9
21101711	002 350.1	AMMONIA NITROGEN	599879	11/02/2021 11:38	SPK	1.00	1.070			1.080	101.0
	350.1	AMMONIA NITROGEN		11/02/2021 11:06	STD	1.00	0.945				94.5
	350.1	AMMONIA NITROGEN		11/02/2021 11:36	STD	1.00	0.941				94.1
	350.1	AMMONIA NITROGEN		11/02/2021 12:02	STD	1.00	0.956				95.6
	350.1	AMMONIA NITROGEN		11/02/2021 12:29	STD	1.00	0.964				96.4
	350.1	AMMONIA NITROGEN		11/02/2021 12:51	STD	1.00	0.973				97.3
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 10:03	LCS	2.00	1.990				99.5
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 10:28	LCS	2.00	2.050				103.0
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 10:46	LCS	2.00	2.130				107.0
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 11:09	LCS	2.00	2.160				108.0
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 13:50	LCS	2.00	2.110				106.0

QC FLAGS: MB or BLK = METHOD BLANK LR = LAB REPLICATE MSD = MATRIX SPIKE DUPLICATE STD or LCS = STANDARD SPK or MS = MATRIX SPIKE 1

SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 14:07	LCS	2.00	2.080				104.0
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 14:25	LCS	2.00	2.110				106.0
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 14:44	LCS	2.00	2.150				108.0
21110058 002	351.2	TOTAL KJELDAHL NITROGEN	600066	11/12/2021 13:41	LR		0.763	0.767	0.37		
21110382 001	351.2	TOTAL KJELDAHL NITROGEN	600716	11/12/2021 10:35	LR		54.100	56.500	3.07		
21110452 001	351.2	TOTAL KJELDAHL NITROGEN	600842	11/12/2021 09:51	LR		73.900	72.100	1.74		
21110634 001	351.2	TOTAL KJELDAHL NITROGEN	601193	11/12/2021 14:15	LR		9.260	9.010	1.94		
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 09:47	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 10:02	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 10:27	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 10:44	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 11:08	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 13:36	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 13:49	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 14:05	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 14:24	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 14:43	MB	0.00	0.000				111.0
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 09:43	PQL	0.25	0.278				84.8
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 13:30	PQL	0.25	0.212				88.8
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 09:36	QCS	2.50	2.220				95.6
	351.2	TOTAL KJELDAHL NITROGEN		11/12/2021 13:21	QCS	2.50	2.390			2.660	99.6
21101654 001	351.2	TOTAL KJELDAHL NITROGEN	599774	11/12/2021 09:49	SPK	2.00	2.670			2.390	97.2
21101654 002	351.2	TOTAL KJELDAHL NITROGEN	599775	11/12/2021 10:07	SPK	2.00	2.450			2.810	104.0
21101654 003	351.2	TOTAL KJELDAHL NITROGEN	599776	11/12/2021 10:33	SPK	2.00	2.740			2.440	93.3
21101654 005	351.2	TOTAL KJELDAHL NITROGEN	599778	11/12/2021 10:50	SPK	2.00	2.580			1.920	96.0
21101654 005	351.2	TOTAL KJELDAHL NITROGEN	599778	11/12/2021 10:55	SPK	2.00	2.000			2.790	97.2
21110405 001	351.2	TOTAL KJELDAHL NITROGEN	600755	11/12/2021 14:12	SPK	2.00	2.850			2.830	104.0
21110495 003	351.2	TOTAL KJELDAHL NITROGEN	600930	11/12/2021 14:30	SPK	2.00	2.740			3.090	107.0
21110594 002	351.2	TOTAL KJELDAHL NITROGEN	601114	11/12/2021 13:39	SPK	2.00	2.950			2.760	103.0
21110631 001	351.2	TOTAL KJELDAHL NITROGEN	601189	11/12/2021 13:55	SPK	2.00	2.690				
21101623 001	365.3	ORTHO PHOSPHORUS AS P	599732	10/28/2021 12:27	LR		1.320	1.330	0.42		
21101623 001	365.3	ORTHO PHOSPHORUS AS P	599732	10/28/2021 12:27	LR		1.320	1.330	0.42		
21101654 001	365.3	ORTHO PHOSPHORUS AS P	599774	10/29/2021 09:12	LR		0.005	0.005	0.00		

QC FLAGS: MB or BLK = METHOD BLANK LR = LAB REPLICATE MSD = MATRIX SPIKE DUPLICATE STD or LCS = STANDARD SPK or MS = MATRIX SPIKE

SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
21101654	001	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 09:12	LR		0.005	0.005	0.00		
21101702	001	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:07	LR		1.300	1.320	0.92		
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 11:57	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 11:58	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 12:10	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:17	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:19	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:39	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:55	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:02	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:03	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:20	MB	0.00	0.000				
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 12:01	PQL	0.01	0.009			0.289	87.0
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:21	PQL	0.01	0.008			0.394	83.0
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:06	PQL	0.01	0.009			0.412	86.0
21101615	025	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 12:29	SPK	0.25	0.290				99.6
21101682	001	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:25	SPK	0.20	0.367				113.0
21101711	001	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:10	SPK	0.20	0.387				113.0
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 11:59	STD	0.20	0.194				97.2
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 12:35	STD	0.20	0.195				97.3
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:20	STD	0.20	0.193				96.5
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:40	STD	0.20	0.226				113.0
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/28/2021 17:56	STD	0.20	0.230				115.0
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:05	STD	0.20	0.192				95.9
	365.3	365.3	ORTHO PHOSPHORUS AS P	10/29/2021 17:21	STD	0.00	0.221				110.5
21101435	001	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 13:57	LR		0.163	0.164	0.13		
21110034	001	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 14:22	LR		8.070	7.690	3.39		
	365.3	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 13:53	MB	0.00	0.000				
	365.3	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 13:54	MB	0.00	0.000				
	365.3	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 14:09	MB	0.00	0.000				
	365.3	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 14:20	MB	0.00	0.000				
	365.3	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 14:34	MB	0.00	0.000				
	365.3	365.3	TOTAL PHOSPHORUS AS P	11/04/2021 14:45	MB	0.00	0.000				

QC FLAGS: MB or BLK = METHOD BLANK LR = LAB REPLICATE MSD = MATRIX SPIKE DUPLICATE STD of LCS = STANDARD SPK or MS = MATRIX SPIKE

SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
21110090	002	TOTAL PHOSPHORUS AS P	600140	11/04/2021 15:42	PQL	0.02	0.020				101.0
21110192	002	TOTAL PHOSPHORUS AS P	600352	11/04/2021 13:59	SPK	0.20	0.297			0.284	93.5
		TOTAL PHOSPHORUS AS P		11/04/2021 15:13	SPK	0.20	0.414			0.454	120.0
		TOTAL PHOSPHORUS AS P		11/04/2021 13:55	STD	0.20	0.194				96.9
		TOTAL PHOSPHORUS AS P		11/04/2021 14:10	STD	0.20	0.221				111.0
		TOTAL PHOSPHORUS AS P		11/04/2021 14:21	STD	0.20	0.221				110.0
		TOTAL PHOSPHORUS AS P		11/04/2021 14:35	STD	0.20	0.220				110.0
		TOTAL PHOSPHORUS AS P		11/04/2021 14:46	STD	0.20	0.221				110.0
21101511	002	CHLOROPHYLL A	599491	11/05/2021 09:30	LR		1.436	1.350	4.20		
21101654	006	CHLOROPHYLL A	599779	11/05/2021 09:30	LR		29.275	35.220	13.04		
		CHLOROPHYLL A		11/05/2021 09:30	MB	0.00	-0.100				
		CHLOROPHYLL A		11/05/2021 09:30	STD	42.93	40.787				95.0
21101548	001	TOTAL SUSPENDED SOLIDS	599558	10/29/2021 13:40	LR		52.000	48.000	5.66		
21101593	001	TOTAL SUSPENDED SOLIDS	599644	10/29/2021 13:40	LR		180.000	196.000	6.02		
21101631	001	TOTAL SUSPENDED SOLIDS	599739	10/29/2021 13:40	LR		96.000	92.000	3.01		
21101634	001	TOTAL SUSPENDED SOLIDS	599740	10/29/2021 13:40	LR		244.000	268.000	6.63		
21101653	001	TOTAL SUSPENDED SOLIDS	599772	10/29/2021 13:40	LR		140.000	128.000	6.33		
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	MB	0.00	0.000				
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	MB	0.00	0.000				
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	MB	0.00	0.000				
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	MB	0.00	0.000				
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	STD	951.00	968.000				101.8
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	STD	951.00	932.000				98.0
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	STD	951.00	940.000				98.8
		TOTAL SUSPENDED SOLIDS		10/29/2021 13:40	STD	951.00	912.000				95.9
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	MB	0.00	0.240				
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	MB	0.00	0.240				
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	MB	0.00	0.240				
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	228.450				115.4
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	198.450				100.2
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	229.950				116.1
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	169.950				85.8
		BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	228.450				115.4

QC FLAGS: MB or BLK = METHOD BLANK LR = LAB REPLICATE MSD = MATRIX SPIKE DUPLICATE STD or LCS = STANDARD SPK or MS = MATRIX SPIKE

SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	198.450				100.2
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	229.950				116.1
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	169.950				85.8
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	228.450				115.4
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	198.450				100.2
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	229.950				116.1
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		10/28/2021 14:15	STD	198.00	169.950				85.8
21101555	001	SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:36	LR		0.000	2.110	0.00		
21101555	002	SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:48	LR		0.000	2.150	0.00		
21101711	001	SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:12	LR		0.000	2.270	0.00		
21101711	002	SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:24	LR		0.000	2.180	0.00		
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:08	MB	0.00	0.000				
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:22	MB	0.00	0.000				
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:34	MB	0.00	0.000				
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:47	MB	0.00	0.000				
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:55	MB	0.00	0.000				
21101555	001	SYSTEMEAS NITRATE+NITRITE AS N	599567	11/02/2021 13:36	SPK	2.00	2.170			2.140	98.6
21101555	002	SYSTEMEAS NITRATE+NITRITE AS N	599568	11/02/2021 13:48	SPK	2.00	2.190			2.080	94.7
21101711	001	SYSTEMEAS NITRATE+NITRITE AS N	599878	11/02/2021 13:12	SPK	2.00	2.250			2.270	101.0
21101711	002	SYSTEMEAS NITRATE+NITRITE AS N	599879	11/02/2021 13:24	SPK	2.00	2.190			2.170	99.0
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:09	STD	0.25	0.235				94.1
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:11	STD	0.25	0.236				94.2
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:23	STD	0.25	0.231				92.5
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:35	STD	0.25	0.231				92.2
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:47	STD	0.25	0.232				92.7
		SYSTEMEAS NITRATE+NITRITE AS N		11/02/2021 13:56	STD	0.25	0.233				93.3

NOTES:

Surface Water Field Sheets

SURFACE WATER FIELD SHEET
Station Information



STATION ID:	LAKE 4
LOCATION:	CENTER OF LAKE / FORWARD OF WEIR
DATE/TIME:	10/27/21 0930
ALL TIMES ARE:	<input checked="" type="radio"/> ETZ or <input type="radio"/> CTZ (circle one)

WATERBODY TYPE: (Circle One)	<input checked="" type="radio"/> Small Lake (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	3.5 (feet)	Sample Depth:	1.5 (feet)
STREAM FLOW: (Circle One if applicable)	<input checked="" type="radio"/> No Flow	Flow within Banks	Flood Conditions
WATER LEVEL: (Circle One)	Low	<input checked="" type="radio"/> Normal	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<input checked="" type="radio"/> Direct Grab with Sample Bottle	Dipper Other

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
0930	1.5	7.59	3.99	50.6	27.5	646	1.24
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy
 PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Algae film present on water surface

SURFACE WATER FIELD SHEET
Station Information



STATION ID:	LAKE 12
LOCATION:	WEST SIDE OF LAKE (OUTFALL STRUCTURE AREA) FORWARD OF WEIR
DATE/TIME:	<u>10/27/21</u> <u>0945</u>
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	<u>Small Lake</u> (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>2.0</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#			Field Measurements		
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>0945</u>	<u>1.5</u>	<u>7.85</u>	<u>2.84</u>	<u>35.5</u>	<u>26.9</u>	<u>777</u>	<u>1.66</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: Water is clear

SURFACE WATER FIELD SHEET
Station Information



STATION ID:	LAKE 14
LOCATION:	WEST SIDE OF LAKE (OUTFALL STRUCTURE AREA) FORWARD OF WEIR
DATE/TIME:	<u>10/27/21</u> 1000
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	<u>Small Lake</u> (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>2.3</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	<u>No Flow</u>	Flow within Banks	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#			Field Measurements			Read By: (initials)
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)	
1000	1.5	8.43	4.92	63.7	28.2	1119	3.80	
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)	

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: _____

SURFACE WATER FIELD SHEET
Station Information



STATION ID:	LAKE 22
LOCATION:	FORWARD OF WEIR
DATE/TIME:	<u>10/27/21</u> 1020
ALL TIMES ARE:	<u>ETZ</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	<u>Small Lake</u> (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>3.5</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	No Flow	<u>Flow within Banks</u>	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other _____

Field Measurements		Meter ID#		Field Measurements Read By: (initials)			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
1020	1.5	8.50	8.24	105.8	28.3	462	1.75
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Camer Hayden

REMARKS: _____

SURFACE WATER FIELD SHEET
Station Information



STATION ID:	LAKE 32
LOCATION:	CENTER OF LAKE / FORWARD OF WEIR
DATE/TIME:	<u>10/27/21</u> 1040
ALL TIMES ARE:	<u>ETD</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	<u>Small Lake</u> (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>1.9</u> (feet)	Sample Depth:	<u>1.0</u> (feet)
STREAM FLOW: (Circle One if applicable)	<u>No Flow</u> Flow within Banks	Flood Conditions	
WATER LEVEL: (Circle One)	Low <u>Normal</u> High		
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn <u>Direct Grab with Sample Bottle</u>	Dipper	Other _____

Field Measurements		Meter ID#		Field Measurements			
Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1040</u>	<u>1.0</u>	<u>8.72</u>	<u>5.54</u>	<u>71.8</u>	<u>23.7</u>	<u>290</u>	<u>3.18</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: Not
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Haydon

REMARKS: _____

SURFACE WATER FIELD SHEET
Station Information



STATION ID:	LAKE 5
LOCATION:	CENTER OF WEST END OF LAKE
DATE/TIME:	10/27/21 1100
ALL TIMES ARE:	<u>ETD</u> or CTZ (circle one)

WATERBODY TYPE: (Circle One)	<u>Small Lake</u> (>4 and <10HA) (collect samples in middle of open water)	Large Lake (>10HA) (collect samples at selected location point)
	Small Stream (collect samples in representative area)	Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements)	<u>NM</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW: (Circle One if applicable)	<u>No Flow</u>	Flow within Banks	Flood Conditions
WATER LEVEL: (Circle One)	Low	<u>Normal</u>	High
WATER SAMPLE COLLECTION DEVICE (Circle One)	Van Dorn	<u>Direct Grab with Sample Bottle</u>	Dipper Other

Field Measurements

Meter ID#

Field Measurements

Read By: (initials)

Time (24 hr.)	Surface Depth Collected (feet)	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1100</u>	<u>1.5</u>	<u>8.62</u>	<u>5.60</u>	<u>72.5</u>	<u>28.8</u>	<u>308</u>	<u>4.53</u>
Time (24 hr.)	Bottom Depth Collected (feet)	pH (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)

*pH of preserved sample: number of drops of sulfuric acid added in field to achieve pH of less than 2: NA
 Samples immediately placed on ice? Yes No

WEATHER CONDITIONS: (circle) raining, clear, partly cloudy, windy

PERSONNEL ON SITE: Andrew Wyatt, Connor Hayden

REMARKS: _____

Laboratory Data Compliance Memo



Technical Memorandum

November 19, 2021

To	Mr. Bruce Bernard Manger of Field Operations Calvin, Giordano & Associates, Inc. 1800 Eller Drive, Suite 600 Fort Lauderdale, FL 33316	Tel	716.205.1977
From	Sheri Finn/ro/8-NF	Ref. No.	11225022
Subject	Analytical Results Compliance Report Surface Water Quality Monitoring Treviso Bay Naples, Florida October 2021		

1. Compliance Review

Samples were collected in October 2021 in support of the Treviso Bay Surface Water Quality Monitoring sampling. The analytical results are summarized in Table 1. All samples were prepared and analyzed within the method required holding times. The method blank results were non-detect. All reported laboratory control sample (LCS) analyses demonstrated acceptable accuracy. Laboratory duplicate analyses were performed for some analytes. All results were acceptable, indicating good analytical precision. The matrix spike (MS) results were evaluated per the laboratory limits. The MS analyses performed were acceptable, demonstrating good analytical accuracy.

Based on this compliance review, the results in Table 1 are acceptable for use.

Regards

Sheri Finn
Analyst

Table 1

**Analytical Results Summary
Surface Water Quality Monitoring
Treviso Bay, Naples, Florida
October 2021**

Sample Location/Sample ID:		Lake 4						Lake 5					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	06/30/2021	10/27/2021	2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters	Units												
Total Water Depth	Feet	3	2.7	2.34	1.2	1.80	3.5	7	7.5	7.50	6.2	NM	NM
Sample Depth	Feet	1.5	1.5	1.5	0.5	1	1.5	1.5	1.5	1.5	1.5	surface	1.5
Conductivity, field	umhos/cm	908	1129	514	666	755	646	405	630	561	284	389	308
Dissolved oxygen (DO), field	mg/L	6.07	4.36	2.78	3.50	3.82	3.99	9.25	4.46	6.72	5.60	4.48	5.60
Dissolved oxygen (DO), field	%	70.6	56.4	34.7	41.7	49.3	50.6	107.9	59.3	83.9	67.5	59.4	72.5
pH, field	s.u.	7.27	8.4	7.79	8.04	7.9	7.59	7.61	7.78	8.61	8.71	8.26	8.62
Temperature, field	Deg C	22.68	29.1	26.8	24.3	28.6	27.5	22.95	30.1	27.2	25.1	30.2	28.8
Turbidity, field	NTU	1.02	2.33	1.84	2.70	2.91	1.24	1.36	2.45	3.54	6.43	1.94	4.53
Secchi Disk	Depth												
Wet Parameters	Units												
Ammonia-N	mg/L	0.010 I	0.008 U	0.181	0.008 U	0.084	0.083	0.008 U	0.009 I	0.030 I	0.008 U	0.053	0.085
TAN criteria calculation	mg/L	1.39	0.23	NS	NS	NS	NS	1.04	0.54	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.651	0.812	1.19	0.870	0.431	0.668	0.654	0.750	1.04	0.828	0.638	0.910
Total nitrogen	mg/L	0.770	0.818	1.23	0.05 U	0.451	0.754	0.654	0.750	1.04	0.828	0.638	0.976
Nitrite/Nitrate	mg/L	0.119	0.006 I	0.043	0.130	0.020 I	0.086	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.066
Ortho phosphorus (Field Filtered)	mg/L	0.039	0.043	0.026	0.008	0.020	0.004 I	0.024	0.053	0.026	0.007 I	0.002 U	0.020
Total phosphorus	mg/L	0.046	0.045	0.024 I	0.084	0.022 I	0.015 I	0.044	0.063	0.027 I	0.014 I	0.008 U	0.046
Chlorophyll	mg/m3	4.58	10.4	4.87	18.4	7.73	3.57	6.71	8.71	9.27	6.17	9.17	29.3
Total suspended solids (TSS)	mg/L	1.75 I	3.00	2.20 I	0.570 U	1.93 I	0.667 I	5.00	2.25 I	6.20	4.80	1.00 I	6.67
Biochemical oxygen demand (total BOD5)	mg/L	1 U	1.0 U	1 U	1.08 I	1 U	1 U	1.11 I	1.0 U	1.49 I	1.11 I	1 U	1.97 I
Sample Location/Sample ID:		Lake 14						Lake 22					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021	2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters	Units												
Total Water Depth	Feet	2.5	2.41	2.81	2.2	1.83	2.3	3	2.27	2.74	2.6	3.58	3.5
Sample Depth	Feet	1.5	1.5	1.5	1.5	1	1.5	1.5	surface	overflow	1.5	1.5	1.5
Conductivity, field	umhos/cm	14.67	2066	999	967	1223	1119	656	1057	453	450	978	462
Dissolved oxygen (DO), field	mg/L	5.79	4.36	5.45	4.13	4.31	4.92	8.62	5.96	4.20	5.14	3.83	8.24
Dissolved oxygen (DO), field	%	66.7	57.6	67.8	48.8	54.1	63.7	99.6	52.6	54.0	61.0	45.7	105.8
pH, field	s.u.	7.71	8.33	8.44	8.55	8.28	8.43	7.73	8.28	8.27	8.76	7.98	8.50
Temperature, field	Deg C	22.04	29.6	26.4	23.7	28.6	28.2	22.42	29.9	26.8	24.4	28.1	28.3
Turbidity, field	NTU	2.07	7.06	3.44	2.83	2.60	3.80	1.17	1.06	1.52	1.38	2.21	1.75
Secchi Disk	Depth												

Table 1

**Analytical Results Summary
Surface Water Quality Monitoring
Treviso Bay, Naples, Florida
February 2020**

Sample Location/Sample ID:		Lake 4						Lake 5					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	06/30/2021	10/27/2021	2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Wet Parameters	Units												
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.041	0.008 U	0.008 U	0.026 I	0.008 U	0.008 U	0.036
TAN criteria calculation	mg/L	0.99	0.25	NS	NS	NS	NS	0.94	0.27	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.816	0.926	1.35	0.908	0.750	0.738	0.648	1.05	1.23	0.807	0.678	0.499
Total nitrogen	mg/L	0.816	0.926	1.35	0.908	0.750	0.738	0.648	1.05	1.23	0.807	0.678	0.499
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.007 I	0.031	0.004 I	0.002 U	0.002 U	0.007 I	0.005 I	0.019	0.007 I	0.002 U	0.002 U	0.002 I
Total phosphorus	mg/L	0.029 I	0.044	0.025 I	0.020 I	0.008 U	0.011 I	0.024 I	0.027 I	0.030 I	0.008 U	0.008 U	0.021 I
Chlorophyll	mg/m3	8.51	10.3	11.7	5.95	16.0	20.0	4.31	5.00	6.48	2.34	4.06	3.35
Total suspended solids (TSS)	mg/L	4.50	3.75	7.50	4.40	3.60	6.00	1.00 I	3.00	2.25 I	1.60 I	0.570 U	1.67 I
Biochemical oxygen demand (total BOD5)	mg/L	1.55 I	1.0 U	2.32 I	1.59 I	1.03 I	1.61 I	1 U	3.00	1.00	1 U	1 U	1 U

Table 1

**Analytical Results Summary
Surface Water Quality Monitoring
Treviso Bay, Naples, Florida
February 2020**

Sample Location/Sample ID:		Lake 12					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters	Units						
Total Water Depth	Feet	1	1.95	2.30	2	2.24	2
Sample Depth	Feet	overflow	surface	overflow	1.5	1.5	1.5
Conductivity, field	umhos/cm	959	1382	658	583	817	777
Dissolved oxygen (DO), field	mg/L	10.03	5.25	2.69	5.69	8.65	2.84
Dissolved oxygen (DO), field	%	116.7	69.0	33.1	66.2	40.9	35.5
pH, field	s.u.	7.54	8.31	7.74	8.63	8.65	7.58
Temperature, field	Deg C	22.43	29.2	25.8	23.1	28.1	26.9
Turbidity, field	NTU	1.75	1.46	0.58	5.48	1.32	1.66
Secchi Disk	Depth						
Wet Parameters	Units						
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.032
TAN criteria calculation	mg/L	1.15	0.26	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.708	0.710	0.927	1.85	0.570	0.446
Total nitrogen	mg/L	0.708	0.710	0.927	1.86	0.570	0.446
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.006 U	0.008 I	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.012	0.034	0.005 I	0.002 I	0.002 U	0.002 I
Total phosphorus	mg/L	0.020 I	0.040	0.011 I	0.047	0.008 U	0.019 I
Chlorophyll	mg/m3	5.55	5.55	2.19	34.9	10.3	5.44
Total suspended solids (TSS)	mg/L	1.25 I	1.50 I	0.769 I	124	0.570 U	1.00 I
Biochemical oxygen demand (total BOD5)	mg/L	1 U	1.0 U	1 U	4.07	1 U	1 U
Sample Location/Sample ID:		Lake 32					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Field Parameters	Units						
Total Water Depth	Feet	3	3.28	3.87	2.3	2.98	1.9
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1
Conductivity, field	umhos/cm	426	680	298	296	508	298
Dissolved oxygen (DO), field	mg/L	8.4	4.27	6.44	5.08	5.71	5.54
Dissolved oxygen (DO), field	%	99.5	56.3	80.3	61.0	71.8	71.8
pH, field	s.u.	8.15	8.15	8.16	8.49	8.27	8.72
Temperature, field	Deg C	23.8	29.7	27.0	24.7	29.1	28.7
Turbidity, field	NTU	0.47	2.75	3.31	9.56	3.28	3.18
Secchi Disk	Depth						

Table 1

**Analytical Results Summary
Surface Water Quality Monitoring
Treviso Bay, Naples, Florida
February 2020**

Sample Location/Sample ID:		Lake 12					
Sample Date:		2/17/2020	6/4/2020	10/22/2020	03/04/2021	6/30/2021	10/27/2021
Wet Parameters	Units						
Ammonia-N	mg/L	0.008 U	0.008 U	0.045	0.008 U	0.008 U	0.028 I
TAN criteria calculation	mg/L	0.49	0.33	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.483	0.897	1.65	0.791	0.639	0.05 U
Total nitrogen	mg/L	0.483	0.897	1.67	0.791	0.639	0.05 U
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.018 I	0.006 U	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.018	0.035	0.008	0.002 I	0.002 U	0.008
Total phosphorus	mg/L	0.022 I	0.058	0.041	0.010 I	0.013 I	0.014 I
Chlorophyll	mg/m3	2.00	7.08	7.29	3.73	11.8	16.1
Total suspended solids (TSS)	mg/L	0.750 I	5.25	4.00	1.20 I	3.40	3.67
Biochemical oxygen demand (total BOD5)	mg/L	1 U	1.0 U	1.25 I	1 U	1 U	1.23 I

Notes:

- U - Not detected at the associated reporting limit
- I - Reported value is between method detection limit and the practical quantitation limit
- NS - Not sampled during noted event
- * - DO values at or above 100% are possible super-saturation conditions due to high water temperatures and/or high volume of algae