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Our ref: 11225022-04

14 April 2022

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

Miromar Lakes Water Quality Sampling Report – February 2022

Dear Mr. Bernard

GHD Services Inc. (GHD) is pleased to present the results of our water quality sampling services for Lakes 3 and 6 – Miromar Lakes.

1. Water Quality Sampling – February 2022

The February 2022 sampling event consisted of the collection of surface water samples from a total of five (5) test locations (WQ #1 through #4 and #6) from Lake 6 – Miromar Lakes, and one (1) location (WQ #5) at the outfall of Lake 3 within the Miromar Lakes Golf Club as identified on **Figure 1**. As discussed in May 2019, due to limitations of the lake depth at the weir location (i.e. WQ #3) and the potential for disturbance of sediments impacting the sample results, the sample collected at a depth of 36 inches was moved to a deeper area of the lake, at the west entrance to the east-west canal that discharges at the weir, and renamed to WQ Location #6. The February 2022 sampling event represents the eighth sampling event for the new WQ Location #6.

The sampling plan includes sample collection at the following locations and depths:

Sample Identification	Sampling Location	Sample Depth
WQ Location #1	Rip Rap in front of the Miromar Lakes Pkwy Bridge	18 inches
WQ Location #2	Mouth of Canal (west of Via Portofino Way)	18 inches
WQ Location #3A	Back of Weir (southeast of Via Navona Way)	18 inches
WQ Location #4	Beach front (east of the Miromar Lakes Pkwy & Montlelago Ct.)	18 inches
WQ Location #5	Lake 3 Outfall within the Miromar Lakes Golf Club	18 inches
WQ Location #6	Front of Weir (southeast of Via Navona Way)	36 inches

Conductivity, dissolved oxygen, pH, and temperature were measured in the field with a calibrated YSI Model 556 multi-parameter water quality meter. Turbidity and total water depth were measured. Water clarity/transparency (i.e. Secchi depth) was also observed using a Secchi disk. Surface Water Field Sheets are attached. Field data is summarized in the Table in the **Laboratory Data Compliance Memo**.

Samples are collected using direct-dip sampling methods. The 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 February 2022 sampling event were prepared and analyzed within the method required holding times. The laboratory data has been reviewed with respect to authenticity, precision, limits of detection, and accuracy of the data. The laboratory analytical results are summarized in the attached **Laboratory Data Compliance Memo.** The laboratory report is also attached.

Trend graphs have been prepared for each monitor location for laboratory analytical results and select field measurements. The trend graphs include water quality action levels for select parameters as developed and presented in the Lake Management Plan for Miromar Lakes. GHD recommends that if a single measurement exceeds an action level the District notify their lake maintenance contractor to inspect the lake(s) for evidence of potential algal blooms and treat as needed. If a subsequent measurement exceeds an action level, it is recommended the District investigate potential reasons behind the change and take appropriate action(s) as applicable based on the findings.

2. Analytical Summary

It appears that between the prior sampling event in October 2021 and the recent sampling event conducted on February 17, 2021:

- BOD5 levels remained consistent except for at WQL #1 and #3A which slightly decreased;
- Dissolved Oxygen and DO% results varied, but remained relatively constant according to historical trends;
- TKN and Total Nitrogen remained constant at all 6 sampling locations;
- Orthophosphorus and Total Phosphorous remained relatively constant at all locations;
- Total Suspended Solids and turbidity remained relatively constant at all locations;
- Chlorophyll-a results remained constant except at WQL #5 which decreased to 16.5 mg/L, a decrease back under the action level from last sampling event;
- pH at almost all locations increased, except for WQL #5, which slightly decreased;

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 well above the action level for dissolved oxygen percent (%) of a minimum of 38%. All sample locations had relatively consistent dissolved oxygen levels at the last sampling event. WQL #1 and #5 have held a slightly downward trend over the last 2 sampling events. We will monitoring future trends at this location. The dissolved oxygen fluctuates throughout the year with apparent lows during the latter part of the year (e.g. September to December months). GHD recommends the District notify their lake maintenance contractor to continue to watch for evidence of algal blooms during these time periods.

The pH at the monitoring locations generally remains consistent over time. Although the pH fluctuates, the pH typically remains within the upper and lower action levels. The pH during this month's sampling event increased at all locations, with this highest result, WQL #1, being at the upper limit of 8.5.

The concentrations of chlorophyll-a were below the action level at all sample locations this month. It appears chlorophyll-a is elevated in Lake 3 during the monitor events conducted in warmer months of the year. This month's results were consistent with historical levels.

During the February 2022 monitoring event, the concentrations of total phosphorous varied, but remained consistent with historical levels, all being below the lower action level limit.

During the February 2022 sampling event, the concentrations of orthophosphate remained mostly consistent with historical levels, all below the action level limit. The orthophosphate at all sample locations slightly decreased this month, except for WQL #1, which slightly increased.

During the February 2022 sampling event, the concentrations of orthophosphate remained mostly consistent with historical levels, all below the action level limit. The orthophosphate at all sample locations slightly decreased this month, except for WQL #1, which slightly increased.

While the total nitrogen has fluctuated in the past, it has remained below the action levels. Total nitrogen remained relatively consistent at most sample locations during the February 2022 monitoring event, except for WQL #5 and #6, which showed a slight increase. This month's results were consistent with historical levels.

While turbidity has fluctuated in the past, the observed turbidity generally has stayed well below the action level and remained consistent with historical levels this month.

Based on historical data, it appears that BOD tends to be elevated during April/May. While the BOD fluctuates, including detections above the action level, the BOD generally does not remain above its action level for more than one monitoring event. This month, BOD at all sample locations were below the action level and relatively stable.

During the months of April/May, particularly at Lake 3, the lake maintenance contractor may need to inspect the lakes more often for evidence of potential algal blooms and treat as needed.

The conductivity at the monitoring locations fluctuates throughout the year but generally remain similar to other monitoring locations with the exception of WQL #5. The WQL #5 location is at the weir of the Lake 3 on the golf course, whereas the other sample locations are from Lake 6 in the residential development area. Therefore, the variation from WQL #5 to the other locations is not unexpected. The conductivity at WQL #5 is generally higher than the conductivity at the other monitoring locations. This may be caused by high levels of recent rain diluting the isolated water.

While the total suspended solids (TSS) have fluctuated, it generally remains below the action level. The results from February 2022 were consistent with historical trends and below the action level.

3. Conclusions and Recommendations

It appears water quality conditions have improved between October 2021 and February 2022, with mostly consistent results.

Even with the pH at the upper action limit at WQL #1, parameters like total nitrogen, total phosphorous and chlorophyll-a have not risen at this location. Therefore, there do not appear to be water quality concerns at this time.

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

Please call if you have questions or need additional information.

Regards

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Encl: Attachments: Laboratory Data Compliance Memo
Figure
Trend Graphs

Laboratory Analytical Reports
Surface Water Field Sheets

Laboratory Data Compliance Memo

Technical Memorandum

April 01, 2022

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/10-NF	**Ref. No.**	11225022
Subject	Analytical Results Compliance Report Surface Water Quality Monitoring Miromar Lakes Fort Myers, Florida February 2022		

1. Compliance Review

Samples were collected in February 2022 in support of the Miromar Lakes 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
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #1 / WQL1										
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**
Field Parameters	**Units**											
Total Water Depth	Feet	7.66	NS	6.1	5.83	3.5	6.2	4.89	2.90	5.7	4.95	6.83
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	408	353	387	369.3	405	413.1	348.2	407.3	354.6	312.7	387.3
Dissolved oxygen (DO), field	mg/L	8.03	5.91	7.53	8.13	7.95	5.91	6.95	6.89	7.39	8.54	6.49
Dissolved oxygen (DO), field	%	100.9*	79.3	89.4	88.5	101.6	79.6	83.0	87.6	98.9	96.0	80.9
pH, field	s.u.	8.44	8.19	7.92	8.13	7.97	8.23	8.08	8.37	8.24	8.31	8.13
Temperature, field	Deg C	27.08	30.8	24	19.5	28.0	31	24.3	27.7	30.6	21.1	26.6
Turbidity, field	NTU	2.41	3.44	3.55	4.64	8.16	5.05	3.02	2.90	5.53	4.39	3.32
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wet Parameters	**Units**											
Ammonia-N	mg/L	U	0.026 I	U	0.035	0.008 U	0.008 U	0.026 I	0.008 U	0.022 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.24	0.29	0.67	0.66	0.48	0.27	0.52	0.26	0.27	0.45	0.42
Total kjeldahl nitrogen (TKN)	mg/L	0.626	0.878	0.911	0.968	0.611	0.580	0.629	0.551	0.565	0.632	0.619
Total nitrogen	mg/L	0.626	0.878	0.911	0.974	0.616	0.592	0.629	0.565	0.574	0.639	0.619
Nitrite/Nitrate	mg/L	U	U	U	0.006 I	0.005 I	0.012 I	0.004 U	0.014 I	0.009 I	0.007 I	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.074	0.071	0.030	0.012	0.027	0.038	0.026	0.014	0.017	0.014	0.024
Total phosphorus	mg/L	0.087	0.091	0.068	0.038	0.027 I	0.041	0.121	0.017 I	0.018 I	0.026 I	0.034
Chlorophyll	mg/m3	5.91	7.32	7.86	11.1	8.42	9.27	5.25	10.1	10.1	6.92	3.72
Total suspended solids (TSS)	mg/L	2.35	3.49	4.80	7.00	7.80	6.15	3.67	3.67	4.00	4.20	1.20 I
Biochemical oxygen demand (total BOD5)	mg/L	0.706 I	U	U	1.06 I	1.40 I	1.05 I	1 U	1.16 I	2.72 I	1.85 I	1.24 I
Sample Location/Sample ID:		**WQ Location #2 / WQL2**										
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**
Field Parameters	**Units**											
Total Water Depth	Feet	7.43	NS	9.2	8.56	6	6.2	8.01	6.00	10.2	8.65	8.31
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	422	359	384	385.7	414	435.0	638.9	417.0	363.7	321.2	411.8
Dissolved oxygen (DO), field	mg/L	7.67	5.55	7.12	8.05	7.87	6.21	6.58	6.95	7.52	9.90	6.88
Dissolved oxygen (DO), field	%	97.4	74.0	84.7	87.6	101.8	82.9	77.7	88.0	100.2	110.0	85.9
pH, field	s.u.	8.37	8.07	7.68	7.97	8.21	8.11	7.89	8.31	8.03	8.06	8.25
Temperature, field	Deg C	27.62	30.4	24.1	19.5	28.7	30.5	23.7	27.5	30.4	20.5	26.7
Turbidity, field	NTU	3.97	31.71	4.38	4.66	7.15	3.12	3.20	8.22	3.75	5.76	3.37
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wet Parameters	**Units**											
Ammonia-N	mg/L	U	0.019 I	U	0.071	0.008 U	0.008 U	0.036	0.008 U	0.008 U	0.008 U	0.027
TAN criteria calculation	mg/L	0.26	0.36	0.90	0.84	0.32	0.34	0.71	0.30	0.38	0.69	0.34
Total kjeldahl nitrogen (TKN)	mg/L	0.745	1.15	0.888	1.04	0.507	0.641	0.710	0.675	0.613	0.693	0.606
Total nitrogen	mg/L	0.745	1.15	0.900	1.04	0.514	0.645	0.710	0.690	0.618	0.698	0.606
Nitrite/Nitrate	mg/L	U	U	0.012 I	U	0.007 I	0.004 I	0.004 U	0.015 I	0.005 I	0.006 I	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.077	0.070	0.064	0.015	0.028	0.050	0.025	0.015	0.020	0.008	0.002 U
Total phosphorus	mg/L	0.079	0.087	0.066	0.031 I	0.054	0.065	0.042	0.023 I	0.008 U	0.009 I	0.008 U
Chlorophyll	mg/m3	6.59	7.28	8.08	11.7	7.76	7.13	5.42	8.35	9.06	8.80	5.28
Total suspended solids (TSS)	mg/L	4.21	3.90	4.60	7.20	6.60	2.60	3.60	8.00	1.00 I	4.67	3.80
Biochemical oxygen demand (total BOD5)	mg/L	0.778 I	U	U	1.33 I	1.13 I	1 U	1 U	1.36 I	1.89 I	1.10 I	1.40 I

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #3A / WQL3A										
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**
Field Parameters	**Units**											
Total Water Depth	Feet	3.78	3.64	3.52	2.81	1.5	4.6	3.35	3.2	3.6	5.87	2.95
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	406	329	255	375.7	430	200.4	339	418.9	365.1	323	391.9
Dissolved oxygen (DO), field	mg/L	7.31	4.78	2.93	7.40	14.02	1.38	6.49	6.16	7.33	8.44	5.82
Dissolved oxygen (DO), field	%	91.8	62.9	34.3	81.5	198	17.42	76.4	78.2	97.9	94.3	72.7
pH, field	s.u.	8.44	8.0	6.99	7.96	9.32	6.91	7.97	8.15	8.13	7.53	8.21
Temperature, field	Deg C	27.0	29.7	23.2	20.1	33.7	27.3	23.5	27.6	30.5	20.8	26.7
Turbidity, field	NTU	7.64	78.77	3.48	5.42	86.9	2.99	3.05	3.94	3.63	4.20	2.20
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wet Parameters	**Units**											
Ammonia-N	mg/L	U	0.029 I	0.044	0.027 I	0.008 U	0.008 U	0.009 I	U	0.023 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.25	0.42	1.54	0.82	0.04	1.22	0.65	0.38	0.32	1.29	0.37
Total kjeldahl nitrogen (TKN)	mg/L	0.581	0.949	1.11	1.06	3.73	0.642	0.634	0.645	0.621	0.949	0.598
Total nitrogen	mg/L	0.581	0.949	1.13	1.06	3.73	0.650	0.634	0.658	0.626	0.954	0.598
Nitrite/Nitrate	mg/L	U	U	0.021	U	0.008 I	0.008 I	0.004 U	0.013 I	0.005 I	0.006 I	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.073	0.012	0.051	0.012	0.018	0.029	0.031	0.016	0.020	0.025	0.014
Total phosphorus	mg/L	0.088	0.026 I	0.052	0.033	0.090	0.039	0.048	0.024 I	0.008 U	0.019 I	0.018 I
Chlorophyll	mg/m3	5.76	8.71	10.1	10.4	249	10.1	4.83	7.85	10.6	8.15	4.60
Total suspended solids (TSS)	mg/L	7.06	6.42	5.11	7.20	95.0	3.80	4.00	3.60	6.00	4.33	2.60
Biochemical oxygen demand (total BOD5)	mg/L	U	U	U	1.11 I	10.6	1.39 I	1 U	1.12 I	1.66 I	1.19 I	2.32 I
Sample Location/Sample ID:		**WQ Location #3B / WQL3B**										
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**
Field Parameters	**Units**											
Total Water Depth	Feet	3.78	4	3.52	2.98	2	4.6	6.94	3.2	3.6	5.87	3.50
Sample Depth	Feet	3	3	3	2.5	1.5	3	3.0	NS	3	3	3
Conductivity, field	umhos/cm	405	341	369	313.1	406	384.1	338.6	NS	354.5	322.4	391.3
Dissolved oxygen (DO), field	mg/L	7.32	6.22	6.82	6.58	8.46	5.59	5.87	NS	7.39	6.32	5.7
Dissolved oxygen (DO), field	%	91.1	82.8	81.2	67.9	109.3	74.0	68.8	NS	98.8	70.6	71.2
pH, field	s.u.	8.46	8.14	7.68	7.77	8.12	8.10	8.00	NS	8.18	8.08	8.22
Temperature, field	Deg C	26.55	30.3	24.1	16.9	28.6	30.0	23.3	NS	30.6	20.8	26.7
Turbidity, field	NTU	7.98	10.03	3.15	21.38	3.93	4.15	2.84	NS	26.26	7.10	2.17
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wet Parameters	**Units**											
Ammonia-N	mg/L	U	0.15 I	U	0.097	0.008 U	0.008 U	0.028 I	NS	0.015 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.24	0.32	0.90	1.29	0.37	0.35	0.63	NS	0.30	0.66	0.36
Total kjeldahl nitrogen (TKN)	mg/L	0.736	0.880	1.04	2.90	0.462	0.715	0.731	NS	0.757	0.722	0.683
Total nitrogen	mg/L	0.744	0.880	1.05	2.90	0.472	0.715	0.731	NS	0.763	0.727	0.683
Nitrite/Nitrate	mg/L	0.008 I	U	0.012 I	U	0.010 I	0.004 U	0.004 U	NS	0.006 I	0.006 I	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.088	0.064	0.029	0.012	0.029	0.226	0.272	NS	0.020	0.022	0.027
Total phosphorus	mg/L	0.092	0.098	0.031 I	0.168	0.054	1.08	0.501	NS	0.013 I	0.033	0.029 I
Chlorophyll	mg/m3	5.99	7.05	7.57	64.5	5.44	9.14	3.94	NS	10.8	7.61	5.38
Total suspended solids (TSS)	mg/L	7.11	5.78	3.80	44.7	4.20	4.80	3.20	NS	26.0	3.33	6.20
Biochemical oxygen demand (total BOD5)	mg/L	0.556 I	U	U	6.47	1 U	1.45 I	1 U	NS	2.01 I	1 U	1.16 I

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #4 / WQL4										
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**
Field Parameters	**Units**											
Total Water Depth	Feet	12	7.77	14.88	7.91	5.0	10.7	7.9	6.90	11.8	10.7	14.20
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	403	340	373	361.8	405	404.8	342.0	399.7	342	310.3	382.1
Dissolved oxygen (DO), field	mg/L	7.72	6.55	7.14	8.06	8.33	5.02	5.73	7.13	6.96	7.84	7.28
Dissolved oxygen (DO), field	%	96.4	88.3	85.6	88.3	106.6	66.8	68.2	89.2	92.9	87.8	90.2
pH, field	s.u.	8.58	8.31	7.59	8.10	7.65	8.16	8.08	8.39	8.34	7.99	7.97
Temperature, field	Deg C	26.71	31.1	24.5	19.8	28.1	30.3	24.1	26.8	30.5	20.9	26.3
Turbidity, field	NTU	1.87	2.04	4.44	3.02	3.11	1.81	2.48	3.38	3.56	4.10	2.72
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wet Parameters	**Units**											
Ammonia-N	mg/L	U	0.023 I	U	0.012 I	0.008 U	0.008 U	0.026 I	0.008 U	0.014 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.20	0.23	0.96	0.68	0.72	0.31	0.53	0.27	0.23	0.74	0.54
Total kjeldahl nitrogen (TKN)	mg/L	0.868	0.887	0.780	0.976	0.518	0.570	0.612	0.610	0.640	0.885	0.615
Total nitrogen	mg/L	0.868	0.887	0.808	0.976	0.524	0.570	0.612	0.623	0.645	0.885	0.615
Nitrite/Nitrate	mg/L	U	U	0.028	U	0.006 I	0.004 U	0.004 U	0.013 I	0.005 I	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.094	0.017	0.024	0.017	0.030	0.044	0.027	0.019	0.017	0.022	0.026
Total phosphorus	mg/L	0.101	0.021 I	0.027 I	0.038	0.048	0.067	0.038	0.030 I	0.044	0.043	0.038
Chlorophyll	mg/m3	4.92	7.11	7.78	9.09	3.94	9.31	4.62	8.66	10.5	8.43	3.43
Total suspended solids (TSS)	mg/L	2.33	2.84	3.60	5.20	3.26	2.60	1.60 I	2.00 I	5.50	2.33	3.40
Biochemical oxygen demand (total BOD5)	mg/L	U	U	U	1.09 I	1 U	1 U	1 U	1.16 I	1.47 I	1 U	1 U

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #5 / WQL5										
Sample Date:		**04/27/16**	**08/03/16**	**10/31/16**	**01/31/17**	**05/04/17**	**08/02/17**	**12/06/17**	**04/26/18**	**08/22/18**	**12/11/18**	**04/16/19**
Field Parameters	**Units**											
Total Water Depth	Feet	NS	2	2.03	1.42	2.5	4.32	2.84	S	2.7	1.10	1.50
Sample Depth	Feet	NS	1.5	1.5	0.5	1.5	1.5	1.5	S	1.5	0.5	0.75
Conductivity, field	umhos/cm	NS	411	515	462.0	464	478.4	447.9	464.1	405.1	427.2	475.8
Dissolved oxygen (DO), field	mg/L	NS	4.84	6.22	6.88	8.50	8.03	4.21	5.47	6.09	4.21	5.00
Dissolved oxygen (DO), field	%	NS	64.7	77.2	72.2	111.1	109.1	49.6	68.2	81.2	46.1	61.0
pH, field	s.u.	NS	7.83	7.77	7.65	7.77	8.10	7.58	7.61	7.80	6.38	6.44
Temperature, field	Deg C	NS	30.6	26.4	17.7	29.3	31.5	23.6	26.6	30.4	19.8	25.4
Turbidity, field	NTU	NS	2.08	3.62	3.60	5.77	4.65	1.99	4.93	3.40	4.18	4.98
Secchi Disk	Depth	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wet Parameters	**Units**											
Ammonia-N	mg/L	NS	0.033	U	0.008 I	0.008 U	0.008 U	0.034	0.008 U	0.010 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	NS	0.49	0.70	1.40	0.58	0.32	1.03	0.82	0.52	2.19	1.51
Total kjeldahl nitrogen (TKN)	mg/L	NS	0.845	0.786	0.962	0.754	0.756	0.838	1.11	0.857	0.944	0.902
Total nitrogen	mg/L	NS	0.845	0.794	0.962	0.762	0.760	0.854	1.13	0.863	0.957	0.902
Nitrite/Nitrate	mg/L	NS	U	0.008 I	U	0.008 I	0.004 I	0.016	0.016	0.006 I	0.013 I	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	NS	0.022	0.042	0.017	0.027	0.019	0.022	0.016	0.015	0.019	0.023
Total phosphorus	mg/L	NS	0.065	0.042	0.036	0.035	0.067	0.046	0.027 I	0.025 I	0.024 I	0.028 I
Chlorophyll	mg/m3	NS	15.1	12.5	13.9	16.0	25.0	17.3	27.6	19.8	15.4	23.4
Total suspended solids (TSS)	mg/L	NS	4.10	4.80	5.00	8.11	11.0	0.570 U	6.20	4.00	3.00	7.60
Biochemical oxygen demand (total BOD5)	mg/L	NS	1.31 I	1.56 I	1.36 I	2.41 I	2.14 I	1.64 I	3.38 I	1.15 I	1.38 I	3.39 I

Notes:

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

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #1 / WQL1 (Continued)							
Sample Date:		**10/24/2019**	**2/17/2020**	**06/03/2020**	**10/21/2020**	**03/03/2021**	**08/05/2021**	**10/26/2021**	**02/17/2022**
Field Parameters	**Units**								
Total Water Depth	Feet	7.2	4.2	3.9	6.5	5.4	6.0	6.0	6.0
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	348.4	369	689	300	292	358	304	304
Dissolved oxygen (DO), field	mg/L	6.1	8.02	6.05	7.07	7.51	7.0	5.74	5.74
Dissolved oxygen (DO), field	%	78.1	94.5	77.0	87.1	90.6	93.1	72.3	72.3
pH, field	s.u.	8.36	8.26	8.29	8.57	8.82	8.10	8.32	8.50
Temperature, field	Deg C	28.1	23.44	29.1	26.6	25.0	29.91	27.4	27.4
Turbidity, field	NTU	3.71	1.66	3.63	2.42	1.58	1.87	1.82	1.82
Secchi Disk	Depth	4.80	4.20	3.90	6.0	5.4	6.0	NS	5.0
Wet Parameters	**Units**								
Ammonia-N	mg/L	0.017 I	0.008 U	0.008 U	0.008 U	0.008 U	0.008 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.26	0.42	0.28	NS	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.588	0.632	0.591	0.05 U	0.480	0.474	0.531	0.430
Total nitrogen	mg/L	0.588	0.639	0.591	0.05 U	0.480	0.474	0.531	0.430
Nitrite/Nitrate	mg/L	0.006 U	0.007 I	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.026	0.028	0.051	0.0126	0.024	0.011	0.014	0.003 I
Total phosphorus	mg/L	0.063	0.035	0.053	0.011 I	0.059	0.022 I	0.030 I	0.017 I
Chlorophyll	mg/m3	7.81	3.71	3.96	5.76	3.55	7.44	7.06	3.36
Total suspended solids (TSS)	mg/L	2.20 I	3.50	3.20	2.40	2.00 I	2.80	0.667 I	2.50
Biochemical oxygen demand (total BOD5)	mg/L	1.03 I	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sample Location/Sample ID:		**WQ Location #2 / WQL2 (Continued)**							
Sample Date:		**10/24/2019**	**2/17/2020**	**06/03/2020**	**10/21/2020**	**03/03/2021**	**08/05/2021**	**10/26/2021**	**02/17/2022**
Field Parameters	**Units**								
Total Water Depth	Feet	10.4	7.8	6.35	9.0	8.8	10.25	7.5	8.5
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	346.4	373	701	300	303	346	305	322
Dissolved oxygen (DO), field	mg/L	6.27	8.12	5.86	4.64	7.04	7.09	8.64	8.18
Dissolved oxygen (DO), field	%	81.0	96.2	77.2	51.1	86.9	93.7	99.9	90.4
pH, field	s.u.	8.27	8.49	8.31	8.26	8.72	8.0	8.22	8.44
Temperature, field	Deg C	28.5	23.9	30.1	27.1	25.5	29.87	27.4	20.2
Turbidity, field	NTU	3.55	2.18	3.49	2.40	3.41	2.44	2.13	2.07
Secchi Disk	Depth	5.30	NS	5.5	6.5	7.0	7.0	NS	7.0
Wet Parameters	**Units**								
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.009 I	0.008 U	0.017 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.30	0.28	0.25	NS	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.605	0.403	0.556	0.500	0.450	0.469	0.542	0.538
Total nitrogen	mg/L	0.605	0.403	0.556	0.500	0.450	0.469	0.542	0.538
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
Ortho phosphorus (Field Filtered)	mg/L	0.055	0.035	0.053	0.0288	0.026	0.016	0.015	0.010
Total phosphorus	mg/L	0.073	0.069	0.062	0.012 I	0.032	0.017 I	0.036	0.020 I
Chlorophyll	mg/m3	9.11	4.34	5.11	6.13	2.04	5.95	7.37	3.72
Total suspended solids (TSS)	mg/L	2.40	3.00	2.40	2.40	2.80	2.80	2.00 I	1.75 I
Biochemical oxygen demand (total BOD5)	mg/L	1.50 I	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #3A / WQL3A (Continued)							
Sample Date:		**10/24/2019**	**2/17/2020**	**06/03/2020**	**10/21/2020**	**03/03/2021**	**08/05/2021**	**10/26/2021**	**02/17/2022**
Field Parameters	**Units**								
Total Water Depth	Feet	4.5	3	1.5	4.0	3.0	3.33	3.75	2.0
Sample Depth	Feet	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5
Conductivity, field	umhos/cm	373.2	381	690	293	297	363	313	321
Dissolved oxygen (DO), field	mg/L	2.05	5.77	6.49	6.41	5.62	3.15	8.43	6.70
Dissolved oxygen (DO), field	%	25.7	68.5	85.4	80.5	70.2	39.0	98.9	73.5
pH, field	s.u.	7.34	7.93	8.44	8.38	8.49	7.16	7.97	8.49
Temperature, field	Deg C	26.8	23.77	29.3	27.0	25.4	26.24	27.6	19.7
Turbidity, field	NTU	2.79	1.31	3.49	2.76	4.13	1.77	2.70	2.17
Secchi Disk	Depth	Lake Bottom	Lake Bottom	Lake Bottom	4.0	3.0	3.33	NS	2.0
Wet Parameters	**Units**								
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.009 I	0.008 U	0.035	0.008 U	0.008 U
TAN criteria calculation	mg/L	1.02	0.67	0.21	NS	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.635	0.451	0.510	0.216	0.526	0.546	0.565	0.607
Total nitrogen	mg/L	0.635	0.451	0.510	0.216	0.526	0.546	0.565	0.607
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
Ortho phosphorus (Field Filtered)	mg/L	0.060	0.043	0.048	0.0199	0.030	0.017	0.012	0.009
Total phosphorus	mg/L	0.066	0.069	0.064	0.012 I	0.046	0.021 I	0.017 I	0.022 I
Chlorophyll	mg/m3	7.88	3.79	5.10	5.52	4.00	7.06	7.99	4.09
Total suspended solids (TSS)	mg/L	2.40	1.50 I	4.80	2.40	4.20	2.00 I	3	1.75 I
Biochemical oxygen demand (total BOD5)	mg/L	1.27 I	1 U	1 U	1 U	1.30 I	1.32 I	1 U	1 U
Sample Location/Sample ID:		**WQL6**	**WQL6**	**WQL6**	**WQL6**	**WQL6**	**WQL6**	**WQL6**	**WQL6**
Sample Date:		**10/24/2019**	**2/17/2020**	**06/03/2020**	**10/21/2020**	**03/03/2021**	**08/05/2021**	**10/26/2021**	**02/17/2022**
Field Parameters	**Units**								
Total Water Depth	Feet	12.5	17.6	15.5	10.5	14.4	12.3	10.5	14.0
Sample Depth	Feet	3	3	3	1.5	3	3	3.0	1.5
Conductivity, field	umhos/cm	340.8	362	688	290	295	365	305	319
Dissolved oxygen (DO), field	mg/L	5.63	8.44	6.49	6.66	7.43	6.82	8.25	8.40
Dissolved oxygen (DO), field	%	72.4	99.2	85.7	83.4	90.4	90.3	85.4	90.8
pH, field	s.u.	8.16	8.5	8.51	8.63	8.74	7.59	8.25	8.48
Temperature, field	Deg C	28.3	23.28	29.4	29.3	25.2	30.07	27.6	19.6
Turbidity, field	NTU	4.85	1.48	2.83	2.13	1.75	2.19	1.79	2.79
Secchi Disk	Depth	5.80	8.00	7.20	7.0	7.5	6.4	NS	7.0
Wet Parameters	**Units**								
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.009 I	0.008 U	0.012 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.36	0.28	0.19	NS	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.612	0.414	0.490	0.05 U	0.559	0.448	0.496	0.782
Total nitrogen	mg/L	0.612	0.414	0.490	0.05 U	0.559	0.448	0.496	0.782
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
Ortho phosphorus (Field Filtered)	mg/L	0.063	0.032	0.059	0.0155	0.026	0.002 I	0.014	0.010
Total phosphorus	mg/L	0.067	0.035	0.064	0.016 I	0.055	0.023 I	0.038	0.020 I
Chlorophyll	mg/m3	8.86	3.18	4.95	4.80	2.48	7.62	6.69	4.19
Total suspended solids (TSS)	mg/L	2.60	1.25 I	3.20	2.60	1.80 I	1.20 I	3	1.25 I
Biochemical oxygen demand (total BOD5)	mg/L	1.04 I	1 U	1 U	1.39 I	1 U	1 U	1 U	1 U

Table 1

Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #4 / WQL4 (Continued)							
Sample Date:		**10/24/2019**	**2/17/2020**	**06/03/2020**	**10/21/2020**	**03/03/2021**	**08/05/2021**	**10/26/2021**	**02/17/2022**
Field Parameters	**Units**								
Total Water Depth	Feet	15.4	13.55	12.55	13.0	8.01	7.2	7.0	5.5
Sample Depth	Feet	1.5	1.5	1.5	1.5	1.5	1.5	1.5	NM
Conductivity, field	umhos/cm	337.0	363	682	286	291	349	302	318
Dissolved oxygen (DO), field	mg/L	6.42	8.45	6.42	1.41	7.75	7.31	6.69	8.22
Dissolved oxygen (DO), field	%	82.8	99.4	83.4	17.0	93.5	94.2	89.1	90.6
pH, field	s.u.	8.38	8.58	8.57	8.66	8.80	6.62	8.21	8.26
Temperature, field	Deg C	28.5	23.49	29.9	27.5	24.8	29.95	27.6	19.7
Turbidity, field	NTU	2.58	1.04	2.48	1.85	2.28	1.76	3.19	3.14
Secchi Disk	Depth	5.50	8.50	7.00	6.5	8.01	7.2	NS	5.5
Wet Parameters	**Units**								
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.025 I	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.25	0.24	0.16	NS	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.126 I	0.371	0.633	0.05 U	0.538	0.469	0.555	0.430
Total nitrogen	mg/L	0.126	0.371	0.633	0.05 U	0.538	0.469	0.555	0.446
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	0.016 I
Ortho phosphorus (Field Filtered)	mg/L	0.065	0.037	0.042	0.0180	0.021	0.012	0.016	0.010
Total phosphorus	mg/L	0.070	0.064	0.064	0.014 I	0.043	0.032	0.043	0.020 I
Chlorophyll	mg/m3	7.38	2.75	3.78	5.05	1.74	5.39	7.27	3.82
Total suspended solids (TSS)	mg/L	3.20	1.25 I	3.40	1.80 I	0.570 U	3.60	2.00 I	1.25 I
Biochemical oxygen demand (total BOD5)	mg/L	1.07 I	1 U	1 U	1.51 I	1 U	1 U	1 U	1 U

Table 1

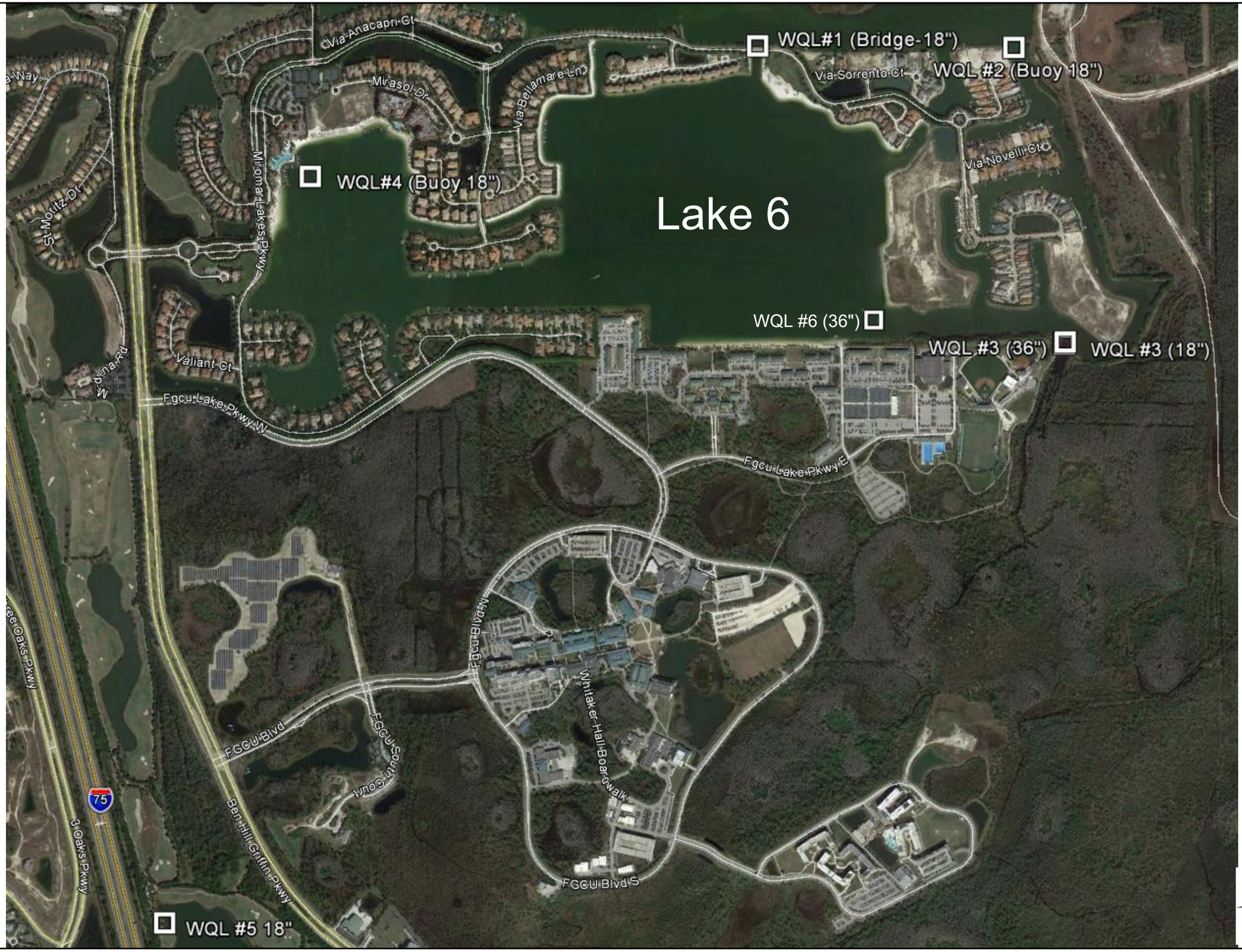
Analytical Results Summary
Surface Water Quality Monitoring
Miromar Lakes, Fort Myers, Florida
February 2020

Sample Location/Sample ID:		WQ Location #5 / WQL5 (Continued)							
Sample Date:		**10/24/2019**	**2/17/2020**	**06/03/2020**	**10/21/2020**	**03/03/2021**	**08/05/2021**	**10/26/2021**	**02/17/2022**
Field Parameters	**Units**								
Total Water Depth	Feet	1.98	1.72	<1	2.0	2.5	NM	4.0	2.0
Sample Depth	Feet	1.0	1	<1	1.5	1.5	1.5	1.5	0.5
Conductivity, field	umhos/cm	465.0	480	802	373	409	82.9	423	438
Dissolved oxygen (DO), field	mg/L	3.20	7.6	5.18	7.65	3.05	6.07	4.69	8.40
Dissolved oxygen (DO), field	%	41.3	89.3	69.0	96.5	37.5	80.6	60.1	53.4
pH, field	s.u.	7.99	8.35	8.28	8.18	8.04	8.12	8.01	8.15
Temperature, field	Deg C	28.4	23.42	30.3	27.4	25.3	30.19	27.9	20.6
Turbidity, field	NTU	4.71	2.45	5.74	2.96	2.27	4.05	17.12	2.10
Secchi Disk	Depth	Lake Bottom	Lake Bottom	Lake Bottom	NS	NS	NS	NS	NS
Wet Parameters	**Units**								
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.023 I	0.008 U	0.008 U	0.008 U
TAN criteria calculation	mg/L	0.46	0.36	0.26	NS	NS	NS	NS	NS
Total kjeldahl nitrogen (TKN)	mg/L	0.807	0.688	1.08	0.137 I	0.755	0.720	0.668	0.925
Total nitrogen	mg/L	0.807	0.688	1.08	0.137	0.755	0.720	0.668	0.925
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
Ortho phosphorus (Field Filtered)	mg/L	0.050	0.038	0.055	0.075	0.029	0.014	0.008	0.010
Total phosphorus	mg/L	0.081	0.049	0.102	0.084	0.067	0.035	0.027 I	0.034
Chlorophyll	mg/m3	15.7	12.6	30.4	22.7	4.93	22.9	16.5	5.08
Total suspended solids (TSS)	mg/L	2.40	3.25	9.00	4.20	3.00	5.40	2.33	1.50 I
Biochemical oxygen demand (total BOD5)	mg/L	1.54 I	1.32 I	3.01 I	1.73 I	1 U	1.55 I	1 U	1.32 I

Notes:

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

Figure



SITE:

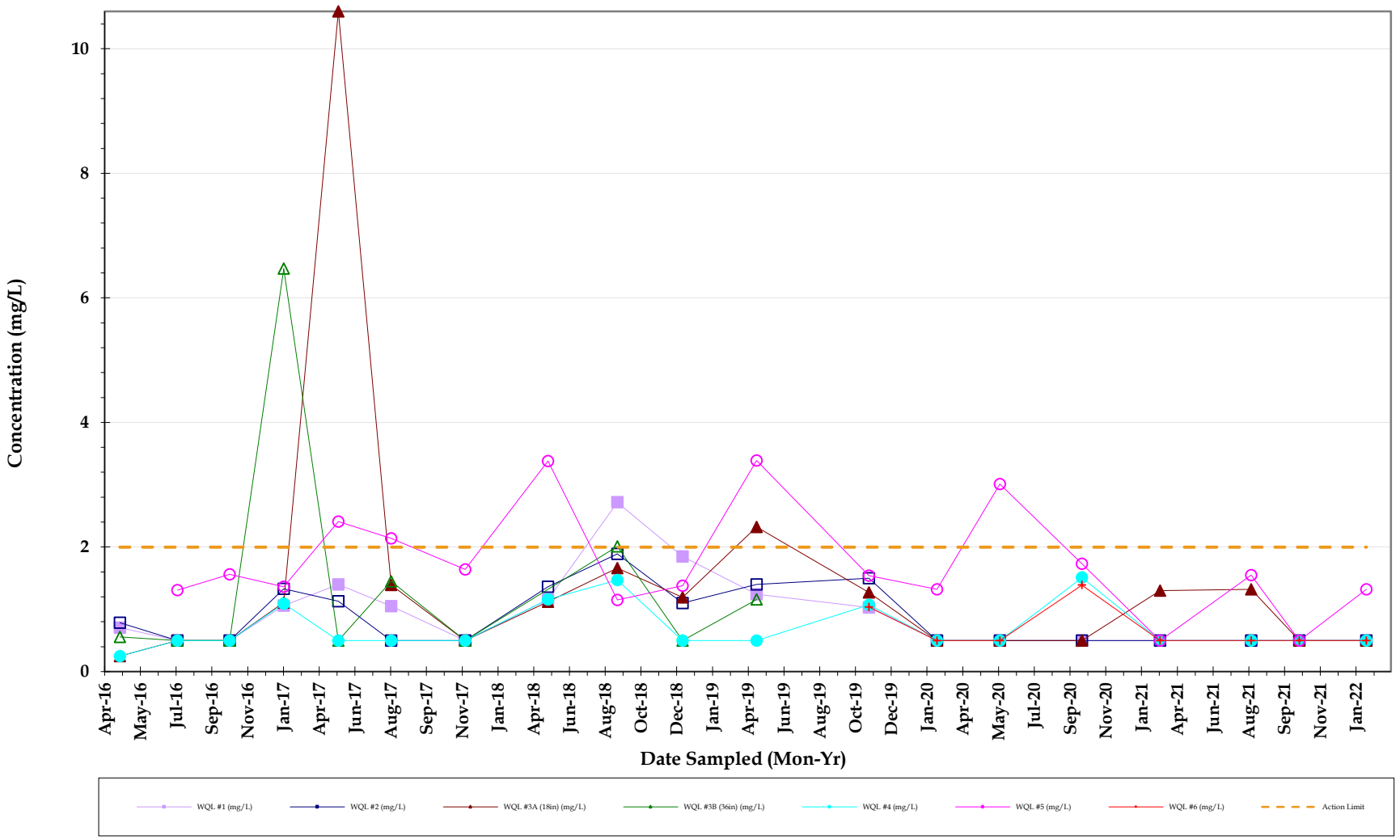
Water Quality Sampling Report – February 2020
Lakes 3 and 6 – Miromar Lakes
Fort Myers, Lee County, Florida

DESIGNED: JR	DRAWN: JR	PROJECT #: 11147356	DATE: Feb 2022
		CHECKED:	CAD FILE:

SHEET TITLE: Location Map

FIGURE: 1

Trend Graphs

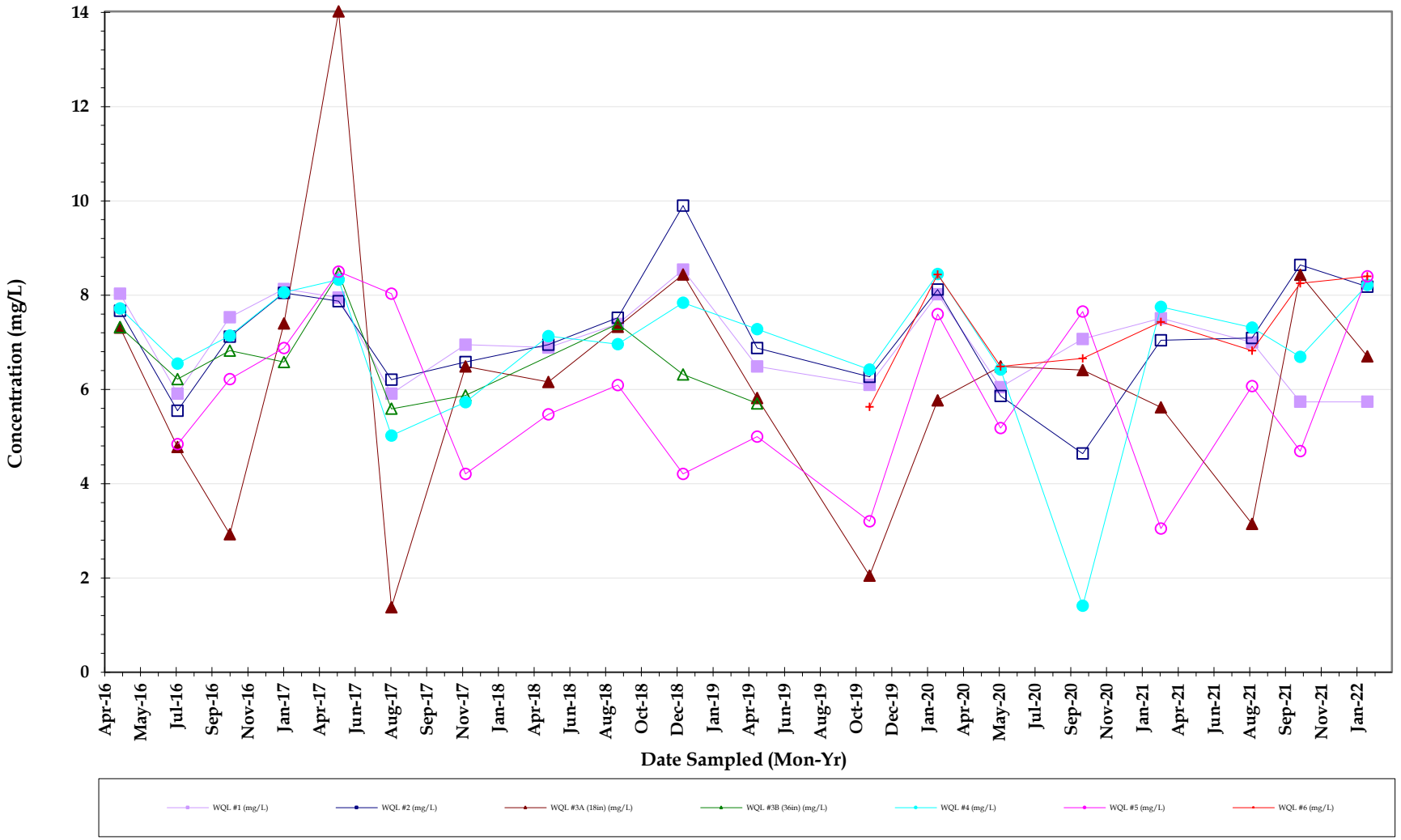


Biochemical Oxygen Demand

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

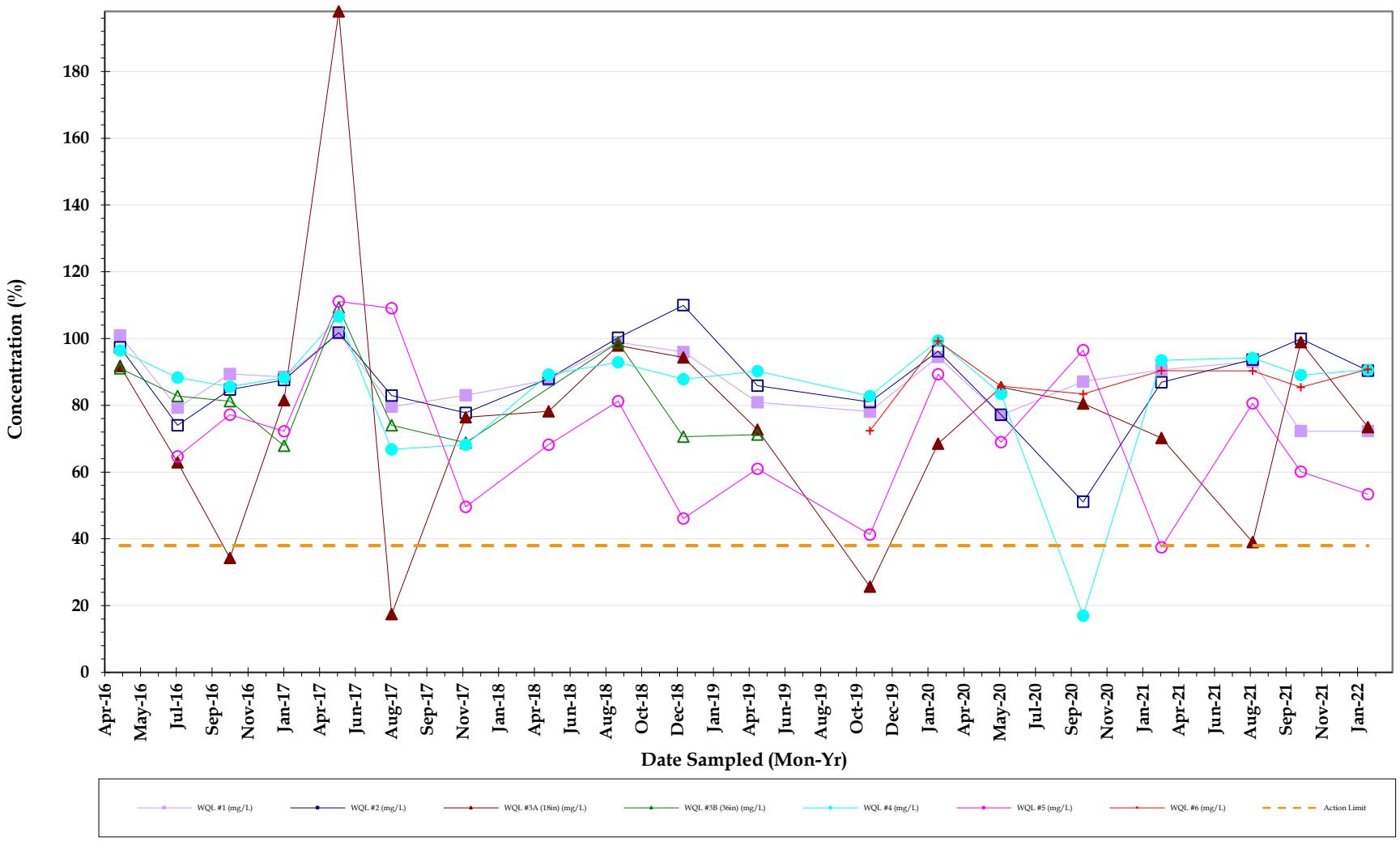


Dissolved Oxygen (mg/L)

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

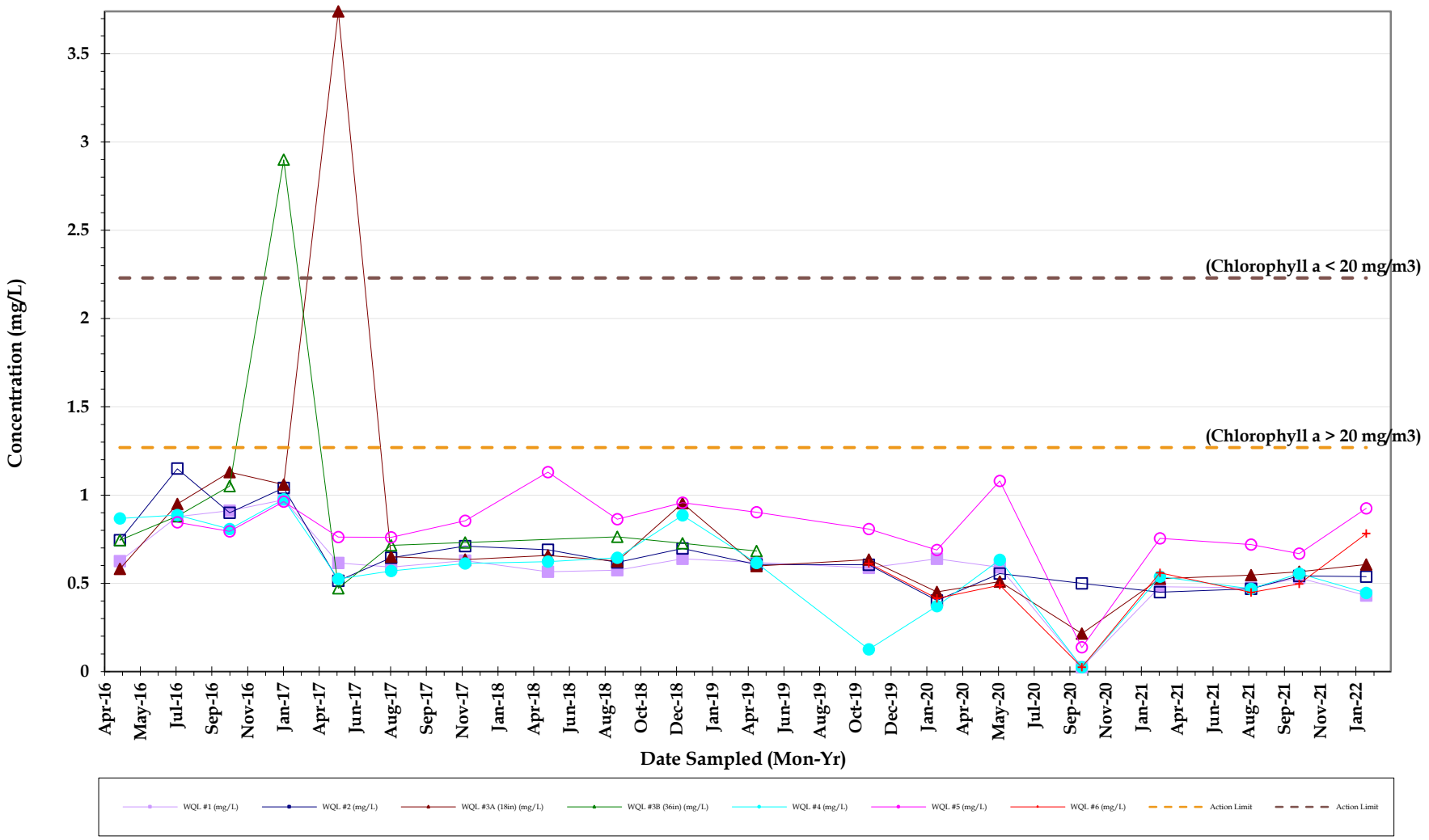


Dissolved Oxygen (%)

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

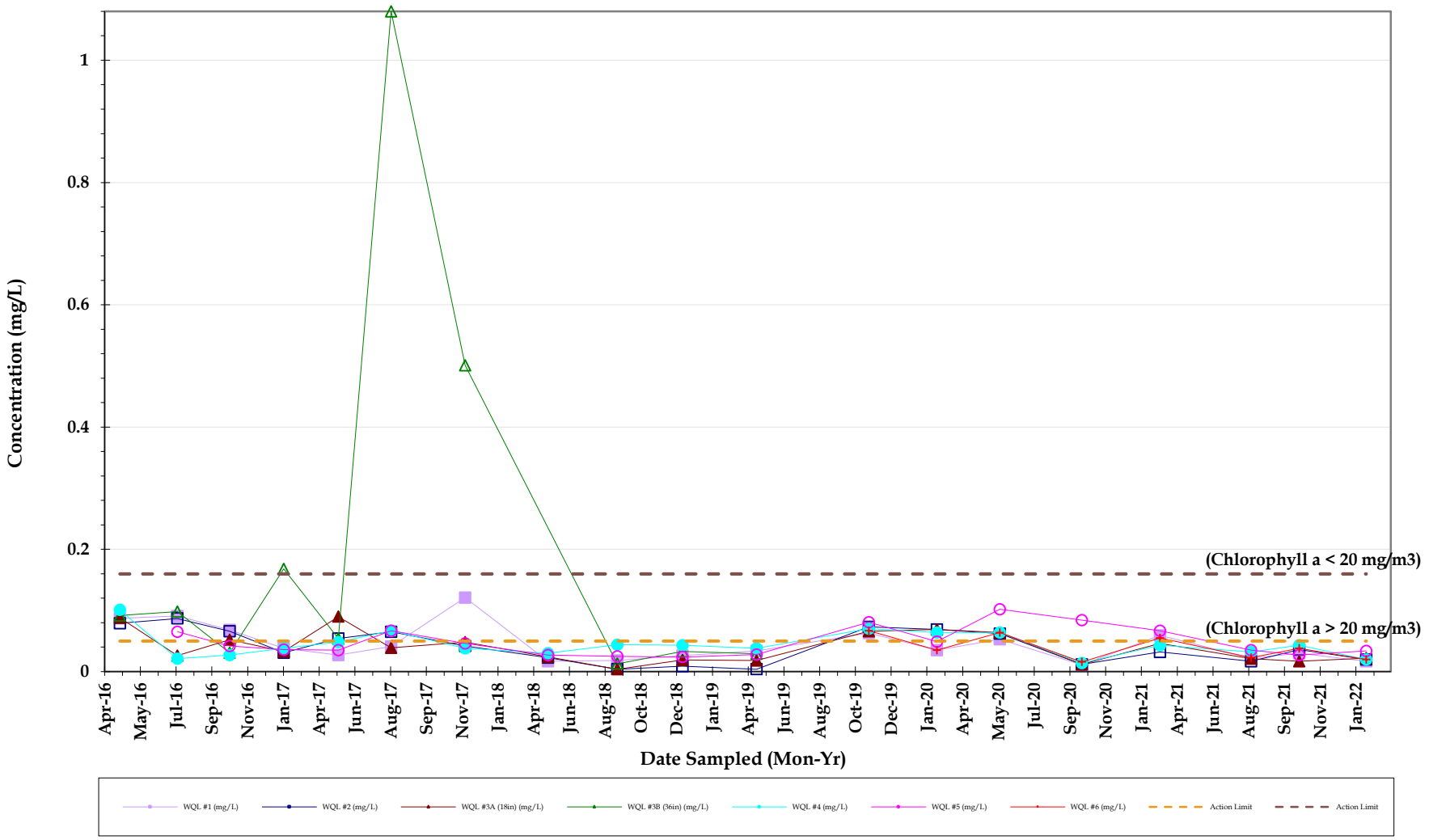


Total Nitrogen

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

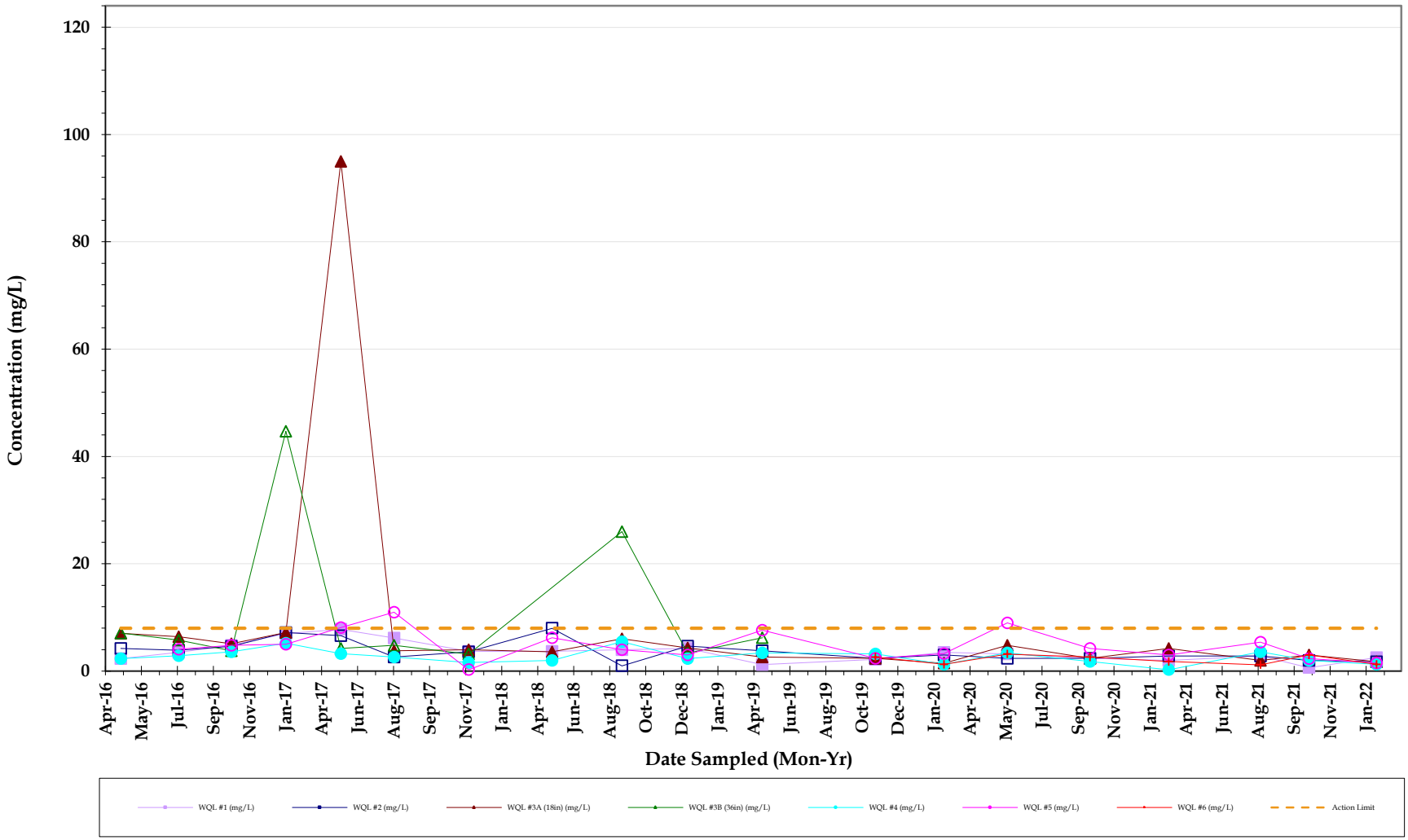


Total Phosphorus

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

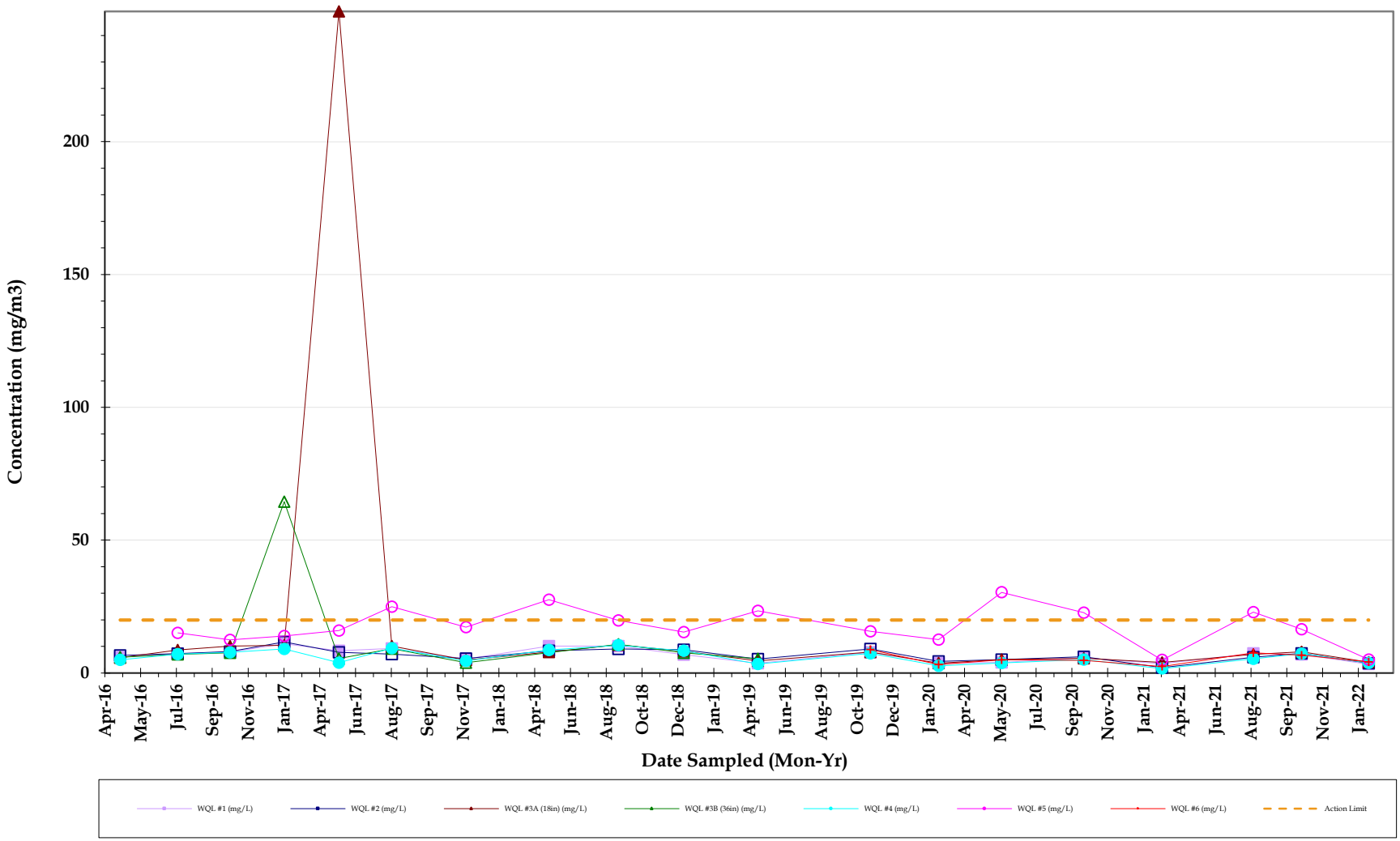


Total Suspended Solids

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

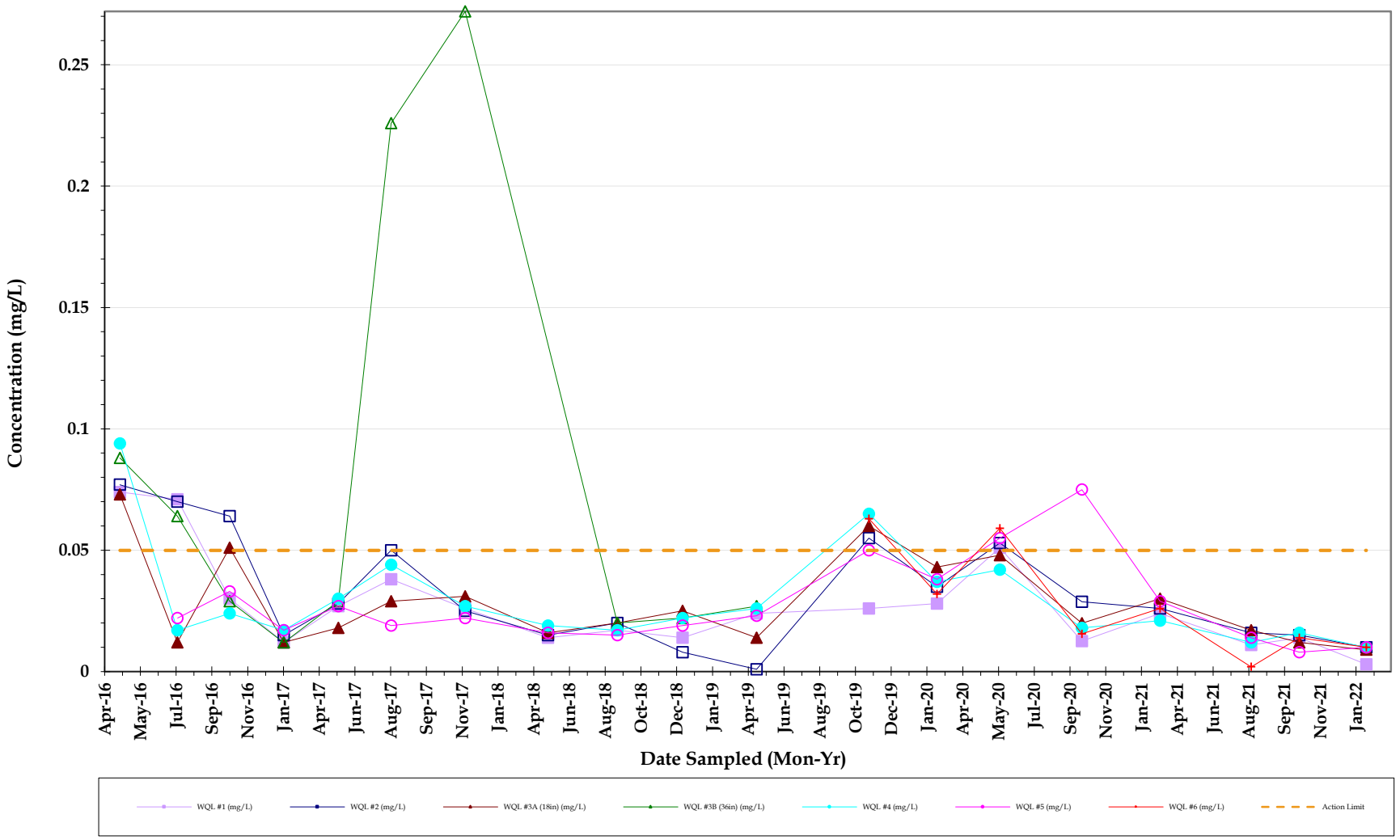


Chlorophyll *a*

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

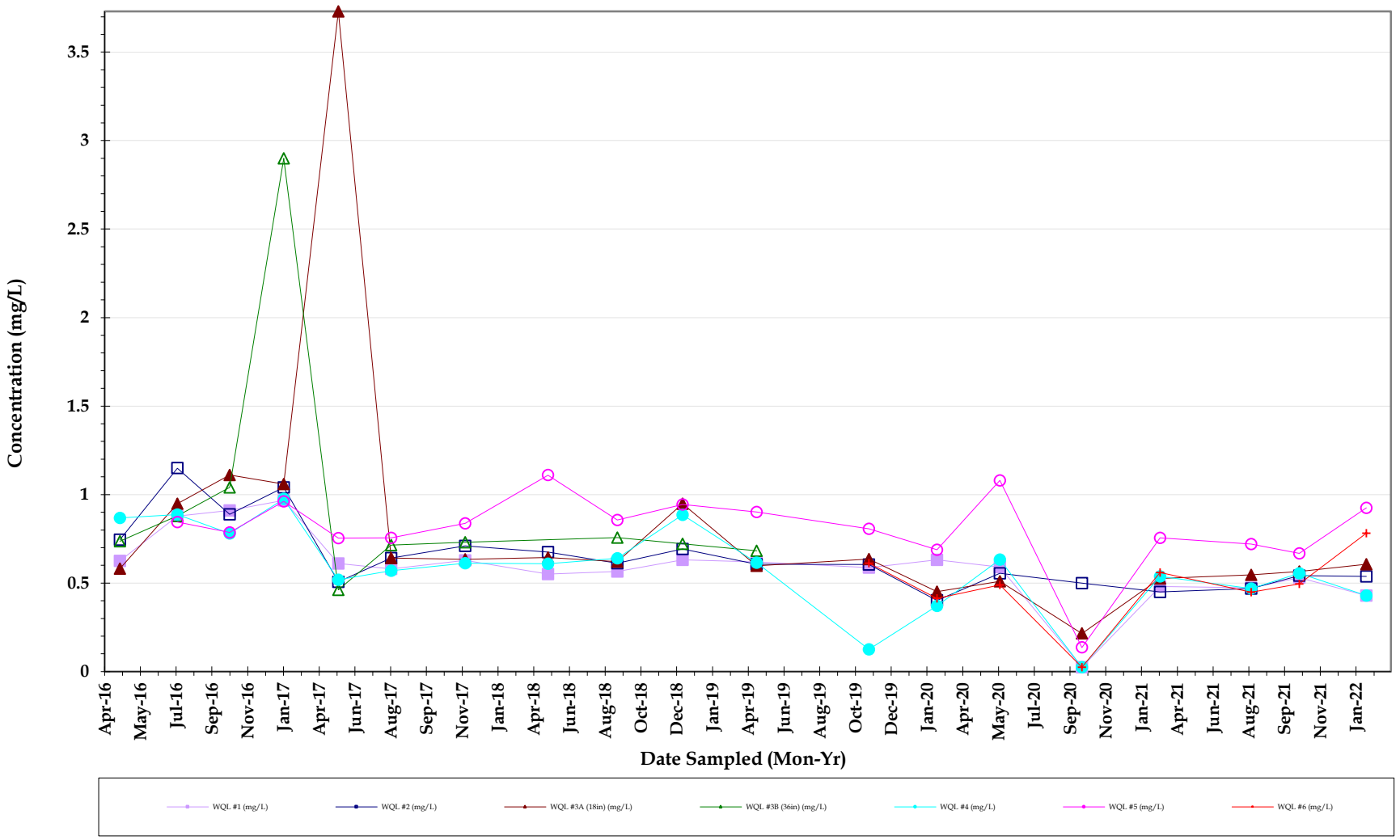


Orthophosphate

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

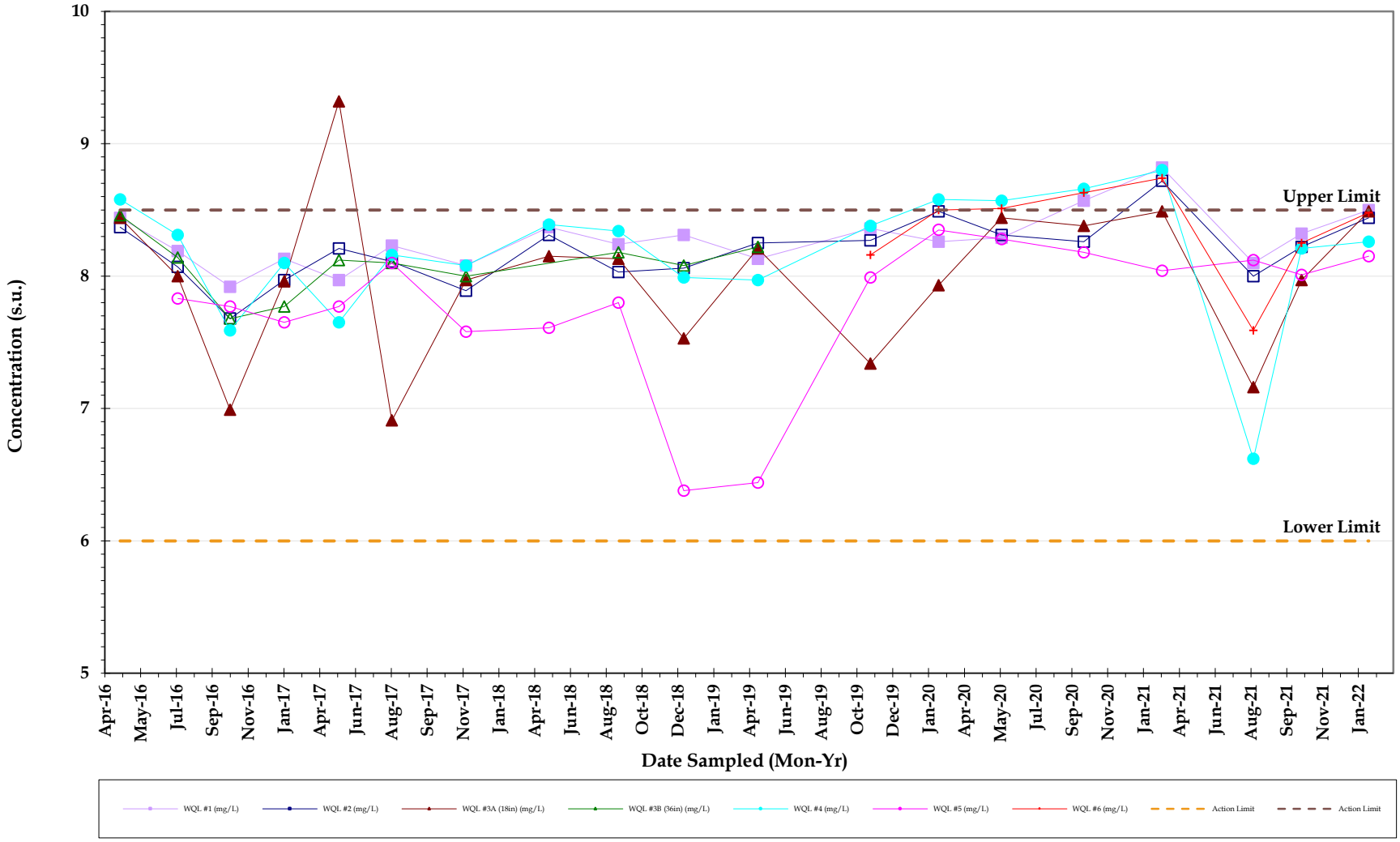


Total kjeldahl nitrogen (TKN)

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

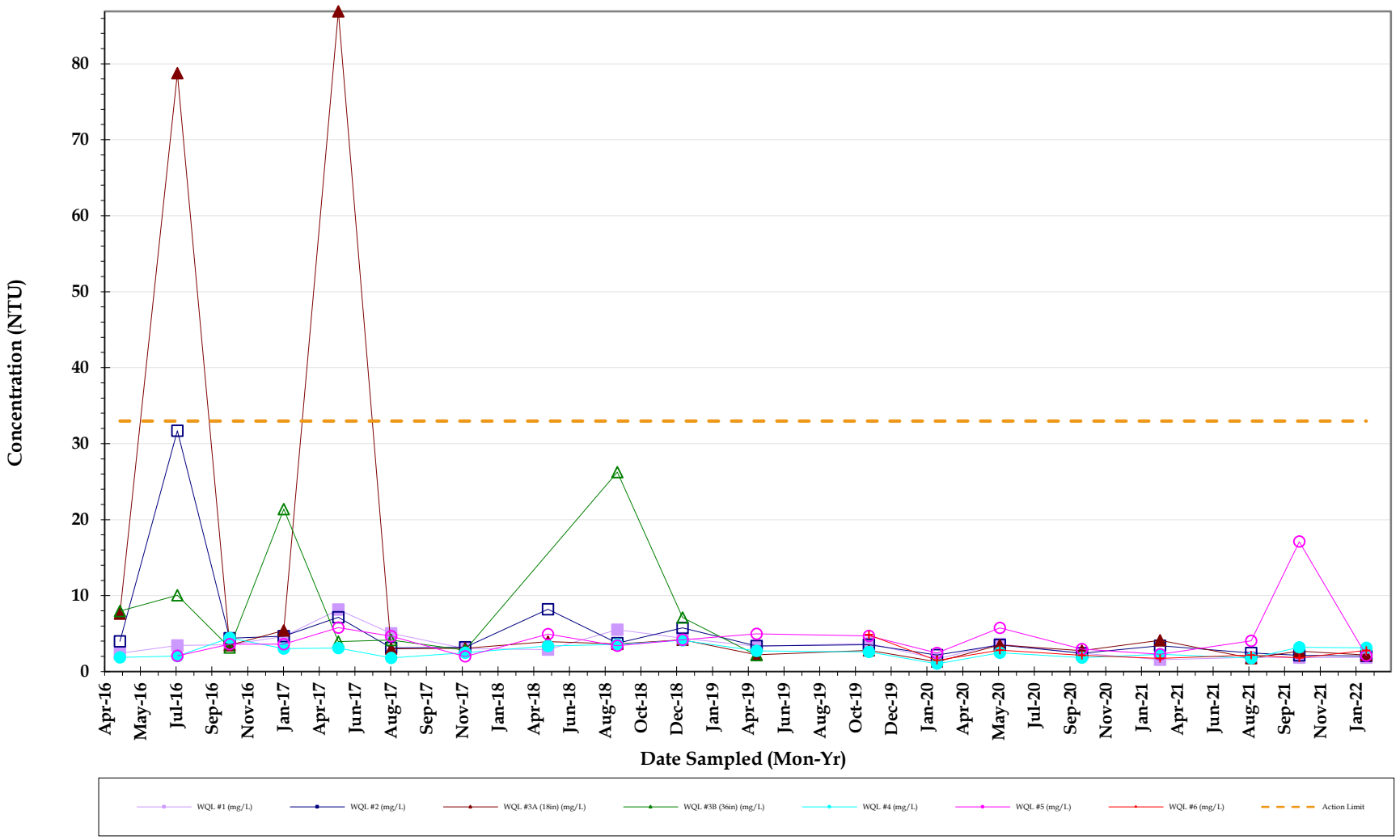


pH, Field

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

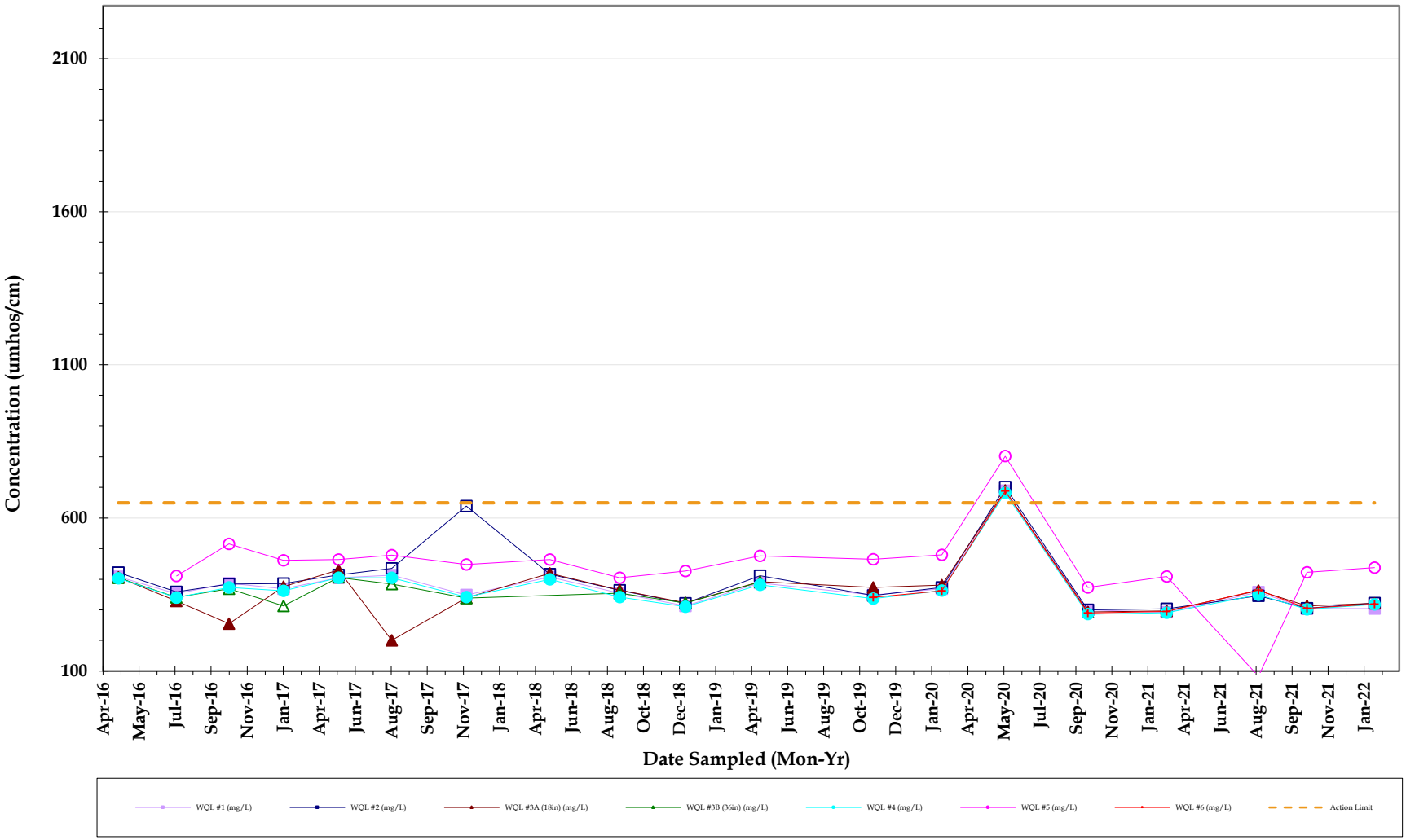


Turbidity

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

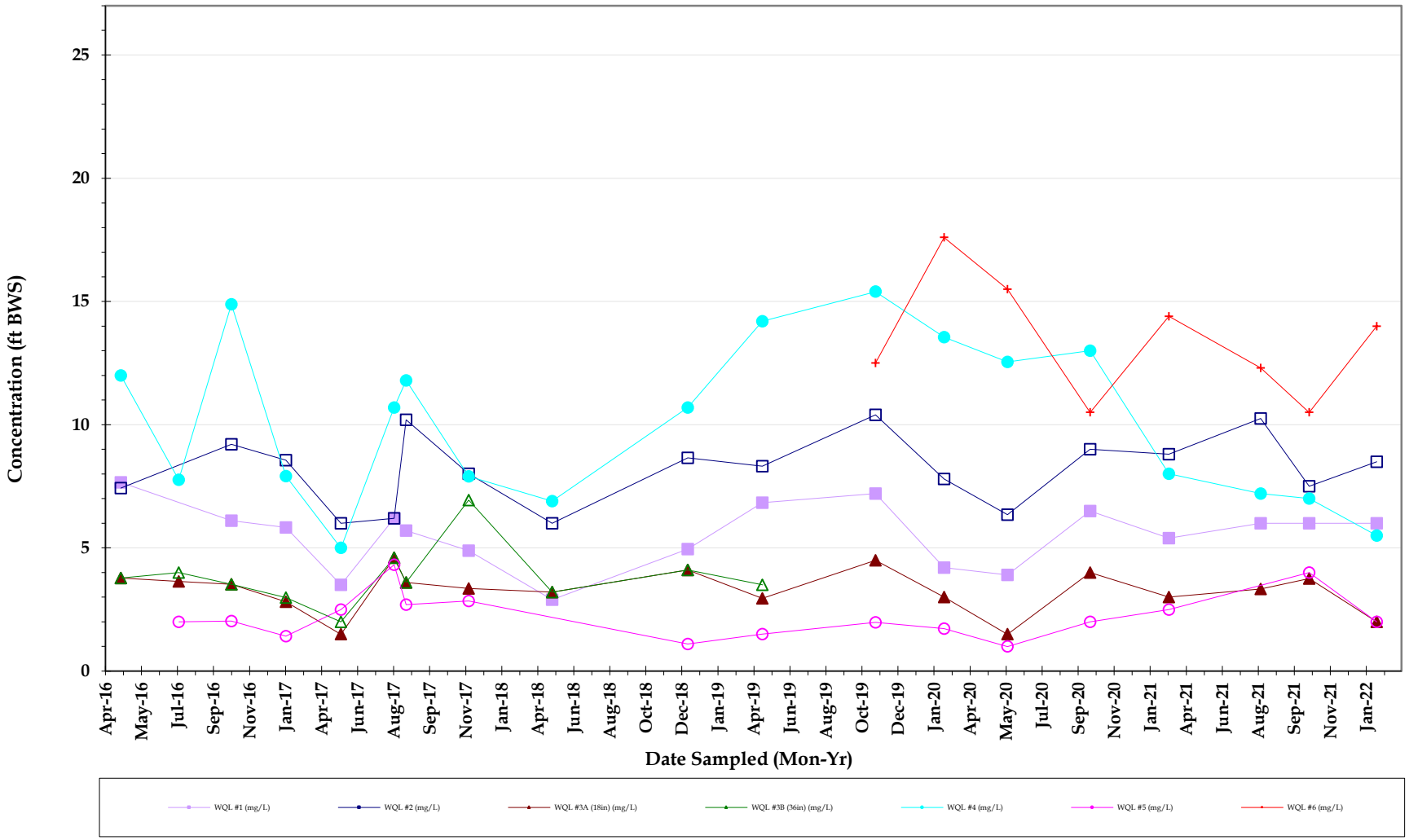


Conductivity

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

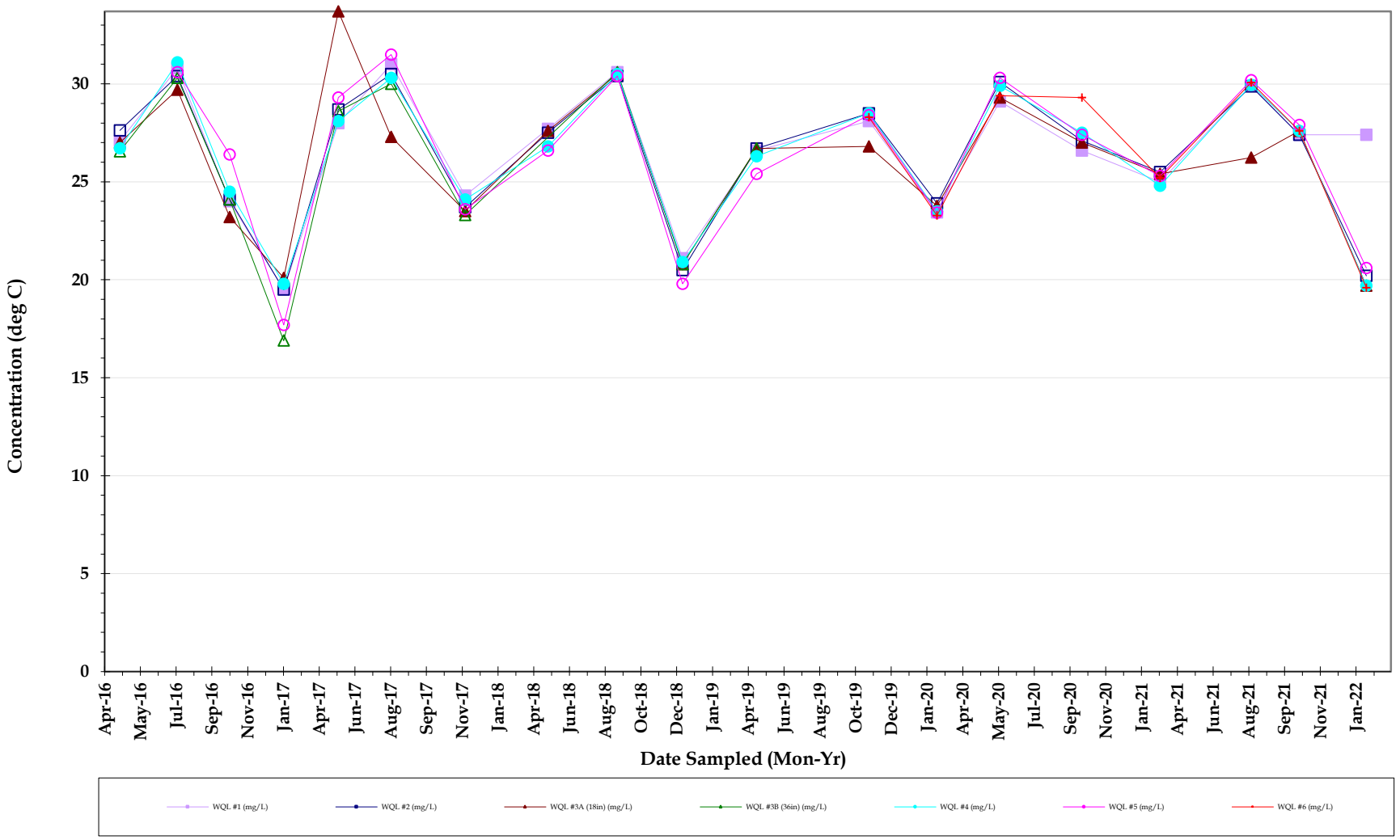


Water Depth

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022



Temperature, sample

Miromar Lakes

Water Quality Surface Water Sample results

FEBRUARY 2022

Laboratory Analytical Report

BENCHMARK
EnviroAnalytical Inc.

NELAC Certification #E84167

ANALYTICAL TEST REPORT
THESE RESULTS MEET NELAC STANDARDS

Submission Number : 22021158

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

Project Name : MIROMAR LAKES WQM QTLY
Project #: 11225022-00
Date Received : 02/18/2022
Time Received : 1527

Submission Number: 22021158
Sample Number: 001
Sample Description: WQL #1

Sample Date: 02/17/2022
Sample Time: 0945
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	02/28/2022 11:35	CW
TOTAL KJELDAHL NITROGEN	0.430	MG/L	0.05	0.20	351.2	02/23/2022 11:18	HR
ORTHO PHOSPHORUS AS P	0.003 I	MG/L	0.002	0.008	365.3	02/18/2022 16:57	KA
TOTAL PHOSPHORUS AS P	0.017 I	MG/L	0.008	0.032	365.3	02/28/2022 10:43	KA
CHLOROPHYLL A	3.36	MG/M3	0.25	1.00	445.0	02/22/2022 11:11	PP
TOTAL SUSPENDED SOLIDS	2.50	MG/L	0.570	2.280	SM2540D	02/21/2022 13:18	TG/MN
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	02/18/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEA EASY	02/25/2022 13:51	CW/PP
TOTAL NITROGEN	0.430	MG/L	0.05	0.20	SYSTEA+351	02/25/2022 13:51	HR/CW/PP

Submission Number: 22021158
Sample Number: 002
Sample Description: WQL #2

Sample Date: 02/17/2022
Sample Time: 0930
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	02/28/2022 11:39	CW
TOTAL KJELDAHL NITROGEN	0.538	MG/L	0.05	0.20	351.2	02/24/2022 10:55	HR
ORTHO PHOSPHORUS AS P	0.010	MG/L	0.002	0.008	365.3	02/18/2022 17:02	KA
TOTAL PHOSPHORUS AS P	0.020 I	MG/L	0.008	0.032	365.3	02/28/2022 10:44	KA
CHLOROPHYLL A	3.72	MG/M3	0.25	1.00	445.0	02/22/2022 11:11	PP
TOTAL SUSPENDED SOLIDS	1.75 I	MG/L	0.570	2.280	SM2540D	02/21/2022 13:18	TG/MN
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	02/18/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEA EASY	02/25/2022 13:51	CW/PP
TOTAL NITROGEN	0.538	MG/L	0.05	0.20	SYSTEA+351	02/25/2022 13:51	HR/CW/PP

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

Submission Number: 22021158
Sample Number: 003
Sample Description: WQL #3A
Sample Date: 02/17/2022
Sample Time: 0920
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	02/28/2022 11:41	CW
TOTAL KJELDAHL NITROGEN	0.607	MG/L	0.05	0.20	351.2	02/24/2022 10:56	HR
ORTHO PHOSPHORUS AS P	0.009	MG/L	0.002	0.008	365.3	02/18/2022 17:03	KA
TOTAL PHOSPHORUS AS P	0.022 I	MG/L	0.008	0.032	365.3	02/28/2022 10:45	KA
CHLOROPHYLL A	4.09	MG/M3	0.25	1.00	445.0	02/22/2022 11:11	PP
TOTAL SUSPENDED SOLIDS	1.75 I	MG/L	0.570	2.280	SM2540D	02/21/2022 13:18	TG/MN
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	02/18/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEA EASY	02/25/2022 13:52	CW/PP
TOTAL NITROGEN	0.607	MG/L	0.05	0.20	SYSTEA+351	02/25/2022 13:52	HR/CW/PP

Submission Number: 22021158
Sample Number: 004
Sample Description: WQL #4
Sample Date: 02/17/2022
Sample Time: 0845
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	02/28/2022 11:43	CW
TOTAL KJELDAHL NITROGEN	0.430	MG/L	0.05	0.20	351.2	02/25/2022 10:11	HR
ORTHO PHOSPHORUS AS P	0.010	MG/L	0.002	0.008	365.3	02/18/2022 17:04	KA
TOTAL PHOSPHORUS AS P	0.020 I	MG/L	0.008	0.032	365.3	02/28/2022 10:46	KA
CHLOROPHYLL A	3.82	MG/M3	0.25	1.00	445.0	02/22/2022 11:11	PP
TOTAL SUSPENDED SOLIDS	1.25 I	MG/L	0.570	2.280	SM2540D	02/21/2022 13:18	TG/MN
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	02/18/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.016 I	MG/L	0.006	0.024	SYSTEA EASY	02/25/2022 13:53	CW/PP
TOTAL NITROGEN	0.446	MG/L	0.05	0.20	SYSTEA+351	02/25/2022 13:53	HR/CW/PP

Submission Number: 22021158
Sample Number: 005
Sample Description: WQL #5
Sample Date: 02/17/2022
Sample Time: 1045
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	02/28/2022 11:45	CW
TOTAL KJELDAHL NITROGEN	0.925	MG/L	0.05	0.20	351.2	02/24/2022 11:00	HR
ORTHO PHOSPHORUS AS P	0.010	MG/L	0.002	0.008	365.3	02/18/2022 17:06	KA
TOTAL PHOSPHORUS AS P	0.034	MG/L	0.008	0.032	365.3	02/28/2022 10:47	KA
CHLOROPHYLL A	5.08	MG/M3	0.25	1.00	445.0	02/22/2022 11:11	PP

TOTAL SUSPENDED SOLIDS	1.50 I	MG/L	0.570	2.280	SM2540D	02/21/2022	13:18	TG/MN
BIOCHEMICAL OXYGEN DEMAND	1.32 I	MG/L	1	4	SM5210B	02/18/2022	16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEA EASY	02/25/2022	13:54	CW/PP
TOTAL NITROGEN	0.925	MG/L	0.05	0.20	SYSTEA+351	02/25/2022	13:54	HR/CW/PP

Submission Number: 22021158
Sample Number: 006
Sample Description: WQL #6

Sample Date: 02/17/2022
Sample Time: 0905
Sample Method: Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time		Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	02/28/2022	11:47	CW
TOTAL KJELDAHL NITROGEN	0.782	MG/L	0.05	0.20	351.2	02/24/2022	11:01	HR
ORTHO PHOSPHORUS AS P	0.010	MG/L	0.002	0.008	365.3	02/18/2022	17:07	KA
TOTAL PHOSPHORUS AS P	0.020 I	MG/L	0.008	0.032	365.3	02/28/2022	10:48	KA
CHLOROPHYLL A	4.19	MG/M3	0.25	1.00	445.0	02/22/2022	11:11	PP
TOTAL SUSPENDED SOLIDS	1.25 I	MG/L	0.570	2.280	SM2540D	02/21/2022	13:18	TG/MN
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	02/18/2022	16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEA EASY	02/25/2022	13:54	CW/PP
TOTAL NITROGEN	0.782	MG/L	0.05	0.20	SYSTEA+351	02/25/2022	13:54	HR/CW/PP

Dale D. Dixon / Laboratory Director

03/01/2022
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 E85086 on 02/18/22 at 0834.

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 #258

Client: **GHD Services, Inc.** (HSA ENG)
2675 Winkler Ave. Suite 180
Ft. Myers Fl 33901
Erik Isern (239) 215-3914 Shannon Tucker 239-210-8653
Email EDD Reports to: Andrew Wyatt (Andrew.Wyatt@ghd.com)
2020 PO# 34043123

Kit Shipped to client via UPS Standard in 1 large cooler

Chain of Custody Form: Miromar Lakes WQM

Project Number: 11225022- 00

Profile: 840, QC Report

Laboratory Submission #: 2202158

Station ID	Sample Type[1]	Sample Matrix[2]	Parameters. Preservative[4]. Container Type[3] / Total # of Containers = 4					Laboratory Submission #
			Unique bottle ID 1A	Unique bottle ID 1B	Unique bottle ID 1C	Unique bottle ID 1D	Unique bottle ID 1E	
			NO_3-NO_2 (353.2) TKN (351.2) NH_3 (350.1) TP (365.3) T-N (Calc.)	BOD5 (SM5210B)	Ortho-Phos (Lab Filtered) (365.3)	TSS (SM2540D) -	Chlorophyll a (445.0) Filtered @ BEAS 2/18/22 0834	
			1.1mL 1:4 H_2SO_4 pH<2 ☑ Lot # 21-21	Plain	Plain	Plain	Plain	
			1 x ½ Pint Plastic	1 x 1 Quart Plastic	1 x ½ Pint Plastic	1 x 1 Quart Plastic	1 x 500mL Opaque Plastic	
WQ Location #1	Grab	SW	Date/Time: 2/17/22 0945					1
WQ Location #2	Grab	SW	Date/Time: 0930					2
WQ Location #3A	Grab	SW	Date/Time: 0920					3
WQ Location #4	Grab	SW	Date/Time: 0845					4
WQ Location #5	Grab	SW	Date/Time: 1045					5
WQ Location #6	Grab	SW	Date/Time: 0905					6

Notes:
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), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
4. **Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).**
5. Under "Preservative," list any preservatives that were added to the sample container. Lot Number of preservative used is specific to the bottles included in the kit. NaThio, H_2SO_4 and HNO_3 do not have expiration dates per the manufacturer. Micro bottles are pre-preserved at manufacturing stage. 40mL vials are pre-preserved at manufacturing stage.
6. 2 Quart plastic bottles are not certified.

Instructions:
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 note special sampling events on the sample custody form.
5. Sample kit has been created by BEA using new, certified bottles unless otherwise noted.

Laboratory Sample Acceptability:
pH <2 : ☑ BEA Temperature: 1.9°C
BEAS Temp: 3.8°C

1	Collector & Affiliation: (Print & Sign) W. McKinney GHD	Date: 2.17.22	Time: 12:45	Received By & Affiliation: (Print & Sign) Melinda Merchant - BEAS	Date: 2/17/22	Time: 1253
2	Relinquished By & Affiliation: (Print & Sign) Melinda Merchant - BEAS	Date: 2/18/22	Time: 11:37	Received By & Affiliation: (Print & Sign) Benchmark MacHall	Date: 2/18/22	Time: 11:37
3	Relinquished By & Affiliation: (Print & Sign) Benchmark MacHall	Date: 2/18/22	Time: 1527	Received By & Affiliation: (Print & Sign) Nathan Hadsell BEA	Date: 2-18-22	Time: 1527
4	Relinquished By & Affiliation: (Print & Sign)	Date:	Time:	Received By & Affiliation: (Print & Sign)	Date:	Time:
5	Relinquished By & Affiliation: (Print & Sign)	Date:	Time:	Received By & Affiliation: (Print & Sign)	Date:	Time:

BENCHMARK

EnviroAnalytical, Inc.

NELAC CERTIFICATION #E84167

QC REPORT

Submission Number: 22021158

Project Name: MIROMAR LAKES WQM QTLY

SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
22021158 001	350.1	AMMONIA NITROGEN	611840	02/28/2022 11:35	LR		-0.076	-0.080	3.25		
22021282 010	350.1	AMMONIA NITROGEN	612038	02/28/2022 12:29	LR		-0.073	-0.070	2.95		
	350.1	AMMONIA NITROGEN		02/28/2022 11:23	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		02/28/2022 11:25	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		02/28/2022 11:55	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		02/28/2022 12:21	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		02/28/2022 12:49	MB	0.00	0.000				
	350.1	AMMONIA NITROGEN		02/28/2022 13:11	MB	0.00	0.000				
22021203 002	350.1	AMMONIA NITROGEN	611927	02/28/2022 15:31	SPK	1.00	3.680			3.720	104.0
22021282 009	350.1	AMMONIA NITROGEN	612037	02/28/2022 12:25	SPK	1.00	1.000			1.130	113.0
22021559 001	350.1	AMMONIA NITROGEN	612501	02/28/2022 11:31	SPK	1.00	1.010			1.170	116.0
22021559 002	350.1	AMMONIA NITROGEN	612502	02/28/2022 11:59	SPK	1.00	1.030			1.180	115.0
	350.1	AMMONIA NITROGEN		02/28/2022 11:27	STD	1.00	0.925				92.5
	350.1	AMMONIA NITROGEN		02/28/2022 11:57	STD	1.00	0.959				95.9
	350.1	AMMONIA NITROGEN		02/28/2022 12:23	STD	1.00	0.962				96.2
	350.1	AMMONIA NITROGEN		02/28/2022 12:51	STD	1.00	0.920				92.0
	350.1	AMMONIA NITROGEN		02/28/2022 13:12	STD	1.00	0.946				94.6
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 10:35	LCS	2.00	2.020				101.0
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 10:55	LCS	2.00	1.960				98.0
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 11:14	LCS	2.00	2.020				101.0
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 11:31	LCS	2.00	2.010				101.0
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 10:22	LCS	2.00	2.150				108.0
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 10:42	LCS	2.00	2.120				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

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		02/24/2022 11:04	LCS	2.00	2.170				109.0
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 11:24	LCS	2.00	2.050				103.0
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 10:19	LCS	2.00	1.800				90.0
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 10:38	LCS	2.00	1.830				91.5
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 10:56	LCS	2.00	1.890				94.5
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 11:18	LCS	2.00	1.840				92.0
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 15:13	LCS	2.00	1.990				99.5
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 15:30	LCS	2.00	1.970				98.5
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 15:48	LCS	2.00	2.080				104.0
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 16:07	LCS	2.00	2.090				105.0
22021128 001	351.2	TOTAL KJELDAHL NITROGEN	611735	02/23/2022 10:25	LR		172.000	176.000	1.63		
22021128 002	351.2	TOTAL KJELDAHL NITROGEN	611736	02/23/2022 11:02	LR		117.000	111.000	3.72		
22021270 001	351.2	TOTAL KJELDAHL NITROGEN	612012	02/24/2022 10:54	LR		132.000	133.000	0.53		
22021311 001	351.2	TOTAL KJELDAHL NITROGEN	612081	02/24/2022 10:11	LR		75.700	77.700	1.84		
22021356 009	351.2	TOTAL KJELDAHL NITROGEN	612148	02/25/2022 10:10	LR		0.784	0.741	3.99		
22021356 010	351.2	TOTAL KJELDAHL NITROGEN	612149	02/25/2022 10:46	LR		0.617	0.692	8.10		
22021413 001	351.2	TOTAL KJELDAHL NITROGEN	612226	02/25/2022 15:37	LR		54.200	54.200	0.00		
22021447 001	351.2	TOTAL KJELDAHL NITROGEN	612308	02/25/2022 15:02	LR		1.490	1.460	1.44		
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 10:20	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 10:34	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 10:54	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 11:12	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 11:30	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 10:06	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 10:20	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 10:41	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 11:03	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 11:23	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 10:05	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 10:18	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 10:37	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 10:55	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 11:17	MB	0.00	0.000				

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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		02/25/2022 14:53	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 15:12	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 15:29	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 15:46	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 16:06	MB	0.00	0.000				
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 10:13	PQL	0.25	0.204				81.6
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 10:03	PQL	0.25	0.223				89.2
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 09:59	PQL	0.25	0.210				84.0
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 14:50	PQL	0.25	0.225				90.0
	351.2	TOTAL KJELDAHL NITROGEN		02/23/2022 10:07	QCS	2.50	2.400				96.0
	351.2	TOTAL KJELDAHL NITROGEN		02/24/2022 09:56	QCS	2.50	2.700				108.0
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 09:52	QCS	2.50	2.410				96.4
	351.2	TOTAL KJELDAHL NITROGEN		02/25/2022 14:43	QCS	2.50	2.700				108.0
22021084 003	351.2	TOTAL KJELDAHL NITROGEN	611644	02/23/2022 10:59	SPK	2.00	2.680			2.710	102.0
22021156 001	351.2	TOTAL KJELDAHL NITROGEN	611834	02/24/2022 10:09	SPK	2.00	2.990			3.030	102.0
22021158 001	351.2	TOTAL KJELDAHL NITROGEN	611840	02/23/2022 11:18	SPK	2.00	2.430			2.520	105.0
22021211 001	351.2	TOTAL KJELDAHL NITROGEN	611946	02/23/2022 10:22	SPK	2.00	3.550			3.510	98.0
22021211 002	351.2	TOTAL KJELDAHL NITROGEN	611947	02/23/2022 10:40	SPK	2.00	3.370			3.430	103.0
22021223 002	351.2	TOTAL KJELDAHL NITROGEN	611961	02/24/2022 10:27	SPK	2.00	3.140			3.220	104.0
22021278 001	351.2	TOTAL KJELDAHL NITROGEN	612024	02/24/2022 11:09	SPK	2.00	5.370			5.450	104.0
22021311 002	351.2	TOTAL KJELDAHL NITROGEN	612082	02/24/2022 10:52	SPK	2.00	4.360			4.220	93.0
22021325 001	351.2	TOTAL KJELDAHL NITROGEN	612100	02/25/2022 15:35	SPK	2.00	3.370			3.340	98.5
22021325 002	351.2	TOTAL KJELDAHL NITROGEN	612101	02/25/2022 15:53	SPK	2.00	3.610			3.430	91.0
22021355 002	351.2	TOTAL KJELDAHL NITROGEN	612138	02/25/2022 10:24	SPK	2.00	2.990			3.030	102.0
22021356 008	351.2	TOTAL KJELDAHL NITROGEN	612147	02/25/2022 11:04	SPK	2.00	2.590			2.450	92.8
22021416 001	351.2	TOTAL KJELDAHL NITROGEN	612232	02/25/2022 14:55	SPK	2.00	3.430			3.400	98.5
22021416 002	351.2	TOTAL KJELDAHL NITROGEN	612233	02/25/2022 15:17	SPK	2.00	3.570			3.480	95.5
22021420 001	351.2	TOTAL KJELDAHL NITROGEN	612237	02/25/2022 10:44	SPK	2.00	3.250			3.090	92.0
22021446 002	351.2	TOTAL KJELDAHL NITROGEN	612306	02/25/2022 10:08	SPK	2.00	2.830			2.860	102.0
22021118 001	365.3	ORTHO PHOSPHORUS AS P	611705	02/18/2022 14:33	LR		0.001	0.001	0.00		
22021158 001	365.3	ORTHO PHOSPHORUS AS P	611840	02/18/2022 16:57	LR		0.004	0.004	7.64		
22021172 009	365.3	ORTHO PHOSPHORUS AS P	611887	02/18/2022 17:31	LR		0.008	0.007	7.35		
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 15:33	MB	0.00	0.000				

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SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 15:34	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 15:39	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 15:43	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 16:51	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 16:52	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 17:12	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 17:29	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 17:36	MB	0.00	0.000				
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 14:31	PQL	0.01	0.010				98.0
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 16:55	PQL	0.01	0.009				95.0
22021118 002	365.3	ORTHO PHOSPHORUS AS P	611706	02/18/2022 15:37	SPK	0.20	0.198			0.172	87.1
22021131 001	365.3	ORTHO PHOSPHORUS AS P	611739	02/18/2022 16:59	SPK	0.20	0.264			0.291	114.0
22021172 010	365.3	ORTHO PHOSPHORUS AS P	611888	02/18/2022 17:33	SPK	0.20	0.209			0.239	115.0
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 15:35	STD	0.20	0.166				83.2
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 14:50	STD	0.20	0.187				93.7
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 15:01	STD	0.20	0.193				96.5
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 16:53	STD	0.20	0.175				87.6
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 17:14	STD	0.20	0.185				92.5
	365.3	ORTHO PHOSPHORUS AS P		02/18/2022 17:30	STD	0.20	0.186				93.1
22021081 001	365.3	TOTAL PHOSPHORUS AS P	611632	02/28/2022 10:27	LR		0.024	0.024	2.36		
22021270 001	365.3	TOTAL PHOSPHORUS AS P	612012	02/28/2022 09:57	LR		14.900	14.400	2.32		
22021413 001	365.3	TOTAL PHOSPHORUS AS P	612226	02/28/2022 14:53	LR		6.680	6.480	2.17		
22021413 001	365.3	TOTAL PHOSPHORUS AS P	612226	02/28/2022 14:53	LR		6.680	6.480	2.17		
22021447 001	365.3	TOTAL PHOSPHORUS AS P	612308	02/28/2022 14:17	LR		4.720	4.670	0.72		
22021447 001	365.3	TOTAL PHOSPHORUS AS P	612308	02/28/2022 14:17	LR		4.720	4.670	0.72		
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:31	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:32	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:45	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:55	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 10:09	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 10:14	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:49	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:50	MB	0.00	0.000				

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SUBMISSION	METHOD	ANALYTE	LAB SAMPLE	ANALYSIS DATE	QC FLAG	QC VALUE	SAMPLE RESULT	DUPLICATE RESULT	LR %RSD	SPK RESULT	STD-SPK RECOVERY
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:04	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:15	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:29	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:40	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:49	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:50	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:04	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:15	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:29	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:40	MB	0.00	0.000				
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:34	PQL	0.02	0.022				111.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:51	PQL	0.02	0.019				95.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:51	PQL	0.02	0.019				95.0
22021156 001	365.3	TOTAL PHOSPHORUS AS P	611834	02/28/2022 09:59	SPK	0.20	1.980			2.000	112.0
22021325 002	365.3	TOTAL PHOSPHORUS AS P	612101	02/28/2022 13:54	SPK	0.20	0.285			0.292	103.0
22021325 002	365.3	TOTAL PHOSPHORUS AS P	612101	02/28/2022 13:54	SPK	0.20	0.285			0.292	103.0
22021416 002	365.3	TOTAL PHOSPHORUS AS P	612233	02/28/2022 15:06	SPK	0.20	0.382			0.435	126.0
22021416 002	365.3	TOTAL PHOSPHORUS AS P	612233	02/28/2022 15:06	SPK	0.20	0.382			0.435	126.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:33	STD	0.20	0.219				109.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:45	STD	0.20	0.219				110.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 09:56	STD	0.20	0.223				111.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 10:10	STD	0.20	0.223				112.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 10:15	STD	0.20	0.224				112.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:51	STD	0.20	0.220				110.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:05	STD	0.20	0.225				113.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:16	STD	0.20	0.222				111.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:30	STD	0.20	0.225				112.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:41	STD	0.20	0.225				112.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 13:51	STD	0.20	0.220				110.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:05	STD	0.20	0.225				113.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:16	STD	0.20	0.222				111.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:30	STD	0.20	0.225				112.0
	365.3	TOTAL PHOSPHORUS AS P		02/28/2022 14:41	STD	0.20	0.225				112.0

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22021081 006	445.0	CHLOROPHYLL A	611637	02/22/2022 11:11	LR		14.191	14.990	3.89		
22021163 01B	445.0	CHLOROPHYLL A	611856	02/22/2022 11:11	LR		9.317	9.060	1.98		
	445.0	CHLOROPHYLL A, CORRECTED		02/22/2022 11:11	STD	42.93	40.891				95.3
22021124 001	SM2540D	TOTAL SUSPENDED SOLIDS	611727	02/21/2022 13:18	LR		710.000	735.000	2.45		
22021124 002	SM2540D	TOTAL SUSPENDED SOLIDS	611728	02/21/2022 13:18	LR		685.000	710.000	2.53		
22021128 001	SM2540D	TOTAL SUSPENDED SOLIDS	611735	02/21/2022 13:18	LR		90.000	92.000	1.55		
22021128 002	SM2540D	TOTAL SUSPENDED SOLIDS	611736	02/21/2022 13:18	LR		33.750	36.250	5.05		
22021137 001	SM2540D	TOTAL SUSPENDED SOLIDS	611776	02/21/2022 13:18	LR		245.000	225.000	6.02		
22021150 001	SM2540D	TOTAL SUSPENDED SOLIDS	611820	02/21/2022 13:18	LR		275.000	280.000	1.27		
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	MB	0.00	0.000				
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	MB	0.00	0.000				
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	MB	0.00	0.000				
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	MB	0.00	0.000				
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	MB	0.00	0.000				
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	STD	951.00	912.000				95.9
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	STD	951.00	852.000				89.6
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	STD	951.00	920.000				96.7
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	STD	951.00	916.000				96.3
	SM2540D	TOTAL SUSPENDED SOLIDS		02/21/2022 13:18	STD	951.00	932.000				98.0
22021141 001	SM5210B	BIOCHEMICAL OXYGEN DEMAND	611793	02/18/2022 14:04	LR		1110.000	1110.000	0.00		
22021161 003	SM5210B	BIOCHEMICAL OXYGEN DEMAND	611850	02/18/2022 14:04	LR		1.010	0.976	2.42		
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		02/18/2022 14:04	MB	0.00	0.120				
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		02/18/2022 14:04	STD	198.00	223.800				113.0
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		02/18/2022 14:04	STD	198.00	217.800				110.0
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		02/18/2022 14:04	STD	198.00	205.800				103.9
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		02/18/2022 14:04	STD	198.00	198.300				100.2
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		02/18/2022 14:04	STD	198.00	169.800				85.8
	SM5210B	BIOCHEMICAL OXYGEN DEMAND		02/18/2022 14:04	STD	198.00	179.800				90.8
22020498 001	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:38	LR		0.000	0.000	0.00		
22020578 002	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:49	LR		0.000	0.000	0.00		
22020910 007	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:59	LR		0.000	0.000	0.00		
22021074 006	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 11:09	LR		0.000	0.000	0.00		
22021424 002	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:57	LR		0.000	0.000	0.00		

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22021446 002	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:37	LR		0.000	0.000	0.00		
22021459 002	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 14:22	LR		0.000	0.000	0.00		
22021513 001	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 14:21	LR		0.000	0.000	0.00		
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:35	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:35	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:47	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:58	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 11:08	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 11:15	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:23	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:23	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:35	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:46	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:56	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 14:03	MB	0.00	0.000				
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 11:21	PQL	0.01	0.012				120.0
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:25	PQL	0.01	0.010				101.0
22020498 001	SYSTEA EAS	NITRATE+NITRITE AS N	610744	02/25/2022 10:38	SPK	2.00	2.010			1.830	91.0
22020578 002	SYSTEA EAS	NITRATE+NITRITE AS N	610884	02/25/2022 10:49	SPK	2.00	1.970			1.800	91.5
22020910 007	SYSTEA EAS	NITRATE+NITRITE AS N	611337	02/25/2022 10:59	SPK	2.00	1.910			1.780	93.4
22021074 006	SYSTEA EAS	NITRATE+NITRITE AS N	611619	02/25/2022 11:09	SPK	2.00	1.920			1.820	94.9
22021446 002	SYSTEA EAS	NITRATE+NITRITE AS N	612306	02/25/2022 13:37	SPK	2.00	4.020			3.600	78.8
22021459 002	SYSTEA EAS	NITRATE+NITRITE AS N	612346	02/25/2022 14:22	SPK	2.00	8.620			8.350	86.9
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:36	STD	0.25	0.230				92.2
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:38	STD	0.25	0.236				94.4
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:48	STD	0.25	0.227				91.0
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 10:58	STD	0.25	0.229				91.5
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 11:22	STD	0.25	0.251				100.0
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 11:16	STD	0.25	0.247				98.7
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:24	STD	0.25	0.199				79.4
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:26	STD	0.25	0.201				80.5
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:36	STD	0.25	0.199				79.6
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:46	STD	0.25	0.207				82.7

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
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 13:57	STD	0.25	0.199				79.6
	SYSTEA EAS	NITRATE+NITRITE AS N		02/25/2022 14:04	STD	0.25	0.204				81.6

NOTES:

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

Surface Water Field Sheets

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	**WQ Location #1**
LOCATION:	Miromar Lakes Parkway Bridge – North Side Rip Rap
DATE/TIME:	2/17/22 0945
ALL TIMES ARE:	(EST) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
- 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: 5.0 (feet) (Average of 2 measurements) Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow (Flow within Banks) Flood Conditions

WATER LEVEL: (Circle One) Low (Normal) High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn (Direct Grab with Sample Bottle) 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)
0945	1.5	8.50	8.40	91.8	19.6	32.4	2.39
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: AW, BM

REMARKS: Secchi disk: 5.0 ft

SURFACE WATER FIELD SHEET
Station Information

STATION ID: **WQ Location #2**

LOCATION: Mouth of Canal – Northeast of Via Portofino Way

DATE/TIME: 2/17/22 0930

ALL TIMES ARE: (EDT) or CDT (circle one)

WATERBODY TYPE: (Circle One)
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: 8.5 (feet) (Average of 2 measurements)
Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow (Flow within Banks) Flood Conditions

WATER LEVEL: (Circle One) Low (Normal) High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn (Direct Grab with Sample Bottle) 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)
0930	1.5	8.44	8.18	90.4	20.2	322	2.07
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: AW, BM

REMARKS: Secchi disk: 7.0 ft

SURFACE WATER FIELD SHEET
Station Information

STATION ID: **WQ Location #3A**

LOCATION: Outlet Weir – South of Via Salerno Way @ **Depth of 18-inches**

DATE/TIME: 2/17/22 0920

ALL TIMES ARE: (ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
- 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: 2.0 (feet) (Average of 2 measurements)

Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow | (Flow within Banks) | Flood Conditions

WATER LEVEL: (Circle One) Low | (Normal) | High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn | (Direct Grab with Sample Bottle) | 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)
0920	1.5	8.49	6.70	73.5	19.7	321	2.17
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

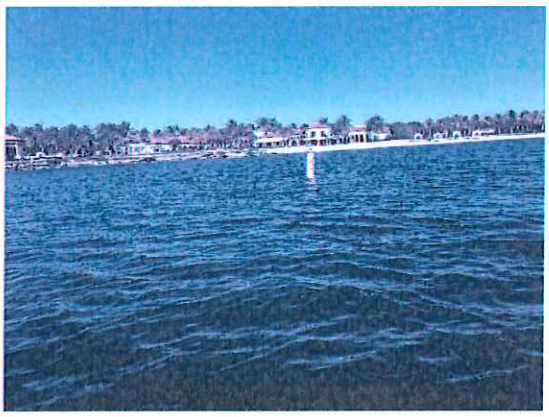
Samples immediately placed on ice? (Yes) No

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

PERSONNEL ON SITE: AW, BM

REMARKS: Secchi disk: 2.0 ft

SURFACE WATER FIELD SHEET
Station Information



STATION ID: **WQ Location #4**

LOCATION: South End of Beach – East of Miromar Lakes Pkwy - Buoy

DATE/TIME: 2/17/22 0845

ALL TIMES ARE: (EST) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
- 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: 5.5 (feet) (Average of 2 measurements)

Sample Depth: _____ (feet)

STREAM FLOW: (Circle One if applicable) No Flow | (Flow within Banks) | Flood Conditions

WATER LEVEL: (Circle One) Low | (Normal) | High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn | (Direct Grab with Sample Bottle) | 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)
0845	1.5	8.26	8.22	80.6	18.7	318	3.14
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: AW, BM

REMARKS: Secchi disk: 5.5 ft

SURFACE WATER FIELD SHEET
Station Information

STATION ID: **WQ Location #5**

LOCATION: Lake #30 Outfall

DATE/TIME: 2/17/22 1045

ALL TIMES ARE: (ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)
(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: 2.0 (feet) (Average of 2 measurements)
Sample Depth: 0.5 (feet)

STREAM FLOW: (Circle One if applicable) (No Flow) Flow within Banks Flood Conditions

WATER LEVEL: (Circle One) (Low) Normal High

WATER SAMPLE COLLECTION DEVICE (Circle One) Van Dorn (Direct Grab with Sample Bottle) 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)
1045	0.5	8.15	4.80	53.4	20.6	438	2.10
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: AW, BM

REMARKS:

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	**WQ Location #6**
LOCATION:	West end of channel. SE corner of south lake @ **Depth of 36-inches**
DATE/TIME:	2/17/22 0905
ALL TIMES ARE:	(ETZ) or CTZ (circle one)

WATERBODY TYPE: (Circle One)	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: 14.0 (feet) (Average of 2 measurements) Sample Depth: 1.5 (feet)

STREAM FLOW: (Circle One if applicable) No Flow (Flow within Banks) Flood Conditions

WATER LEVEL: (Circle One) Low (Normal) High

WATER SAMPLE COLLECTION DEVICE (Circle One) (Van Dorn) Direct Grab with Sample Bottle 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)
0905	1.5	8.48	8.40	90.8	19.6	319	2.79
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: AW, BM

REMARKS: Secchi disk: 7.0 ft