

Our ref: 11225022-03

May 2, 2022

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

Water Quality Monitoring – March 2022 – Flow Way CDD

Dear Mr. Bernard:

GHD Services Inc. (GHD) is pleased to present the results of our water quality sampling services for the Flow Way and Lakes 7, 9, 12 and 18/19 - Flow Way CDD at Esplanade Golf and Country Club.

1. Water Quality Sampling – March 2022

The March 2022 sampling event consisted of the collection of five (5) surface water samples at five (5) sample locations (FW – Flow Way, FW – Lake 9, FW – Lake 7, FW – Lake 12, and FW – Lake 18/19) within the Esplanade Golf and Country Club as identified on **Figure 1**.

Samples were collected using direct-dip sampling methods. All samples were collected at a depth of 18 inches from the banks of the Lakes/Flow Way. See **Figure 1** for sampling locations.

Conductivity, dissolved oxygen, pH, and temperature were measured in the field with a calibrated YSI Model 556 multi-parameter water quality meter. Turbidity was also measured at each location. Surface Water Field Sheets are attached. Field data is summarized in the Table within the **Laboratory Data Compliance Memo**.

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 analyses 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 March 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 Table within the **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.

2. Analytical Summary

The March 2022 sampling event represents the first sampling event for the select five (5) WQ Locations for Flow Way. It is best to observe true trends after a minimum of three sampling events. Laboratory results are summarized in the **Laboratory Data Compliance Memo** and are displayed visually in the trend graphs, enclosed.

Ammonia and nitrite/nitrate were undetected at all sampling locations for the March 2022 sampling event.

3. Conclusions and Recommendations

The next tri-annual sampling event is planned for June 2022. There do not appear to be water quality concerns at this time. Please call if you have questions or need additional information.

Sincerely,
GHD



Jessica Walsh
Engineering Intern



Lori Coolidge, P.G.
Geologist

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

Laboratory Data Compliance Memo



Technical Memorandum

April 18, 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
Copy to	Connor Haydon	Email	Connor.Haydon@ghd.com
From	Sheri Finn/ro/12-NF	Ref. No.	11225022
Subject	Analytical Results Compliance Report Surface Water Quality Monitoring Flow Way CDD Fort Myers, Florida March 2022		

1. Compliance Review

Samples were collected in March 2022 in support of the Flow Way CDD 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

**Analytical Results Summary
Surface Water Quality Monitoring
Flow Way CDD
Fort Myers, Florida
March 2022**

Sample Location/Sample ID:		FW-Flow Way	FW-Lake 12	FW-Lake 18/19
Sample Date:		3/9/2022	3/9/2022	3/9/2022
Field Parameters	Units			
Total Water Depth	Feet	NM	NM	NM
Sample Depth	Feet	1.5	1.5	1.5
Conductivity, field	umhos/cm	486	477.2	416.1
Dissolved oxygen (DO), field	mg/L	5.13	6.22	5.51
Dissolved oxygen (DO), field	%	62.3	76.1	66.8
pH, field	s.u.	8.54	8.41	8.79
Temperature, field	Deg C	25.3	25.7	25.7
Turbidity, field	NTU	3.38	4.07	3.02
Secchi Disk	Depth			
Wet Parameters	Units			
Ammonia-N	mg/L	0.008 U	0.008 U	0.008 U
TAN criteria calculation	mg/L	NM	NM	NM
Total kjeldahl nitrogen (TKN)	mg/L	2.08	1.35	2.13
Total nitrogen	mg/L	2.08	1.35	2.13
Nitrite/Nitrate	mg/L	0.006 U	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.004 I	0.022	0.014
Total phosphorus	mg/L	0.024 I	0.026 I	0.027 I
Chlorophyll	mg/m3	4.73	7.87	5.80
Total suspended solids (TSS)	mg/L	6.33	3.33	3.67
Biochemical oxygen demand (total BOD5)	mg/L	1 U	1.39 I	1.22 I

Sample Location/Sample ID:		FW-Lake 7	FW-Lake 9
Sample Date:		3/9/2022	3/9/2022
Field Parameters	Units		
Total Water Depth	Feet	NM	NM
Sample Depth	Feet	1.5	1.5
Conductivity, field	umhos/cm	386	459
Dissolved oxygen (DO), field	mg/L	6.81	5.13
Dissolved oxygen (DO), field	%	82.5	61.7
pH, field	s.u.	8.82	8.51
Temperature, field	Deg C	25.2	24.9
Turbidity, field	NTU	1.98	3.57
Secchi Disk	Depth		
Wet Parameters	Units		
Ammonia-N	mg/L	0.008 U	0.008 U
TAN criteria calculation	mg/L	NM	NM
Total kjeldahl nitrogen (TKN)	mg/L	1.31	1.36
Total nitrogen	mg/L	1.31	1.36
Nitrite/Nitrate	mg/L	0.006 U	0.006 U
Ortho phosphorus (Field Filtered)	mg/L	0.006 I	0.021
Total phosphorus	mg/L	0.025 I	0.024 I
Chlorophyll	mg/m3	3.27	5.45
Total suspended solids (TSS)	mg/L	0.667 I	1.67 I
Biochemical oxygen demand (total BOD5)	mg/L	1.06 I	1.08 I

Notes:

U - Not detected at the associated reporting limit

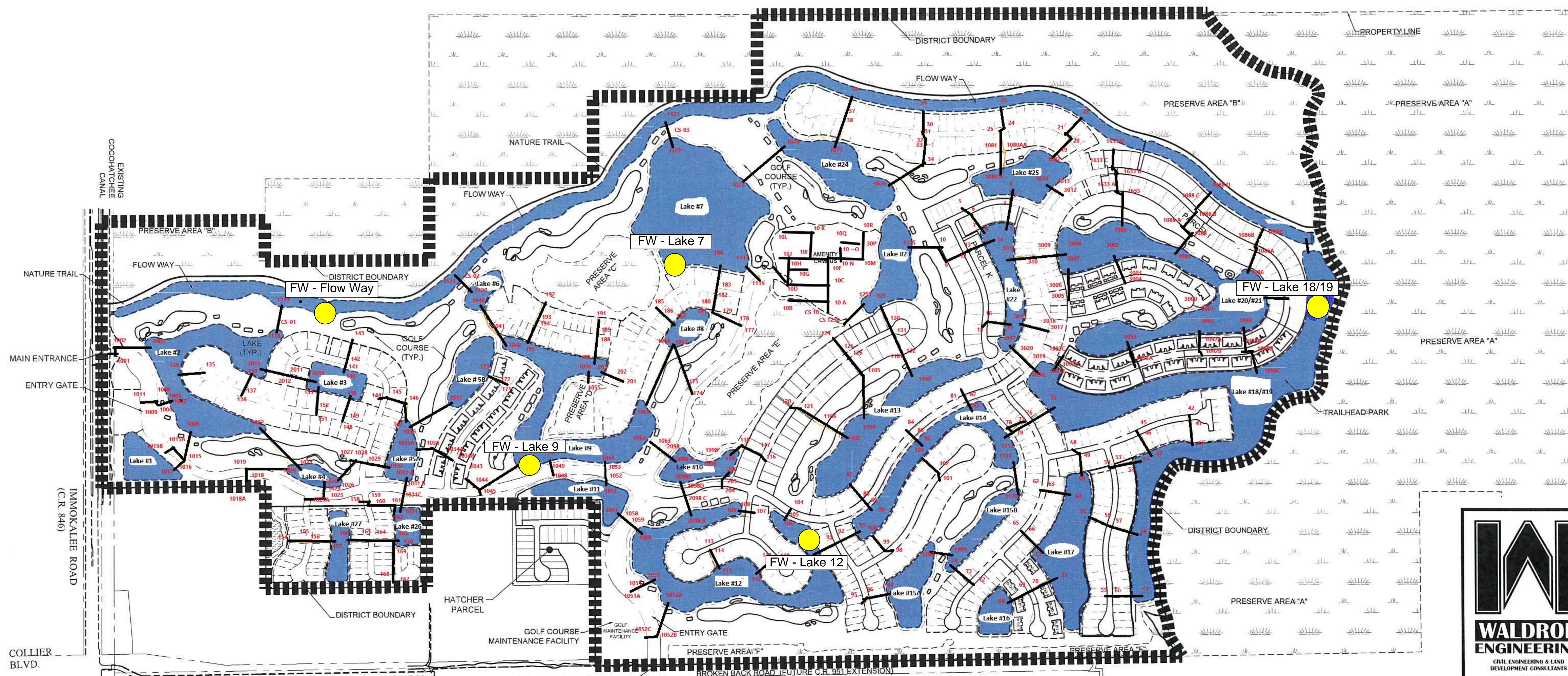
I - Reported value is between method detection limit and the practical quantitation limit

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

NM - Not Measured

Figure



WALDROP ENGINEERING

CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTANTS
 1103 MARBELLA PLAZA DRIVE
 TAMPA, FL 33619
 P: 813-443-8282 F: 813-443-8285
 EMAIL: info@waldropengineering.com

FLORIDA CERTIFICATE OF AUTHORIZATION #8826

PHASED DISTRICT SURFACE WATER MANAGEMENT FACILITIES EXHIBIT 7

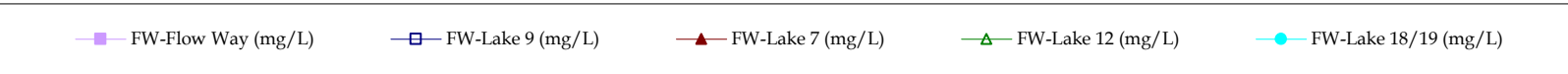
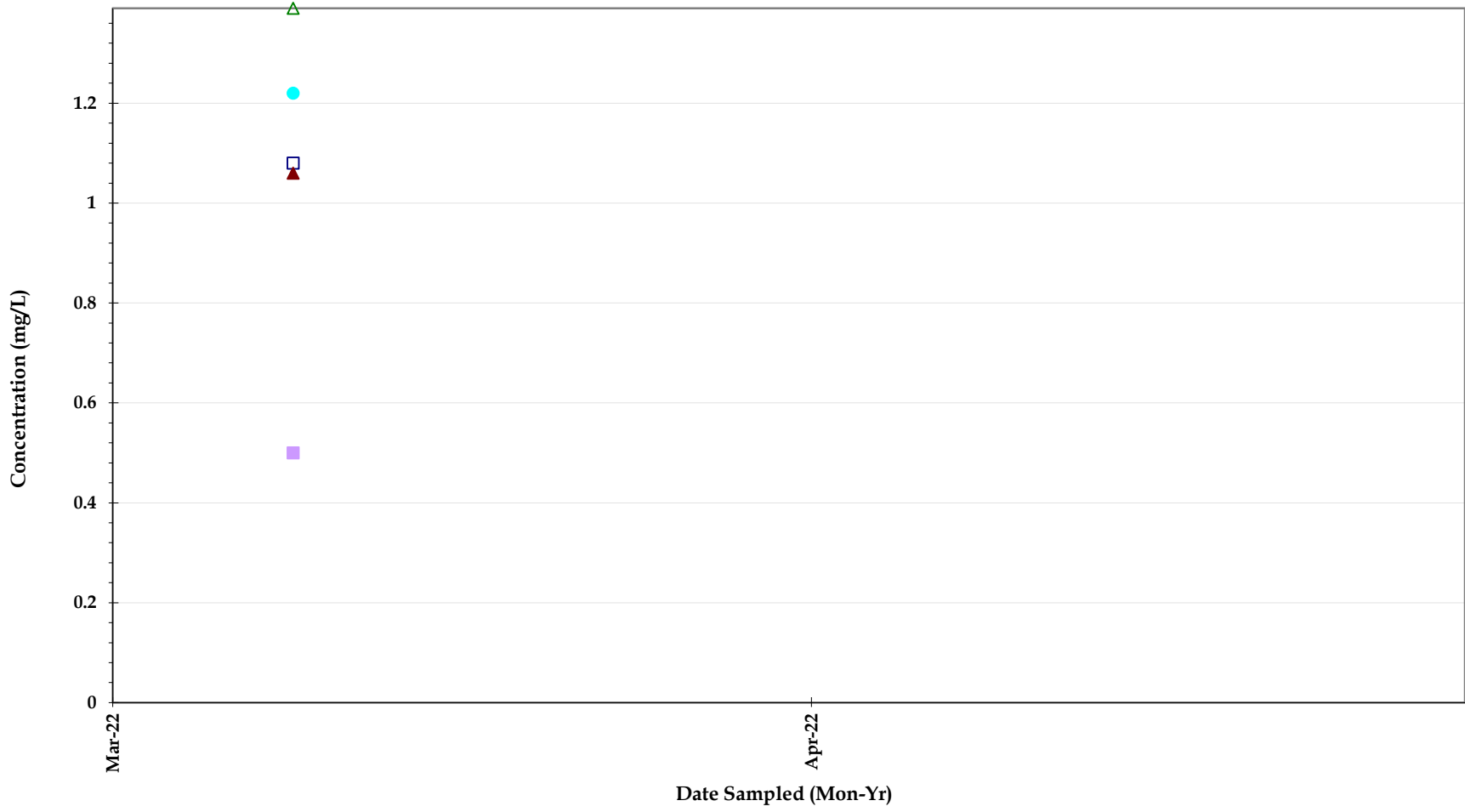
PREPARED FOR:

BOARD OF SUPERVISORS FLOW WAY CDD

FILE NAME: 276110707
 UPDATED: 4/16/2020

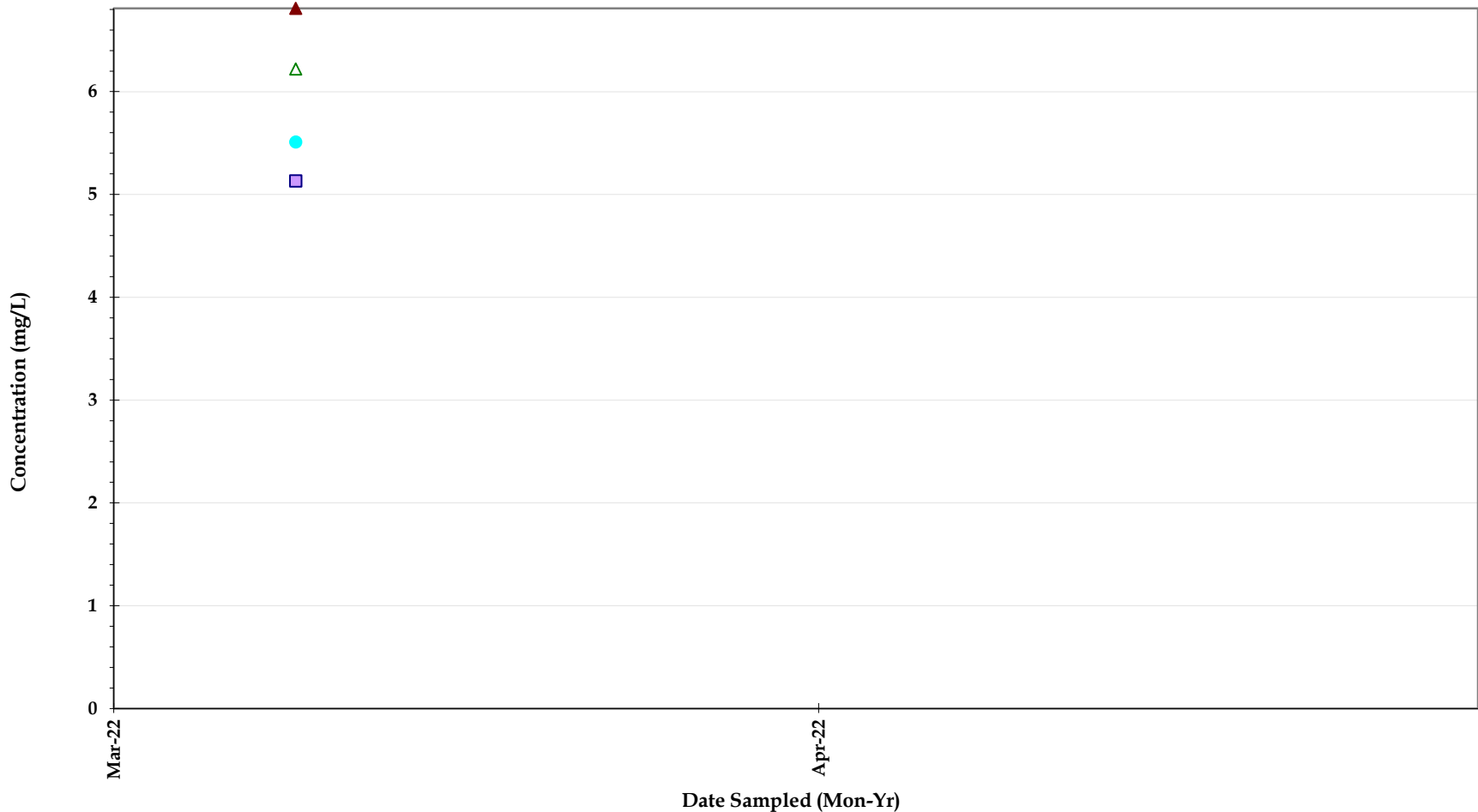
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 4/16/2020 11:52:31 PM

Trend Graphs



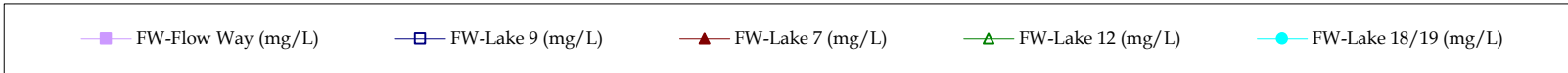
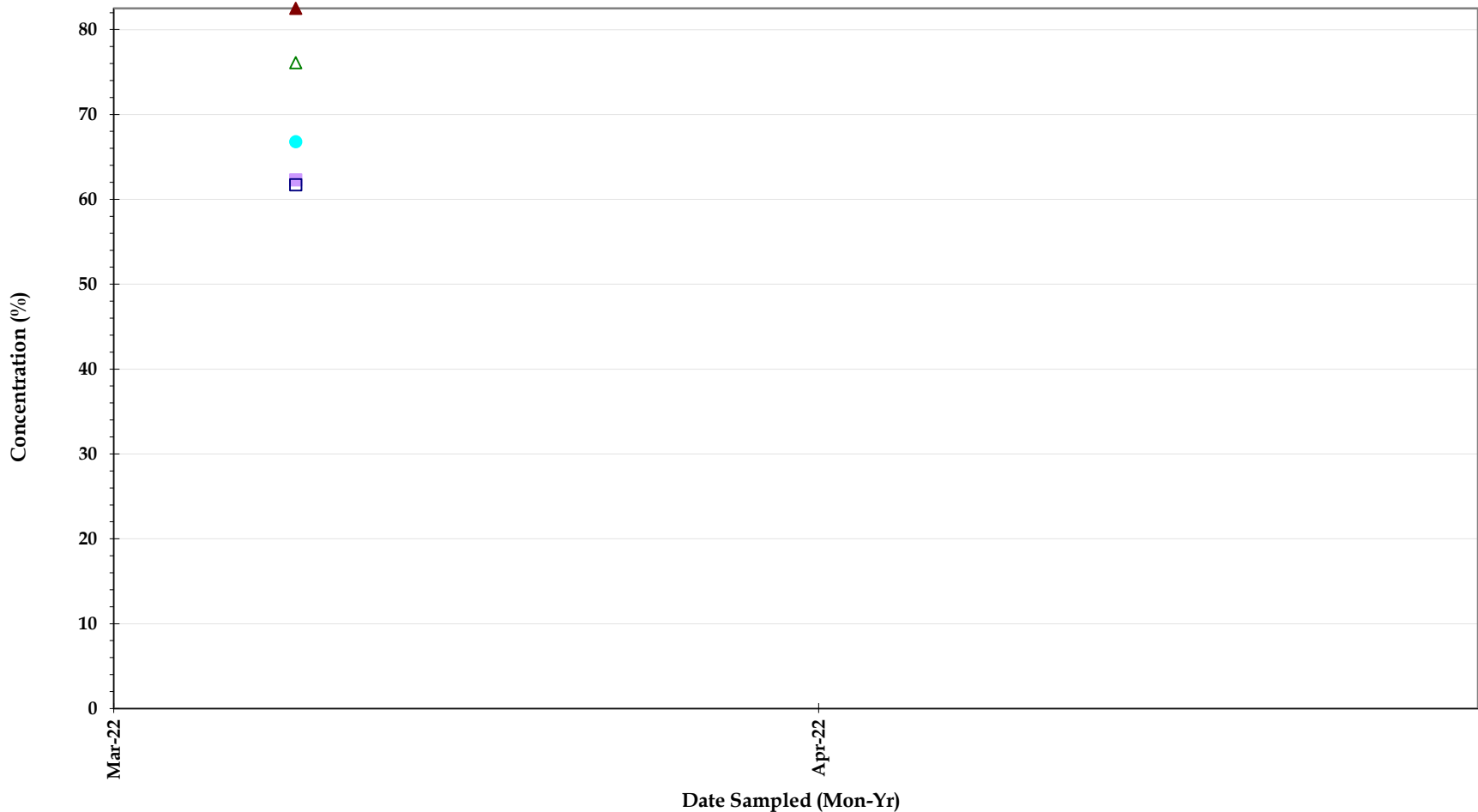
Biochemical Oxygen Demand

Flow Way
Water Quality Surface Water Sample results
MARCH 2022



Dissolved Oxygen (mg/L)

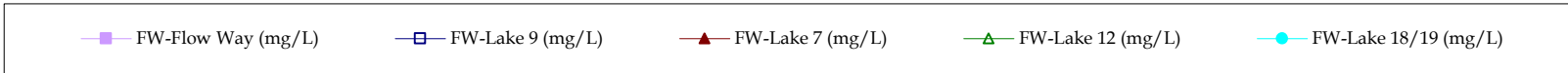
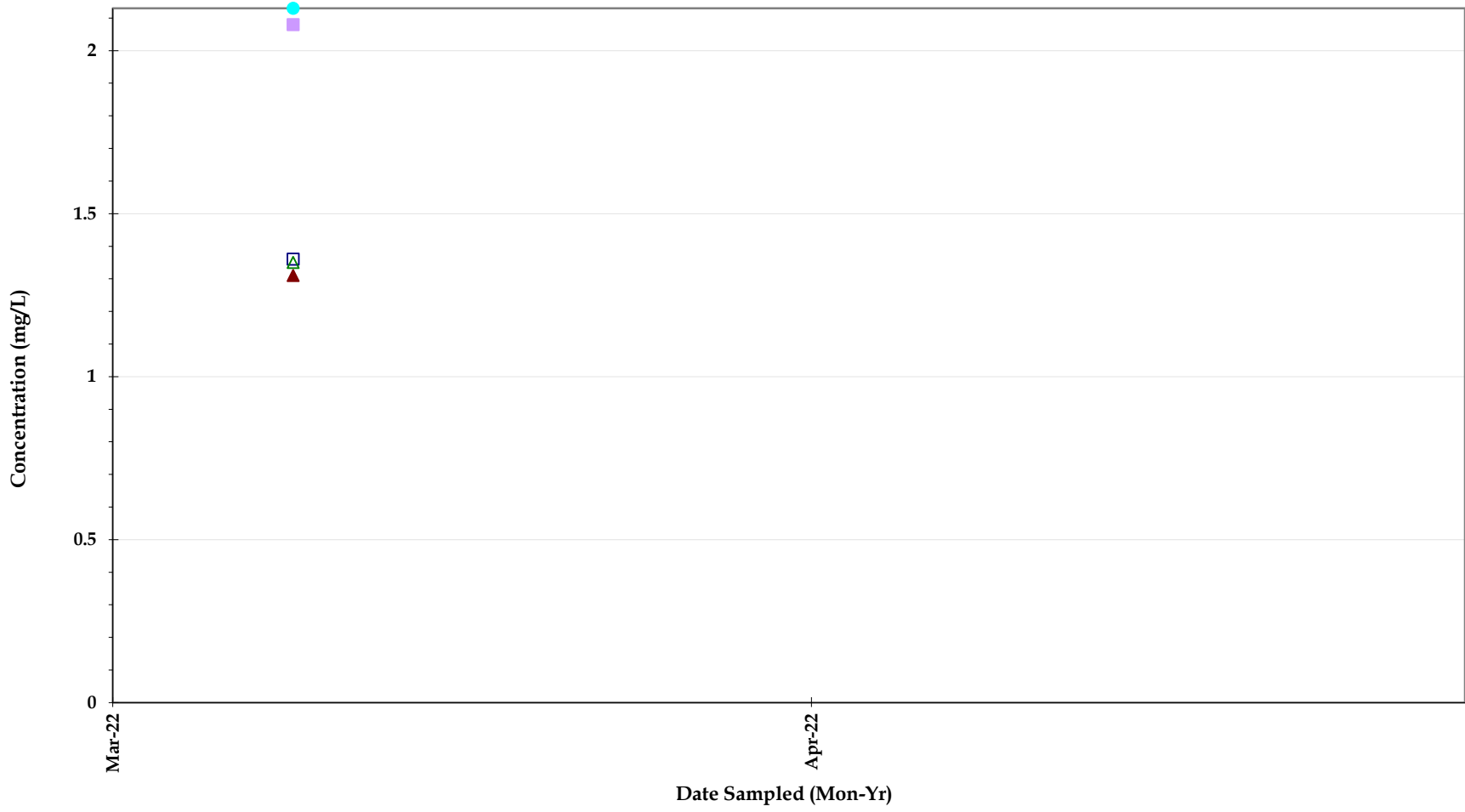
Flow Way
Water Quality Surface Water Sample results
MARCH 2022



Dissolved Oxygen (%)

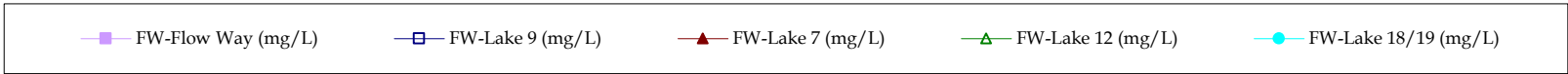
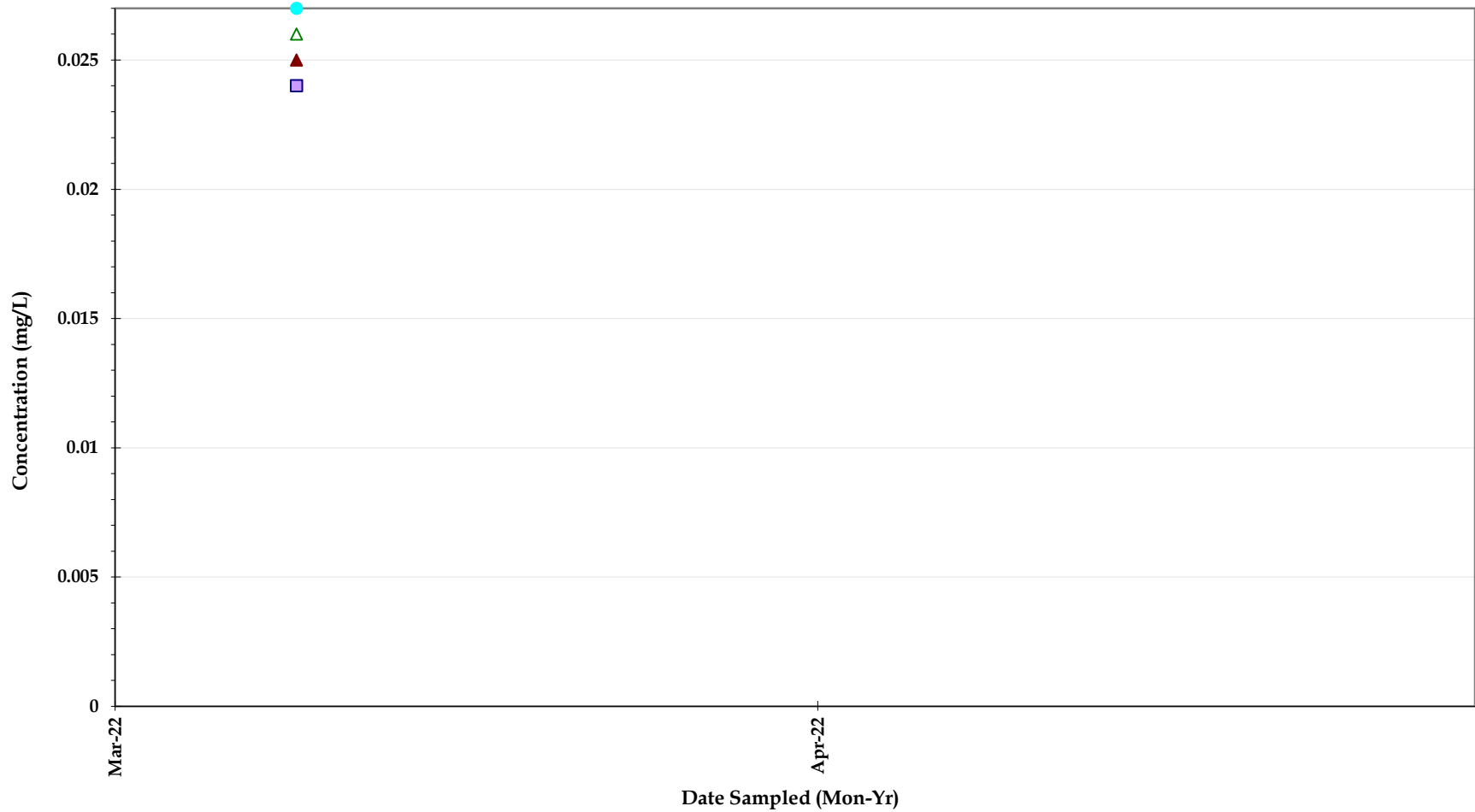


Flow Way
Water Quality Surface Water Sample results
MARCH 2022



Total Nitrogen

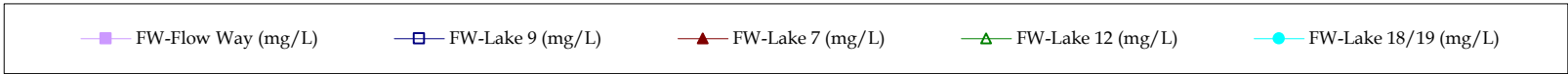
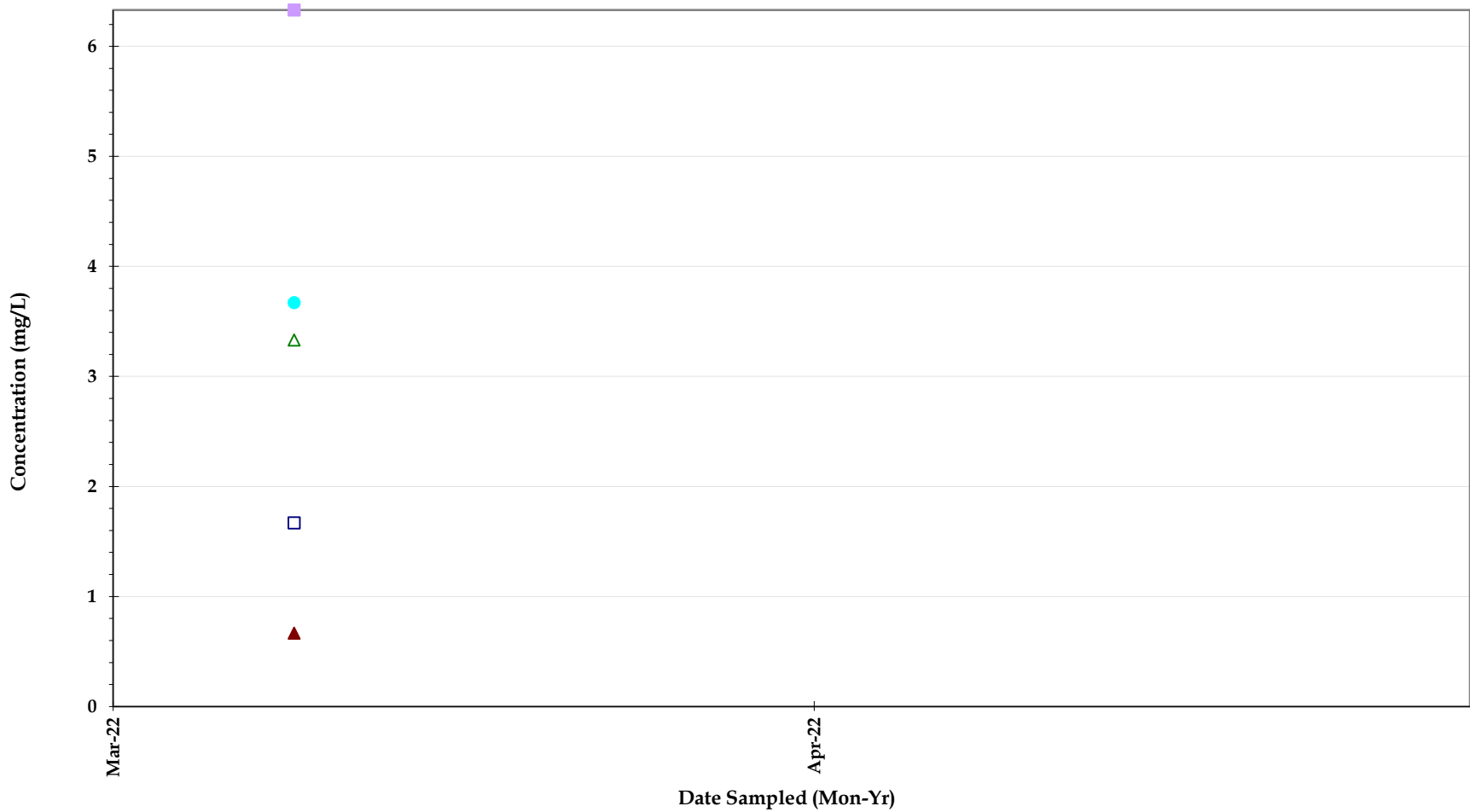
Flow Way
Water Quality Surface Water Sample results
MARCH 2022



Total Phosphorus



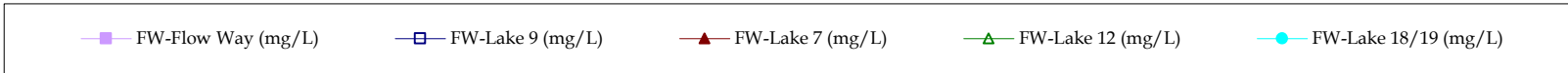
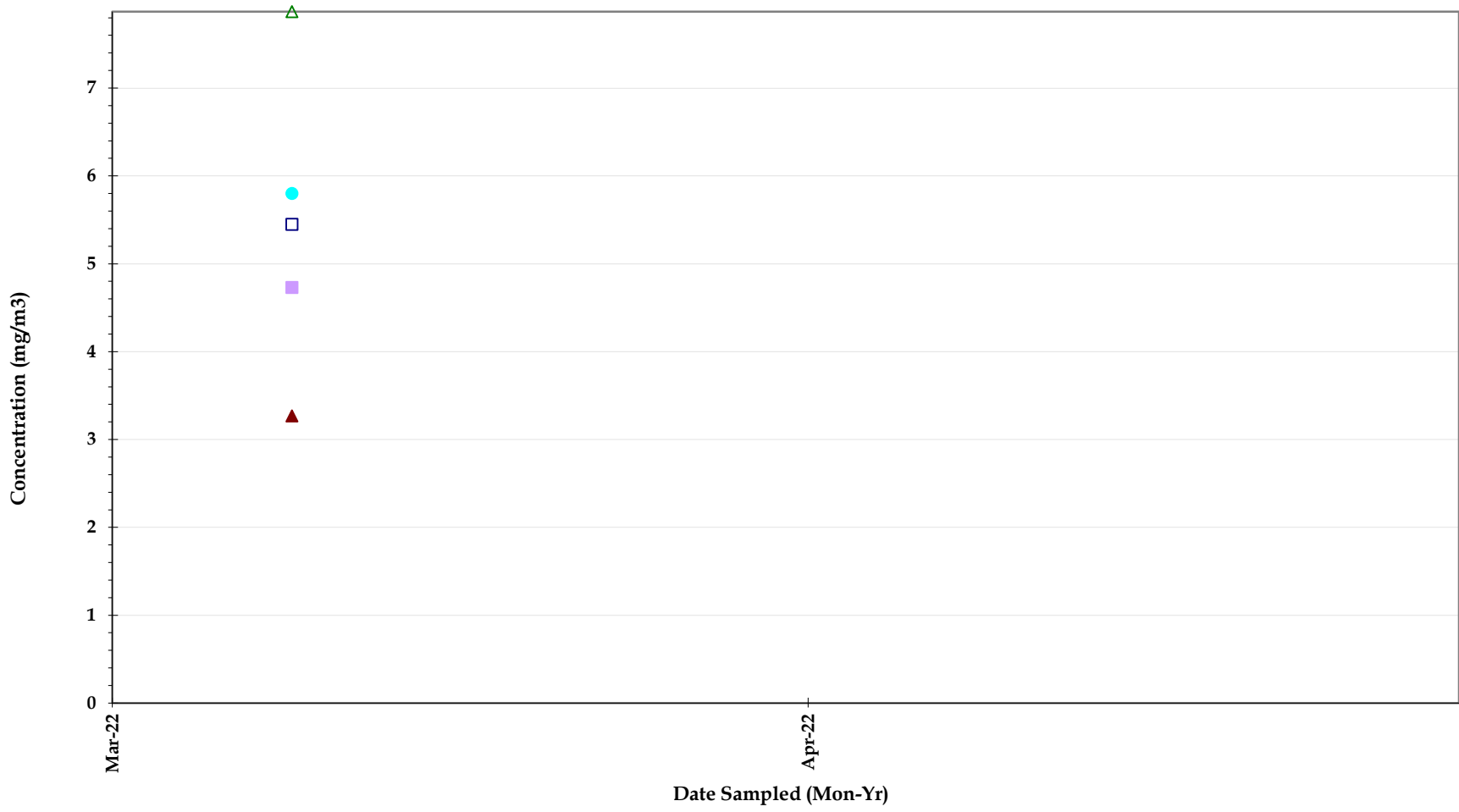
Flow Way
Water Quality Surface Water Sample results
MARCH 2022



Total Suspended Solids

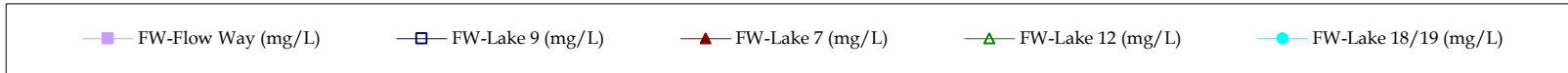
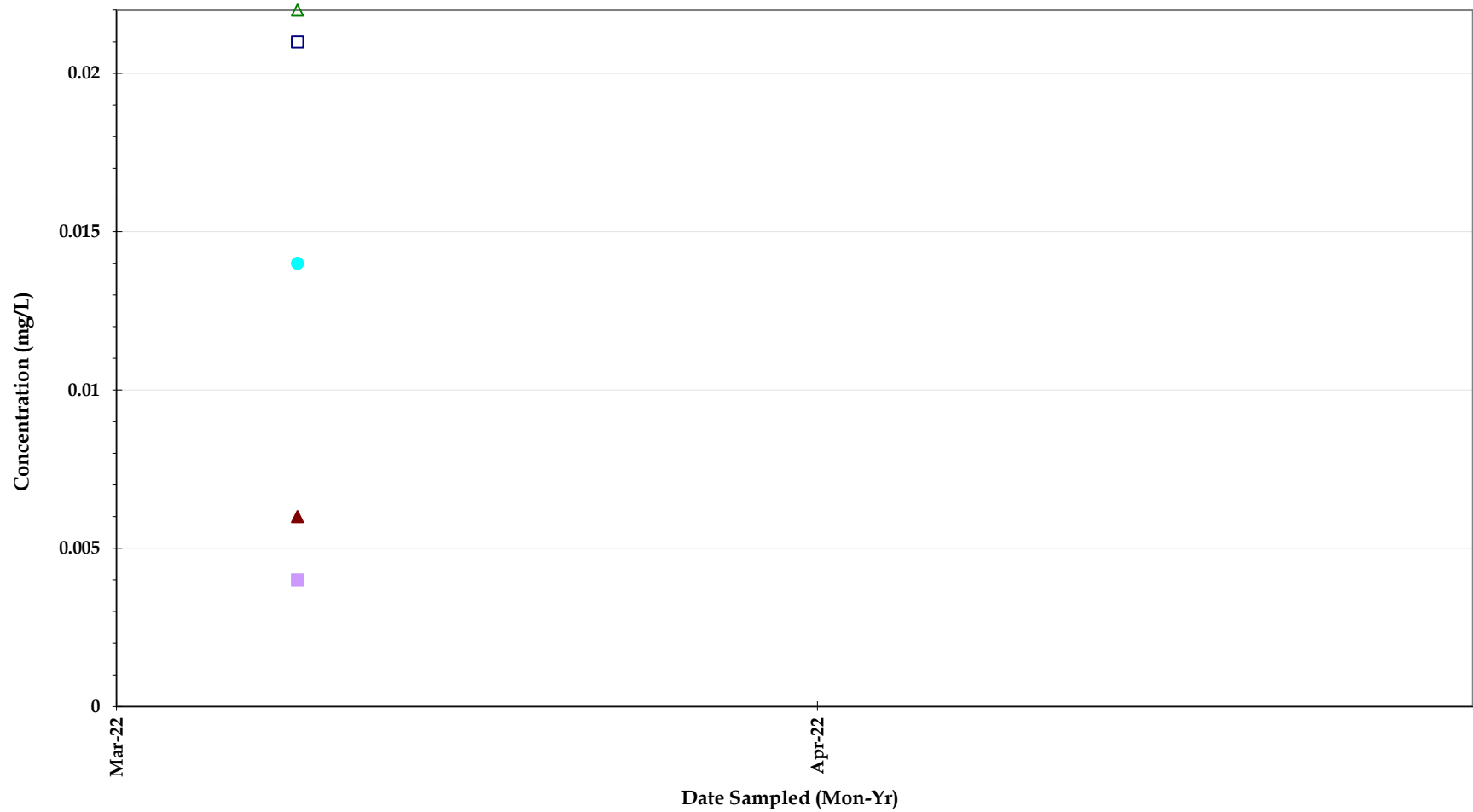


Flow Way
Water Quality Surface Water Sample results
MARCH 2022



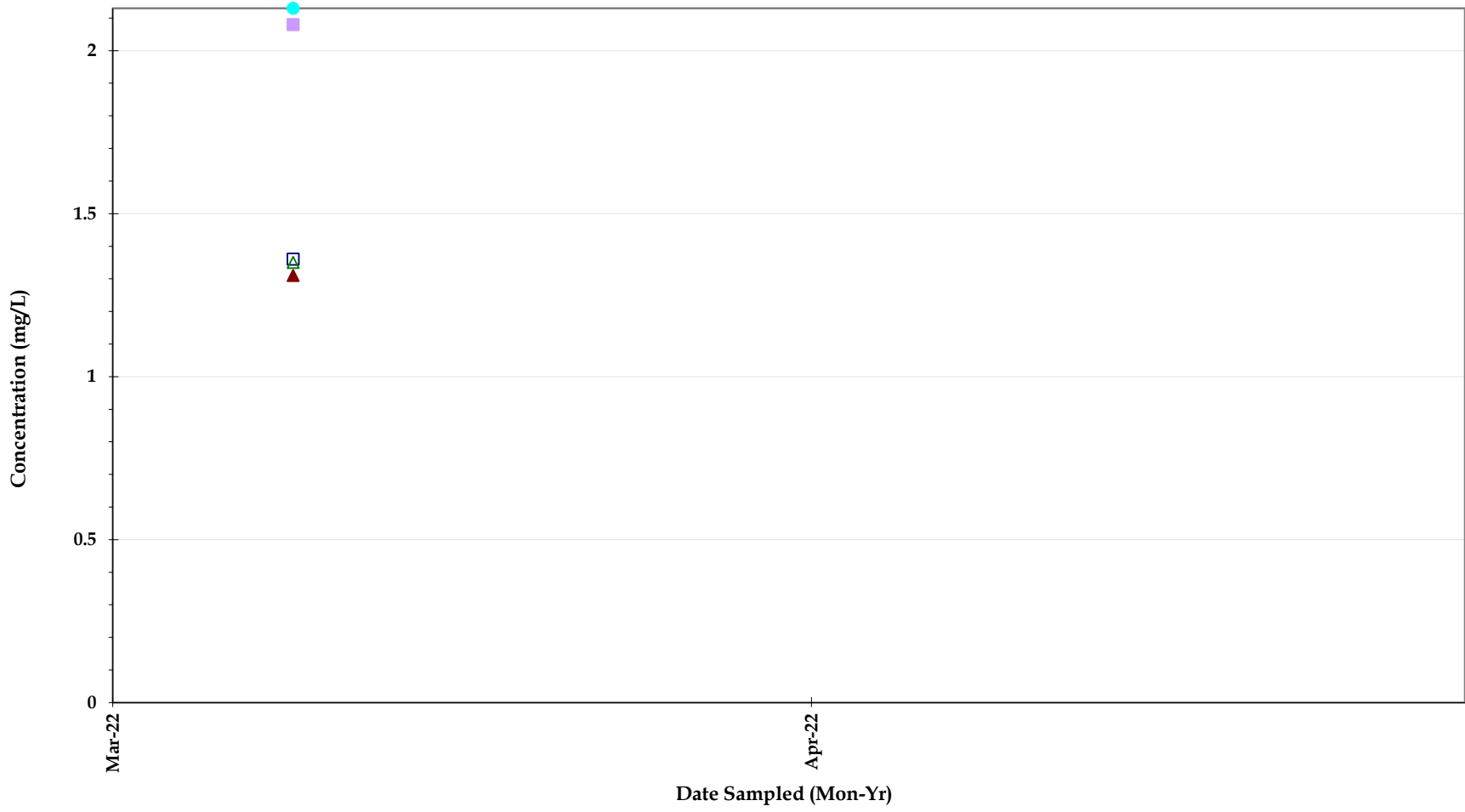
Chlorophyll *a*

Flow Way
Water Quality Surface Water Sample results
MARCH 2022



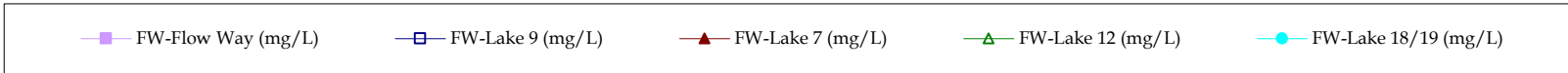
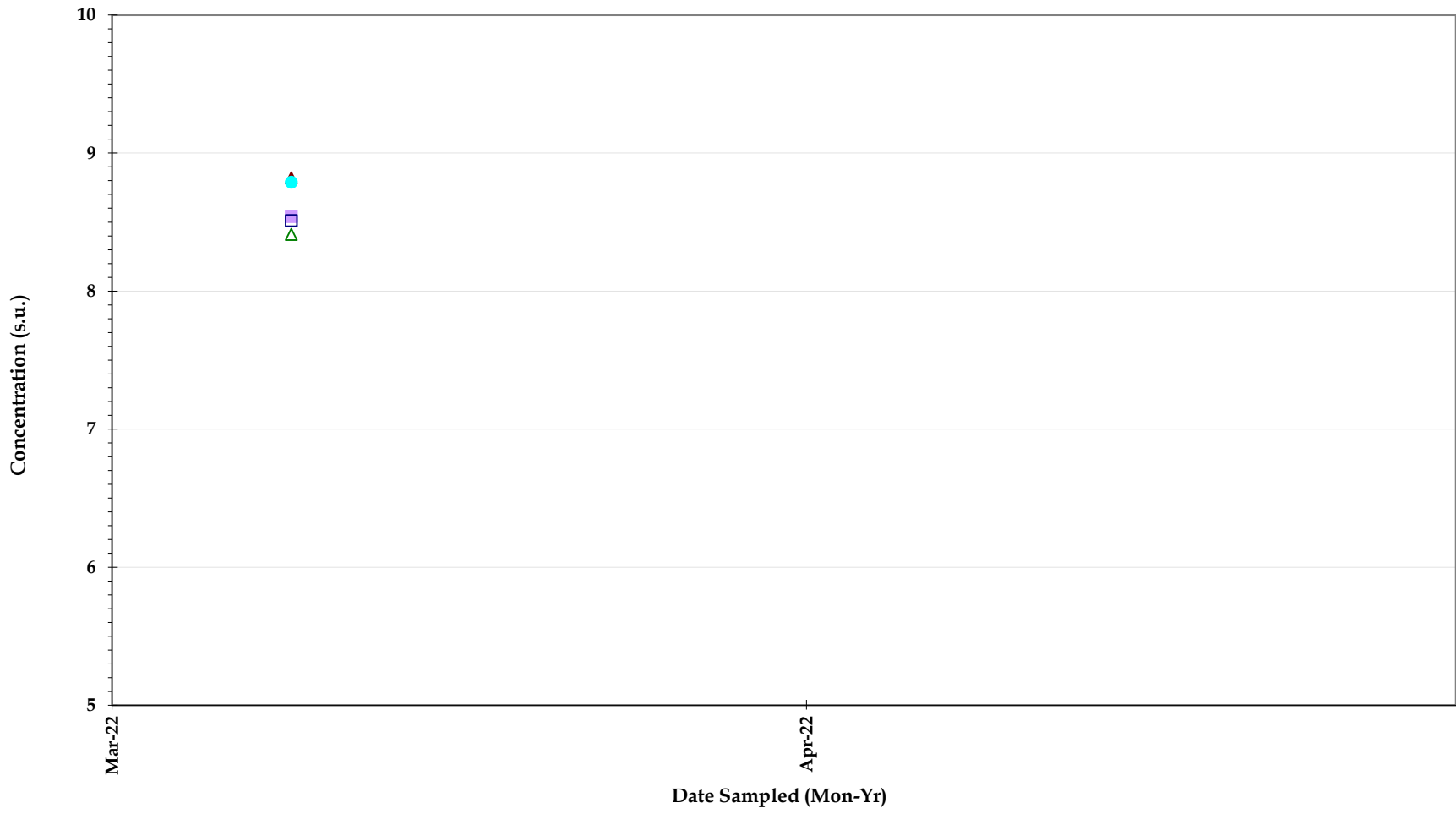
Orthophosphate

Flow Way
Water Quality Surface Water Sample results
MARCH 2022



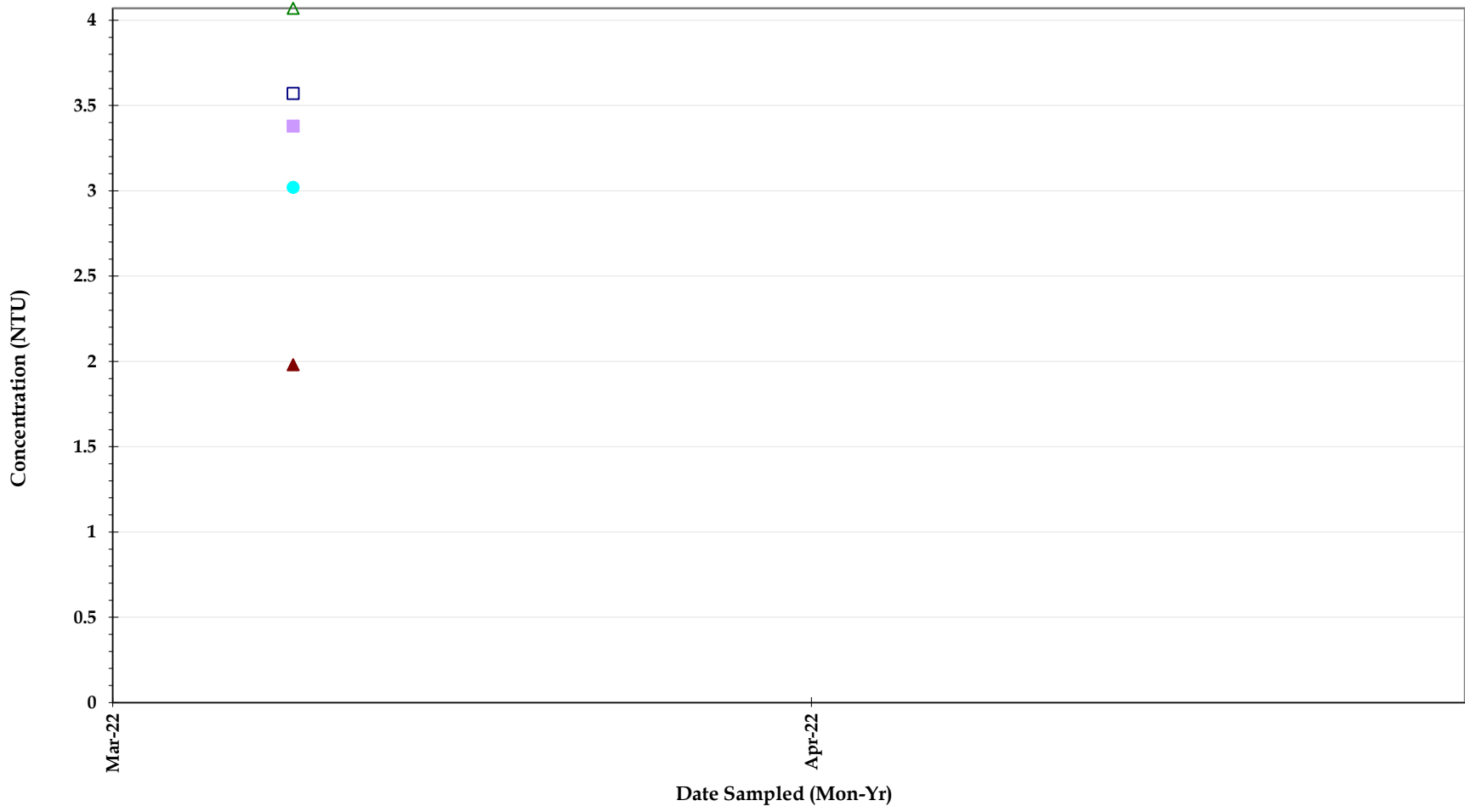
Total kjeldahl nitrogen (TKN)

Flow Way
Water Quality Surface Water Sample results
MARCH 2022



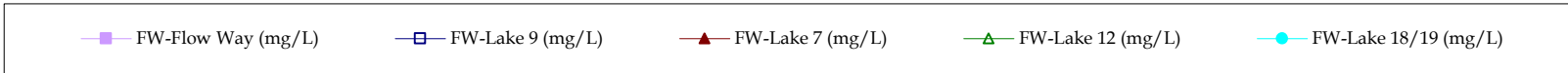
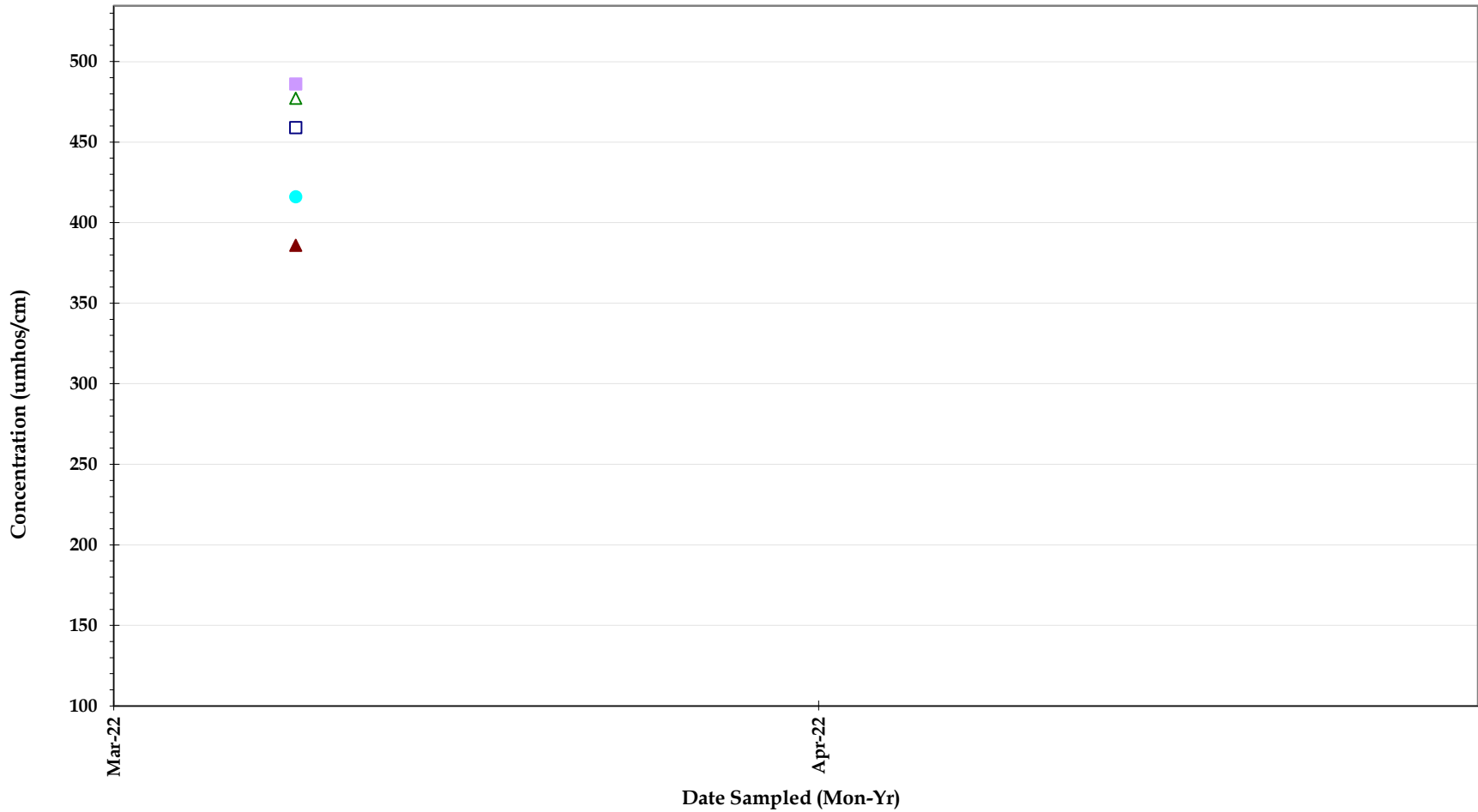
pH, Field

Flow Way
Water Quality Surface Water Sample results
MARCH 2022



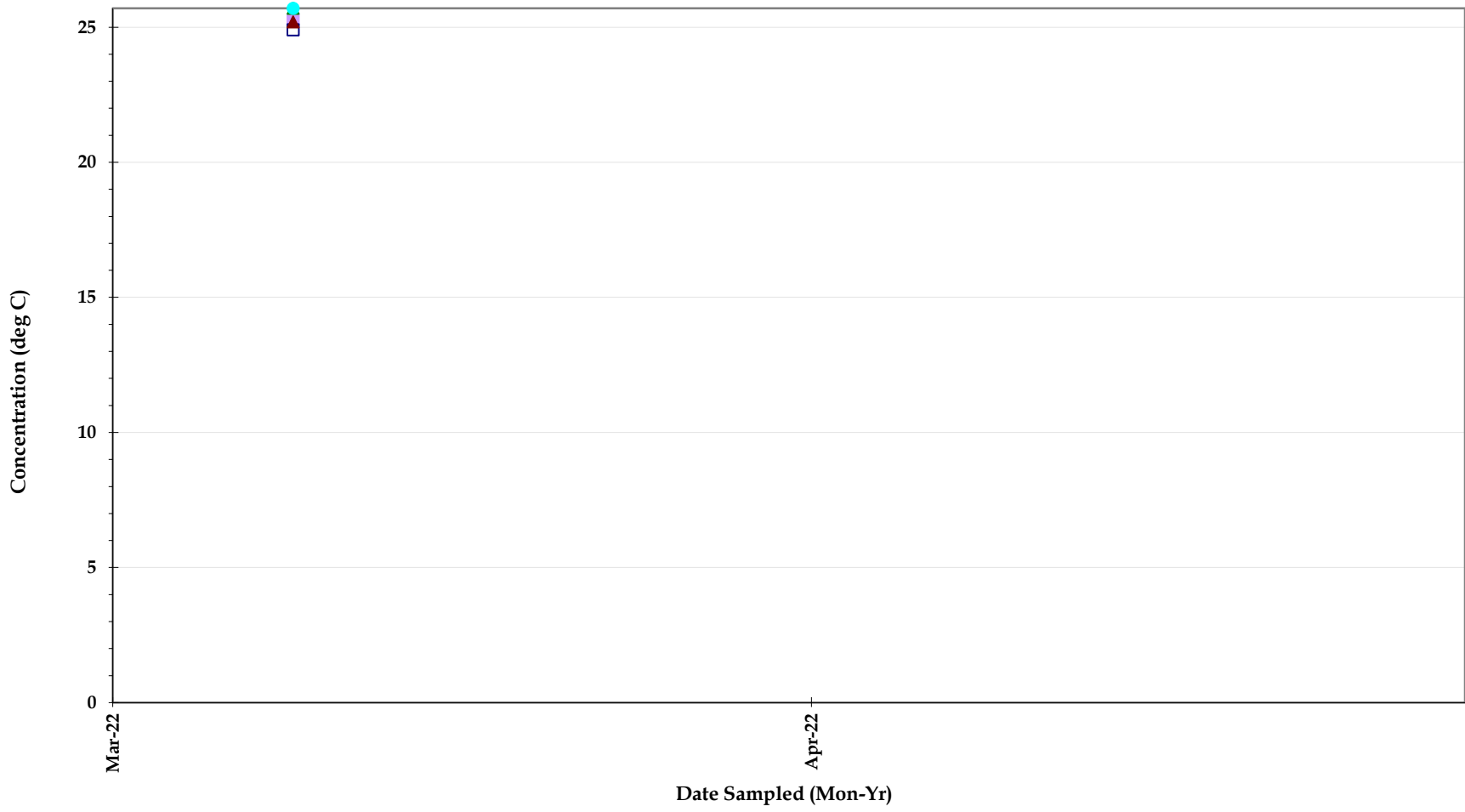
Turbidity

Flow Way
Water Quality Surface Water Sample results
MARCH 2022



Conductivity

Flow Way
Water Quality Surface Water Sample results
MARCH 2022



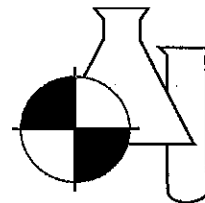
Temperature, sample

Flow Way
 Water Quality Surface Water Sample results
 MARCH 2022

Laboratory Analytical Report

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 22030621

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

Project Name : FLOW WAY CDD WQM

Date Received : 03/10/2022

Time Received : 1453

Submission Number: 22030621 Sample Date: 03/09/2022
Sample Number: 001 Sample Time: 0850
Sample Description: WQ Location #1 Sample Method: Grab

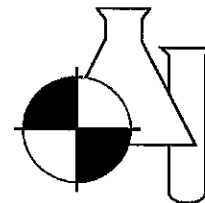
Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
AMMONIA NITROGEN	0.008 U	MG/L	0.008	0.032	350.1	03/14/2022 13:01	CW
TOTAL KJELDAHL NITROGEN	2.08	MG/L	0.05	0.20	351.2	03/14/2022 14:31	HR
ORTHO PHOSPHORUS AS P	0.004 I	MG/L	0.002	0.008	365.3	03/10/2022 17:24	KA
TOTAL PHOSPHORUS AS P	0.024 I	MG/L	0.008	0.032	365.3	03/16/2022 15:46	KA
CHLOROPHYLL A	4.73	MG/M3	0.25	1.00	445.0	03/11/2022 10:00	PP
TOTAL SUSPENDED SOLIDS	6.33	MG/L	0.570	2.280	SM2540D	03/11/2022 10:38	TG
BIOCHEMICAL OXYGEN DEMAND	1 U	MG/L	1	4	SM5210B	03/10/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAS EASY	03/11/2022 14:47	CW
TOTAL NITROGEN	2.08	MG/L	0.05	0.20	SYSTEAS+351	03/14/2022 14:31	HR/CW

Submission Number: 22030621 Sample Date: 03/09/2022
Sample Number: 002 Sample Time: 0905
Sample Description: WQ Location #2 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	03/14/2022 13:03	CW
TOTAL KJELDAHL NITROGEN	1.36	MG/L	0.05	0.20	351.2	03/14/2022 14:32	HR
ORTHO PHOSPHORUS AS P	0.021	MG/L	0.002	0.008	365.3	03/10/2022 17:25	KA
TOTAL PHOSPHORUS AS P	0.024 I	MG/L	0.008	0.032	365.3	03/16/2022 15:47	KA
CHLOROPHYLL A	5.45	MG/M3	0.25	1.00	445.0	03/11/2022 10:00	PP
TOTAL SUSPENDED SOLIDS	1.67 I	MG/L	0.570	2.280	SM2540D	03/11/2022 10:38	TG
BIOCHEMICAL OXYGEN DEMAND	1.08 I	MG/L	1	4	SM5210B	03/10/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAS EASY	03/11/2022 14:48	CW
TOTAL NITROGEN	1.36	MG/L	0.05	0.20	SYSTEAS+351	03/14/2022 14:32	HR/CW

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EnviroAnalytical Inc.



NELAC Certification #E84167

Submission Number: 22030621
Sample Number: 003
Sample Description: WQ Location #3

Sample Date: 03/09/2022
Sample Time: 0925
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	03/14/2022 13:04	CW
TOTAL KJELDAHL NITROGEN	1.31	MG/L	0.05	0.20	351.2	03/14/2022 14:33	HR
ORTHO PHOSPHORUS AS P	0.006 I	MG/L	0.002	0.008	365.3	03/10/2022 17:27	KA
TOTAL PHOSPHORUS AS P	0.025 I	MG/L	0.008	0.032	365.3	03/16/2022 15:48	KA
CHLOROPHYLL A	3.27	MG/M3	0.25	1.00	445.0	03/11/2022 10:00	PP
TOTAL SUSPENDED SOLIDS	0.667 I	MG/L	0.570	2.280	SM2540D	03/11/2022 10:38	TG
BIOCHEMICAL OXYGEN DEMAND	1.06 I	MG/L	1	4	SM5210B	03/10/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAS EASY	03/11/2022 14:49	CW
TOTAL NITROGEN	1.31	MG/L	0.05	0.20	SYSTEAS+351	03/14/2022 14:33	HR/CW

Submission Number: 22030621
Sample Number: 004
Sample Description: WQ Location #4

Sample Date: 03/09/2022
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	03/14/2022 13:06	CW
TOTAL KJELDAHL NITROGEN	1.35	MG/L	0.05	0.20	351.2	03/14/2022 14:35	HR
ORTHO PHOSPHORUS AS P	0.022	MG/L	0.002	0.008	365.3	03/10/2022 17:28	KA
TOTAL PHOSPHORUS AS P	0.026 I	MG/L	0.008	0.032	365.3	03/16/2022 15:49	KA
CHLOROPHYLL A	7.87	MG/M3	0.25	1.00	445.0	03/11/2022 10:00	PP
TOTAL SUSPENDED SOLIDS	3.33	MG/L	0.570	2.280	SM2540D	03/11/2022 10:38	TG
BIOCHEMICAL OXYGEN DEMAND	1.39 I	MG/L	1	4	SM5210B	03/10/2022 16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAS EASY	03/11/2022 14:49	CW
TOTAL NITROGEN	1.35	MG/L	0.05	0.20	SYSTEAS+351	03/14/2022 14:35	HR/CW

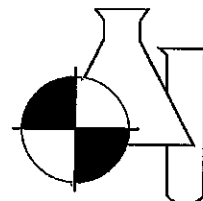
Submission Number: 22030621
Sample Number: 005
Sample Description: WQ Location #5

Sample Date: 03/09/2022
Sample Time: 1000
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	03/14/2022 13:08	CW
TOTAL KJELDAHL NITROGEN	2.13	MG/L	0.05	0.20	351.2	03/14/2022 14:36	HR
ORTHO PHOSPHORUS AS P	0.014	MG/L	0.002	0.008	365.3	03/10/2022 17:29	KA
TOTAL PHOSPHORUS AS P	0.027 I	MG/L	0.008	0.032	365.3	03/16/2022 15:50	KA
CHLOROPHYLL A	5.80	MG/M3	0.25	1.00	445.0	03/11/2022 10:00	PP

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification #E84167

TOTAL SUSPENDED SOLIDS	3.67	MG/L	0.570	2.280	SM2540D	03/11/2022	10:38	TG
BIOCHEMICAL OXYGEN DEMAND	1.22 I	MG/L	1	4	SM5210B	03/10/2022	16:00	LD/LD
NITRATE+NITRITE AS N	0.006 U	MG/L	0.006	0.024	SYSTEAEASY	03/11/2022	14:50	CW
TOTAL NITROGEN	2.13	MG/L	0.05	0.20	SYSTEAE+351	03/14/2022	14:38	HR/CW

03/21/2022

Dale D. Dixon / Laboratory Director

Date

Tülay Tarrisever - 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.
 I = 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 03/10/2022 at 0828.

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) & Connor Haydon (Connor.Haydon@ghd.com)
 2020 PO# 34043123

Kit Shipped to client via UPS Standard in 1 large cooler

Chain of Custody Form: Flow Way CDD WQM
 Project Number: 11225022- 03

Profile: 840, QC Report

Laboratory Submission #: **22030621**

Station ID	Sample Type ¹	Sample Matrix ²	Parameters, Preservative ⁴ , Container Type ³ / Total # of Containers = 25					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 0828 3/10/22	
			1.1mL 1:4 H ₂ SO ₄ pH<2 <input checked="" type="checkbox"/> Lot # 21-21	Plain	Plain	Plain	Plain	
			1 x 1/2 Pint Plastic	1 x 1 Quart Plastic	1 x 1/2 Pint Plastic	1 x 1 Quart Plastic	1 x 500mL Opaque Plastic	
WQ Location #1	Grab	SW	Date/Time: 3/9/22	0850				1
WQ Location #2	Grab	SW	Date/Time: ↓	0905				2
WQ Location #3	Grab	SW	Date/Time: ↓	0925				3
WQ Location #4	Grab	SW	Date/Time: ↓	0945				4
WQ Location #5	Grab	SW	Date/Time: ↓	1000				5

- Notes:**
- "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 - "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 (SLDGC).
 - "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 - 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).
 - 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, H₂SO₄, and HNO₃ do not have expiration dates per the manufacturer. Micro bottles are pre-preserved at manufacturing stage.
 - 2 Quart plastic bottles are not certified.
- Instructions:**
- Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 - 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.
 - All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 - The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.
 - Sample kit has been created by BEA using new, certified bottles unless otherwise noted.

Laboratory Sample Acceptability:
 pH < 2: BEA Temperature: 0-2°C
 BEAS: 4.3°C

1	Collector & Affiliation: (Print & Sign) <i>Connor Haydon GHD</i>	Date: 3/9/22	Time: 1239	Received By & Affiliation: (Print & Sign) <i>Brooke Kraternick BEAS</i>	Date: 3/9/22	Time: 1239
2	Relinquished By & Affiliation: (Print & Sign) <i>Brooke Kraternick</i>	Date: 3/10/22	Time: 11:20	Received By & Affiliation: (Print & Sign) <i>Chris Spitzer BEA</i>	Date: 3/10/22	Time: 11:20
3	Relinquished By & Affiliation: (Print & Sign) <i>Chris Spitzer BEA</i>	Date: 3/10/22	Time: 1453	Received By & Affiliation: (Print & Sign) <i>Kara McBaner BEA</i>	Date: 3/10/22	Time: 1453
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:

4 36 4

Surface Water Field Sheets

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	WA Location #1
LOCATION:	downstream of bridge
DATE/TIME:	3/9/22 850
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)	<input type="radio"/> Large Lake (>10HA) (collect samples at selected location point)
	<input type="radio"/> Small Stream (collect samples in representative area)	<input type="radio"/> Large River (collect samples in representative area)

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements) (Circle One if applicable)	N/A	(feet)	Sample Depth:	1.5	(feet)
STREAM FLOW:	No Flow	<input checked="" type="radio"/> Flow within Banks	Flood Conditions		
WATER LEVEL:	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 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)
850	1.5	8.54	5.13	62.3	25.3	486	3.32
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: N/A
 Samples immediately placed on ice? Yes No

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

PERSONNEL ON SITE: Connor Hayden, Andrew Wapatt, Jessie Walsh

REMARKS: sample collected downstream of bridge. mostly clear, flowing water

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>WQ Location 2</u>
LOCATION:	<u>down NW corner of Lake</u>
DATE/TIME:	<u>3/9/22 905</u>
ALL TIMES ARE:	<input checked="" type="radio"/> ETZ or <input type="radio"/> CTZ (circle one)

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

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements) (Circle One if applicable)	<u>N/A</u> (feet)	Sample Depth:	<u>1.5</u> (feet)
STREAM FLOW:	No Flow	<input checked="" type="radio"/> Flow within Banks	Flood Conditions
WATER LEVEL:	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)
<u>905</u>	<u>1.5</u>	<u>8.51</u>	<u>5.13</u>	<u>61.7</u>	<u>24.9</u>	<u>459</u>	<u>3.57</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: N/A
 Samples immediately placed on ice? Yes No

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

PERSONNEL ON SITE: Connor Hayden, Andrew Wyatt, Jessie Walsh

REMARKS: Sample collected @ SE corner of Lake 9. low water level and very marshy.

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	NO Location # 3
LOCATION:	eastern corner of lake 7
DATE/TIME:	3/1/22 925
ALL TIMES ARE:	<input checked="" type="radio"/> ETZ or <input type="radio"/> CTZ (circle one)

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

Water Characteristics

TOTAL WATER DEPTH: (Average of 2 measurements) (Circle One if applicable)	NM	(feet)	Sample Depth:	1.5	(feet)
STREAM FLOW:	No Flow	<input checked="" type="radio"/> Flow within Banks	Flood Conditions		
WATER LEVEL:	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 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)
925	1.5	8.82	6.81	82.5	25.2	386	1.98
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: Connor Hayden, Andrew Wyatt, Jessie Wain

REMARKS: Sample collected from east bank from shore low-ish water level

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	WQ Location #41
LOCATION:	Northwestern bank
DATE/TIME:	3/9/22 945
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)	<input type="radio"/> Large Lake (>10HA) (collect samples at selected location point)
	<input type="radio"/> Small Stream (collect samples in representative area)	<input type="radio"/> 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)	<input checked="" type="radio"/> No Flow	<input type="radio"/> Flow within Banks	<input type="radio"/> Flood Conditions
WATER LEVEL: (Circle One)	<input type="radio"/> Low	<input checked="" type="radio"/> Normal	<input type="radio"/> High
WATER SAMPLE COLLECTION DEVICE (Circle One)	<input type="radio"/> Van Dorn	<input checked="" type="radio"/> Direct Grab with Sample Bottle	<input type="radio"/> Dipper <input type="radio"/> Other _____

Field Measurements		Field Measurements Read By: (initials)						
Time (24 hr.)	Surface Depth Collected (feet)	Meter ID#	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
945	1.5		8.41	6.22	76.1	25.7	477.2	4.07
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: Jessie Walsh, Connor Haydon,
Andrew Wyatt

REMARKS: Sample collected from west bank of stream,
slightly low water level

SURFACE WATER FIELD SHEET
Station Information

STATION ID:	<u>W0 Location #5</u>
LOCATION:	<u>Western bank</u>
DATE/TIME:	<u>3/9/22 1000</u>
ALL TIMES ARE:	<input checked="" type="radio"/> ETZ or <input type="radio"/> CTZ (circle one)

WATERBODY TYPE: (Circle One)	<input type="radio"/> Small Lake (>4 and <10HA) (collect samples in middle of open water)	<input type="radio"/> Large Lake (>10HA) (collect samples at selected location point)
	<input checked="" type="radio"/> Small Stream (collect samples in representative area)	<input type="radio"/> 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)	<input type="radio"/> No Flow	<input checked="" type="radio"/> Flow within Banks	<input type="radio"/> Flood Conditions
WATER LEVEL: (Circle One)	<input type="radio"/> Low	<input checked="" type="radio"/> Normal	<input type="radio"/> High
WATER SAMPLE COLLECTION DEVICE (Circle One)	<input type="radio"/> Van Dorn	<input checked="" type="radio"/> Direct Grab with Sample Bottle	<input type="radio"/> Dipper <input type="radio"/> Other _____

Field Measurements		Field Measurements Read By: (initials)						
Time (24 hr.)	Surface Depth Collected (feet)	Meter ID#	pH* (SU)	D.O.(mg./L)	D.O. (%)	Temp (°C)	Conductivity (µmhos/cm)	Turbidity (NTU)
<u>1000</u>	<u>1.5</u>		<u>8.79</u>	<u>5.51</u>	<u>66.8</u>	<u>25.7</u>	<u>416.1</u>	<u>3.02</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: Jessie Watson, Connor Haydon, Andrew Wyatt

REMARKS: Sample collected from western bank, slightly low flow