

Chemical Analysis Report

NE-DIST-2023-10-13-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Algae Bloom Response NEROC-as needed**
Request ID: **RQ-2023-07-24-49**
Customer: **NE-DIST**
Project ID: **BLOOM-RESP**

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Certified by: Colin Wright, Program Administrator

Date Certified: 23-OCT-2023 12:13



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Doctors Lake - Doctors Lake Park

Collection Date/Time: 10/12/2023 12:20

Field ID: NEHAB0113

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444988	DEP SOP: NU-094-1	Color (true)	82		PCU	P436497	
2444990	EPA 350.1 Rev. 2.0	Ammonia-N	0.13		mg N/L	P436763	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P436520	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P436631	
	EPA 365.1 Rev. 2.0	Total-P	0.063		mg P/L	P436515	
2444992	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.023		mg P/L	P436490	
2444994	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P436523	
		Cylindrospermopsin	0.10	U	ug/L	P436451	
		Desmethyl microcystin LR	0.25	U	ug/L	P436451	
		Microcystin HiLR	0.25	U	ug/L	P436451	
		Microcystin HtyR	0.25	U	ug/L	P436451	
		Microcystin LA	0.10	U	ug/L	P436451	
		Microcystin LF	0.10	U	ug/L	P436451	
		Microcystin LR	0.25	U	ug/L	P436451	
		Microcystin LW	0.25	U	ug/L	P436451	
		Microcystin LY	0.10	U	ug/L	P436451	
		Microcystin RR	0.10	U	ug/L	P436451	
		Microcystin WR	0.50	U	ug/L	P436451	
		Neosaxitoxin	0.50	U	ug/L	P436523	
		Microcystin YR	0.25	U	ug/L	P436451	
		Saxitoxin	0.50	U	ug/L	P436523	
		Nodularin-R	0.10	U	ug/L	P436451	

Sample Location: Georges Lake - Boat Ramp

Collection Date/Time: 10/12/2023 10:55

Field ID: NEHAB0099

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444989	DEP SOP: NU-094-1	Color (true)	54		PCU	P436497	
2444991	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P436763	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.64		mg N/L	P436520	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P436631	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P436515	
2444993	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.013		mg P/L	P436490	
2444995	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P436523	
		Cylindrospermopsin	0.10	U	ug/L	P436451	
		Desmethyl microcystin LR	0.25	U	ug/L	P436451	
		Microcystin HiLR	0.25	U	ug/L	P436451	
		Microcystin HtyR	0.25	U	ug/L	P436451	
		Microcystin LA	0.10	U	ug/L	P436451	
		Microcystin LF	0.10	U	ug/L	P436451	
		Microcystin LR	0.25	U	ug/L	P436451	
		Microcystin LW	0.25	U	ug/L	P436451	
		Microcystin LY	0.10	U	ug/L	P436451	
		Microcystin RR	0.10	U	ug/L	P436451	
		Microcystin WR	0.50	U	ug/L	P436451	
		Neosaxitoxin	0.50	U	ug/L	P436523	
		Microcystin YR	0.25	U	ug/L	P436451	
		Saxitoxin	0.50	U	ug/L	P436523	
		Nodularin-R	0.10	U	ug/L	P436451	

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P436497

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436763

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436520

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436631

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436515

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436490

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8321B
Batch ID: P436451

Component	Result	Code	Units
Cylindrospermopsin	0.10	U	ug/L
Desmethyl microcystin LR	0.25	U	ug/L
Microcystin H1LR	0.25	U	ug/L
Microcystin HtyR	0.25	U	ug/L
Microcystin LA	0.10	U	ug/L
Microcystin LF	0.10	U	ug/L
Microcystin LR	0.25	U	ug/L
Microcystin LW	0.25	U	ug/L
Microcystin LY	0.10	U	ug/L
Microcystin RR	0.10	U	ug/L
Microcystin WR	0.50	U	ug/L
Microcystin YR	0.25	U	ug/L
Nodularin-R	0.10	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P436523

Component	Result	Code	Units
Anatoxin-a	0.25	U	ug/L
Neosaxitoxin	0.50	U	ug/L
Saxitoxin	0.50	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P436497

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436763

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	100		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436520

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	102		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436631

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436515

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436490

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	101		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P436451

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	108		P	40 - 160
Desmethyl microcystin LR	111		P	40 - 160
Microcystin H1R	111		P	40 - 160
Microcystin HtyR	121		P	40 - 160
Microcystin LA	116		P	40 - 160
Microcystin LF	139		P	40 - 160
Microcystin LR	122		P	40 - 160
Microcystin LW	141		P	40 - 160
Microcystin LY	135		P	40 - 160
Microcystin RR	121		P	40 - 160
Microcystin WR	93.9		P	40 - 160
Microcystin YR	116		P	40 - 160
Nodularin-R	112		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P436523

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	102		P	40 - 150
Neosaxitoxin	82.7		P	40 - 150
Saxitoxin	85.3		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444968	Ammonia-N	99.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436520

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444969	Kjeldahl Nitrogen	93.4	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436631

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444879	NO2NO3-N	94.8	93.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436515

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444890	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436490

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444970	O-Phosphate-P	96.1	95.1	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P436451

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444994	Cylindrospermopsin	82.2	85.0	P/P	40 - 160
2444994	Desmethyl microcystin LR	114	121	P/P	40 - 160
2444994	Microcystin HiLR	115	124	P/P	40 - 160
2444994	Microcystin HtyR	114	115	P/P	40 - 160
2444994	Microcystin LA	110	109	P/P	40 - 160
2444994	Microcystin LF	132	129	P/P	40 - 160
2444994	Microcystin LR	132	135	P/P	40 - 160
2444994	Microcystin LW	114	124	P/P	40 - 160
2444994	Microcystin LY	135	126	P/P	40 - 160
2444994	Microcystin RR	102	99.0	P/P	40 - 160
2444994	Microcystin WR	111	111	P/P	40 - 160
2444994	Microcystin YR	122	133	P/P	40 - 160
2444994	Nodularin-R	108	103	P/P	40 - 160

Reference Method: EPA 8321B
Batch ID: P436523

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444994	Anatoxin-a	94.5	101	P/P	40 - 150
2444994	Neosaxitoxin	59.5	63.4	P/P	40 - 150
2444994	Saxitoxin	78.2	81.6	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P436497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444966	Color (true)	0.539	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444968	Ammonia-N	0.531	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436520

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444969	Kjeldahl Nitrogen	7.34	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436631

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444879	NO2NO3-N	1.53	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436515

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444890	Total-P	0.0660	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436490

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444970	O-Phosphate-P	1.05	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P436451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444994	Cylindrospermopsin	3.39	Spike	P	0 - 30
2444994	Desmethyl microcystin LR	5.63	Spike	P	0 - 30
2444994	Microcystin HtIR	7.49	Spike	P	0 - 30
2444994	Microcystin HtyR	0.869	Spike	P	0 - 30
2444994	Microcystin LA	0.252	Spike	P	0 - 30
2444994	Microcystin LF	2.19	Spike	P	0 - 30
2444994	Microcystin LR	2.18	Spike	P	0 - 30
2444994	Microcystin LW	7.97	Spike	P	0 - 30
2444994	Microcystin LY	6.95	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P436451

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444994	Microcystin RR	3.42	Spike	P	0 - 30
2444994	Microcystin WR	0.515	Spike	P	0 - 30
2444994	Microcystin YR	8.64	Spike	P	0 - 30
2444994	Nodularin-R	4.18	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P436523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444994	Anatoxin-a	6.41	Spike	P	0 - 30
2444994	Neosaxitoxin	6.28	Spike	P	0 - 30
2444994	Saxitoxin	4.35	Spike	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2444994
Field Sample ID: NEHAB0113

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Anatoxin-a 13C4	92.9	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	132	P	30 - 160

Lab Sample ID: 2444995
Field Sample ID: NEHAB0099

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Anatoxin-a 13C4	93.6	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	112	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A122143

Included Lab Sample IDs: 2444992, 2444993

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.5	96.9	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A122146

Included Lab Sample IDs: 2444988, 2444989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122193

Included Lab Sample IDs: 2444990, 2444991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122201

Included Lab Sample IDs: 2444990, 2444991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	97.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122221

Included Lab Sample IDs: 2444990, 2444991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122228

Included Lab Sample IDs: 2444994, 2444995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	93.6	102	P/P	50 - 160
Neosaxitoxin	90.4	94.7	P/P	50 - 160
Saxitoxin	100	105	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A122229

Included Lab Sample IDs: 2444994, 2444995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	95.6	78.7	P/P	60 - 160
Desmethyl microcystin LR	113	103	P/P	50 - 160
Microcystin HILR	122	105	P/P	60 - 160
Microcystin HtyR	101	99.5	P/P	60 - 160
Microcystin LA	112	93.9	P/P	50 - 160
Microcystin LF	135	107	P/P	60 - 160
Microcystin LR	140	107	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A122229

Included Lab Sample IDs: 2444994, 2444995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Microcystin LW	128	93.8	P/P	60 - 160
Microcystin LY	132	96.2	P/P	60 - 160
Microcystin RR	118	96.3	P/P	60 - 160
Microcystin WR	106	94.2	P/P	60 - 160
Microcystin YR	136	105	P/P	60 - 160
Nodularin-R	104	90.9	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122246

Included Lab Sample IDs: 2444990, 2444991

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	100	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
					LCS	
DEP SOP: NU-094-1	Color (true)	99.9			0.539	
EPA 350.1 Rev. 2.0	Ammonia-N	100	99.4	100		0.531
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	93.4	106		7.34
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	94.8	93.3		1.53
EPA 365.1 Rev. 2.0	Total-P	102	104	104		0.0660
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	96.1	95.1		1.05
EPA 8321B	Anatoxin-a	102	94.5	101		6.41
	Cylindrospermopsin	108	82.2	85.0		3.39
	Desmethyl microcystin LR	111	114	121		5.63
	Microcystin HILR	111	115	124		7.49
	Microcystin HtyR	121	114	115		0.869
	Microcystin LA	116	110	109		0.252
	Microcystin LF	139	132	129		2.19
	Microcystin LR	122	132	135		2.18
	Microcystin LW	141	114	124		7.97
	Microcystin LY	135	135	126		6.95
	Microcystin RR	121	102	99.0		3.42
	Microcystin WR	93.9	111	111		0.515
	Microcystin YR	116	122	133		8.64
	Neosaxitoxin	82.7	59.5	63.4		6.28
	Nodularin-R	112	108	103		4.18
	Saxitoxin	85.3	78.2	81.6		4.35

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2444988, 2444989
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2444990, 2444991
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2444990, 2444991
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2444990, 2444991
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2444990, 2444991
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2444992, 2444993
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2444994, 2444995
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2444994, 2444995

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	10/13/2023			10/13/2023 14:47	Anna M. Plaviak	2444988
	10/13/2023			10/13/2023 14:48	Anna M. Plaviak	2444989
EPA 350.1 Rev. 2.0	10/13/2023			10/19/2023 14:05	Khloe J Berg	2444990
	10/13/2023			10/19/2023 14:06	Khloe J Berg	2444991
EPA 351.2 Rev. 2.0	10/13/2023	10/16/2023 13:15	Simonne.V. Calhoun	10/18/2023 13:05	Samantha L Bates	2444990
	10/13/2023	10/16/2023 13:15	Simonne.V. Calhoun	10/18/2023 13:07	Samantha L Bates	2444991
EPA 353.2 Rev. 2.0	10/13/2023			10/17/2023 12:52	Fadila Guebre	2444990
	10/13/2023			10/17/2023 12:53	Fadila Guebre	2444991
EPA 365.1 Rev. 2.0	10/13/2023	10/16/2023 12:31	Adam P Silver	10/17/2023 10:32	James L Waggeberby	2444990
	10/13/2023	10/16/2023 12:31	Adam P Silver	10/17/2023 10:33	James L Waggeberby	2444991
EPA 365.1 Rev. 2.0 dissolved	10/13/2023			10/13/2023 14:00	Chandler E Cox	2444992
	10/13/2023			10/13/2023 14:01	Chandler E Cox	2444993
EPA 8321B	10/13/2023	10/18/2023 12:00	Tae K Lee	10/18/2023 13:00	Tae K Lee	2444994
	10/13/2023	10/18/2023 12:00	Tae K Lee	10/18/2023 13:16	Tae K Lee	2444995
	10/13/2023	10/18/2023 12:00	Tae K Lee	10/18/2023 13:53	Tae K Lee	2444994
	10/13/2023	10/18/2023 12:00	Tae K Lee	10/18/2023 14:07	Tae K Lee	2444995