

Chemical Analysis Report

NE-DIST-2024-06-19-03

Florida DEP Laboratory
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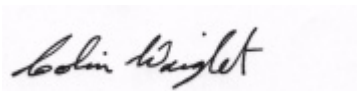
Event Description: **Algae Bloom Response NEROC-as needed**
Request ID: **RQ-2024-03-04-72**
Customer: **NE-DIST**
Project ID: **BLOOM-RESP**

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Certified by: Colin Wright, Program Administrator

Date Certified: 11-JUL-2024 11:03



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: Crescent lake - Eagle Trail

Collection Date/Time: 06/18/2024 11:25

Field ID: NEHAB0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2494914	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P446699	
		Cylindrospermopsin	0.10	U	ug/L	P446698	
		Desmethyl microcystin LR	0.25	U	ug/L	P446698	
		Microcystin HlR	0.25	U	ug/L	P446698	
		Microcystin HtyR	0.25	U	ug/L	P446698	
		Microcystin LA	0.10	U	ug/L	P446698	
		Microcystin LF	0.10	U	ug/L	P446698	
		Microcystin LR	0.25	U	ug/L	P446698	
		Microcystin LW	0.25	U	ug/L	P446698	
		Microcystin LY	0.10	U	ug/L	P446698	
		Microcystin RR	0.12	I	ug/L	P446698	
		Microcystin WR	0.50	U	ug/L	P446698	
		Neosaxitoxin	0.50	U	ug/L	P446699	
		Microcystin YR	0.25	U	ug/L	P446698	
		Saxitoxin	0.50	U	ug/L	P446699	
		Nodularin-R	0.10	U	ug/L	P446698	

Sample Location: Crescent Lake - New City Boat Ramp

Collection Date/Time: 06/18/2024 10:40

Field ID: NEHAB0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2494915	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P446699	
		Cylindrospermopsin	0.10	U	ug/L	P446698	
		Desmethyl microcystin LR	0.25	U	ug/L	P446698	
		Microcystin HlIR	0.25	U	ug/L	P446698	
		Microcystin HtyR	0.25	U	ug/L	P446698	
		Microcystin LA	0.10	U	ug/L	P446698	
		Microcystin LF	0.10	U	ug/L	P446698	
		Microcystin LR	0.41	I	ug/L	P446698	
		Microcystin LW	0.25	U	ug/L	P446698	
		Microcystin LY	0.10	U	ug/L	P446698	
		Microcystin RR	0.13	I	ug/L	P446698	
		Microcystin WR	0.50	U	ug/L	P446698	
		Neosaxitoxin	0.50	U	ug/L	P446699	
		Microcystin YR	0.25	U	ug/L	P446698	
		Saxitoxin	0.50	U	ug/L	P446699	
		Nodularin-R	0.10	U	ug/L	P446698	

Sample Location: Crescent lake - Eagle Trail

Collection Date/Time: 06/18/2024 11:25

Field ID: NEHAB0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2494970	DEP SOP: NU-094-1	Color (true)	170		PCU	P446763	
2494972	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P447096	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P447192	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P447045	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P446865	
2494974	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.035		mg P/L	P446733	

Sample Location: Crescent Lake - New City Boat Ramp

Collection Date/Time: 06/18/2024 10:40

Field ID: NEHAB0118					Matrix: W-SURF-FRH			
Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2494971	DEP SOP: NU-094-1	Color (true)	170		PCU	P446763		
2494973	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P447096		
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P447192		
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P447045		
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P446865		
2494975	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.026		mg P/L	P446733		

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P446763

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P447096

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P447192

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P447045

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P446865

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P446733

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

Reference Method: EPA 8321B
Batch ID: P446698

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: P446699

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: P446763

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P447096

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P447192

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: P447045

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P446865

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P446733

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

Reference Method: EPA 8321B
Batch ID: P446698

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	113		P	40 - 160
Desmethyl microcystin LR	93.9		P	40 - 160
Microcystin H1LR	97.9		P	40 - 160
Microcystin HtyR	95.4		P	40 - 160
Microcystin LA	101		P	40 - 160
Microcystin LF	109		P	40 - 160
Microcystin LR	96.6		P	40 - 160
Microcystin LW	110		P	40 - 160
Microcystin LY	117		P	40 - 160
Microcystin RR	102		P	40 - 160
Microcystin WR	99.8		P	40 - 160
Microcystin YR	103		P	40 - 160
Nodularin-R	101		P	40 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P446699

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	131		P	40 - 150
Neosaxitoxin	117		P	40 - 150
Saxitoxin	128		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P447096

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2494513	Ammonia-N	92.8	94.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P447192

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2494985	Kjeldahl Nitrogen	104	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P447045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2494934	NO2NO3-N	97.4	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P446865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2495019	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P446733

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2494876	O-Phosphate-P	98.1	99.0	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P446698

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2494772	Cylindrospermopsin	113	108	P/P	40 - 160
2494772	Desmethyl microcystin LR	100	92.7	P/P	40 - 160
2494772	Microcystin HiLR	105	97.1	P/P	40 - 160
2494772	Microcystin HtyR	101	94.5	P/P	40 - 160
2494772	Microcystin LA	101	102	P/P	40 - 160
2494772	Microcystin LF	127	115	P/P	40 - 160
2494772	Microcystin LR	102	95.0	P/P	40 - 160
2494772	Microcystin LW	107	108	P/P	40 - 160
2494772	Microcystin LY	118	103	P/P	40 - 160
2494772	Microcystin RR	106	95.7	P/P	40 - 160
2494772	Microcystin WR	109	99.7	P/P	40 - 160
2494772	Microcystin YR	109	103	P/P	40 - 160
2494772	Nodularin-R	108	102	P/P	40 - 160

Reference Method: EPA 8321B
Batch ID: P446699

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2494772	Anatoxin-a	112	110	P/P	40 - 150
2494772	Neosaxitoxin	62.3	60.6	P/P	40 - 150
2494772	Saxitoxin	77.7	75.8	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P446763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494748	Color (true)	0.524	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P447096

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494513	Ammonia-N	1.32	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P447192

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494985	Kjeldahl Nitrogen	0.411	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P447045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494934	NO2NO3-N	0.402	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P446865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2495019	Total-P	0.131	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P446733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494876	O-Phosphate-P	0.807	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P446698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494772	Cylindrospermopsin	4.22	Spike	P	0 - 30
2494772	Desmethyl microcystin LR	7.75	Spike	P	0 - 30
2494772	Microcystin HtIR	7.67	Spike	P	0 - 30
2494772	Microcystin HtyR	6.23	Spike	P	0 - 30
2494772	Microcystin LA	1.19	Spike	P	0 - 30
2494772	Microcystin LF	10.2	Spike	P	0 - 30
2494772	Microcystin LR	7.46	Spike	P	0 - 30
2494772	Microcystin LW	0.498	Spike	P	0 - 30
2494772	Microcystin LY	13.9	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P446698

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494772	Microcystin RR	10.1	Spike	P	0 - 30
2494772	Microcystin WR	8.99	Spike	P	0 - 30
2494772	Microcystin YR	5.44	Spike	P	0 - 30
2494772	Nodularin-R	6.12	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P446699

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2494772	Anatoxin-a	1.77	Spike	P	0 - 30
2494772	Neosaxitoxin	2.71	Spike	P	0 - 30
2494772	Saxitoxin	2.59	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2494914
Field Sample ID: NEHAB0006

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Anatoxin-a 13C4	114	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	72.1	P	30 - 160

Lab Sample ID: 2494915
Field Sample ID: NEHAB0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Anatoxin-a 13C4	112	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	82.9	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A126221

Included Lab Sample IDs: 2494914, 2494915

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	122	116	P/P	60 - 160
Desmethyl microcystin LR	96.9	93.6	P/P	60 - 160
Microcystin HILR	99.0	101	P/P	60 - 160
Microcystin HtyR	94.0	99.7	P/P	60 - 160
Microcystin LA	103	107	P/P	50 - 160
Microcystin LF	101	113	P/P	50 - 160
Microcystin LR	91.5	91.9	P/P	60 - 160
Microcystin LW	91.3	98.0	P/P	60 - 160
Microcystin LY	104	113	P/P	60 - 160
Microcystin RR	76.0	81.2	P/P	60 - 160
Microcystin WR	104	106	P/P	60 - 160
Microcystin YR	98.7	101	P/P	60 - 160
Nodularin-R	86.7	98.9	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A126235

Included Lab Sample IDs: 2494974, 2494975

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.3	97.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A126249

Included Lab Sample IDs: 2494914, 2494915

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	86.7	116	P/P	50 - 160
Neosaxitoxin	90.1	117	P/P	50 - 160
Saxitoxin	126	133	P/P	50 - 160

Reference Method: DEP SOP: NU-094-1

Run ID: A126250

Included Lab Sample IDs: 2494970, 2494971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A126318

Included Lab Sample IDs: 2494972, 2494973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A126347

Included Lab Sample IDs: 2494972, 2494973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	97.0	95.5	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A126371
Included Lab Sample IDs: 2494972, 2494973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.7	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A126443
Included Lab Sample IDs: 2494972, 2494973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	104	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		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	100				0.524	
EPA 350.1 Rev. 2.0	Ammonia-N	95.0	92.8	94.8			1.32
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	104	105			0.411
EPA 353.2 Rev. 2.0	NO2NO3-N	96.5	97.4	97.8			0.402
EPA 365.1 Rev. 2.0	Total-P	104	105	105			0.131
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	98.1	99.0			0.807
EPA 8321B	Anatoxin-a	131	112	110			1.77
	Cylindrospermopsin	113	113	108			4.22
	Desmethyl microcystin LR	93.9	100	92.7			7.75
	Microcystin HILR	97.9	105	97.1			7.67
	Microcystin HtyR	95.4	101	94.5			6.23
	Microcystin LA	101	101	102			1.19
	Microcystin LF	109	127	115			10.2
	Microcystin LR	96.6	102	95.0			7.46
	Microcystin LW	110	107	108			0.498
	Microcystin LY	117	118	103			13.9
	Microcystin RR	102	106	95.7			10.1
	Microcystin WR	99.8	109	99.7			8.99
	Microcystin YR	103	109	103			5.44
	Neosaxitoxin	117	62.3	60.6			2.71
	Nodularin-R	101	108	102			6.12
	Saxitoxin	128	77.7	75.8			2.59

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2494970, 2494971
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2494972, 2494973
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2494972, 2494973
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2494972, 2494973
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2494972, 2494973
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2494974, 2494975
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2494914, 2494915
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2494914, 2494915

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	06/19/2024			06/19/2024 14:47	Jessica K Wilks	2494970
	06/19/2024			06/19/2024 14:48	Jessica K Wilks	2494971
EPA 350.1 Rev. 2.0	06/19/2024			06/26/2024 12:33	Ping Hua	2494972
	06/19/2024			06/26/2024 12:35	Ping Hua	2494973
EPA 351.2 Rev. 2.0	06/19/2024	06/28/2024 07:22	Simonne.V. Calhoun	07/01/2024 13:21	Ping Hua	2494972
	06/19/2024	06/28/2024 07:22	Simonne.V. Calhoun	07/01/2024 13:23	Ping Hua	2494973
EPA 353.2 Rev. 2.0	06/19/2024			06/25/2024 14:28	Fadila Guebre	2494972
	06/19/2024			06/25/2024 14:29	Fadila Guebre	2494973
EPA 365.1 Rev. 2.0	06/19/2024	06/21/2024 12:57	Adam P Silver	06/24/2024 12:15	James L Waggeberby	2494972
	06/19/2024	06/21/2024 12:57	Adam P Silver	06/24/2024 12:16	James L Waggeberby	2494973
EPA 365.1 Rev. 2.0 dissolved	06/19/2024			06/19/2024 11:47	Chandler E Cox	2494974
	06/19/2024			06/19/2024 11:48	Chandler E Cox	2494975
EPA 8321B	06/19/2024	06/19/2024 12:00	Tae K Lee	06/19/2024 20:33	Tae K Lee	2494914
	06/19/2024	06/19/2024 12:00	Tae K Lee	06/19/2024 20:50	Tae K Lee	2494915
	06/19/2024	06/19/2024 12:00	Tae K Lee	06/19/2024 21:03	Tae K Lee	2494914
	06/19/2024	06/19/2024 12:00	Tae K Lee	06/19/2024 21:16	Tae K Lee	2494915