

Chemical Analysis Report

SE-DIST-2023-09-29-01

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

Event Description: **Algal Bloom Response - SE ROC**
Request ID: **RQ-2023-09-18-64**
Customer: **SE-DIST**
Project ID: **BLOOM-RESP**

Send Reports to:
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2199 South Rock Road
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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 12-OCT-2023 09:41



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: South Fork New River - Residential Canal W of I-95 **Collection Date/Time: 09/28/2023 11:00**

Field ID: SEHAB0105

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441636	DEP SOP: NU-094-1	Color (true)	36		PCU	P435763	
2441638	EPA 350.1 Rev. 2.0	Ammonia-N	0.22		mg N/L	P435866	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P436085	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.28		mg N/L	P436308	
	EPA 365.1 Rev. 2.0	Total-P	0.087		mg P/L	P435918	
2441640	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.066		mg P/L	P435754	
2441642	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P435665	
		Cylindrospermopsin	0.10	U	ug/L	P435663	
		Desmethyl microcystin LR	0.25	U	ug/L	P435663	
		Microcystin HILR	0.25	U	ug/L	P435663	
		Microcystin HtyR	0.25	U	ug/L	P435663	
		Microcystin LA	0.10	U	ug/L	P435663	
		Microcystin LF	0.10	U	ug/L	P435663	
		Microcystin LR	0.25	U	ug/L	P435663	
		Microcystin LW	0.25	U	ug/L	P435663	
		Microcystin LY	0.10	U	ug/L	P435663	
		Microcystin RR	0.10	U	ug/L	P435663	
		Microcystin WR	0.50	U	ug/L	P435663	
		Neosaxitoxin	0.50	U	ug/L	P435665	
		Microcystin YR	0.25	U	ug/L	P435663	
		Saxitoxin	0.50	U	ug/L	P435665	
		Nodularin-R	0.10	U	ug/L	P435663	

Sample Location: South Fork New River - Residential Canal W of I-95 **Collection Date/Time: 09/28/2023 11:20**

Field ID: FB_09282023

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2441637	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P435763	
2441639	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P435866	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P436085	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P436308	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P435918	
2441641	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P435754	
2441643	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P435665	
		Cylindrospermopsin	0.10	U	ug/L	P435663	
		Desmethyl microcystin LR	0.25	U	ug/L	P435663	
		Microcystin HILR	0.25	U	ug/L	P435663	
		Microcystin HtyR	0.25	U	ug/L	P435663	
		Microcystin LA	0.10	U	ug/L	P435663	
		Microcystin LF	0.10	U	ug/L	P435663	
		Microcystin LR	0.25	U	ug/L	P435663	
		Microcystin LW	0.25	U	ug/L	P435663	
		Microcystin LY	0.10	U	ug/L	P435663	
		Microcystin RR	0.10	U	ug/L	P435663	
		Microcystin WR	0.50	U	ug/L	P435663	
		Neosaxitoxin	0.50	U	ug/L	P435665	
		Microcystin YR	0.25	U	ug/L	P435663	
		Saxitoxin	0.50	U	ug/L	P435665	
		Nodularin-R	0.10	U	ug/L	P435663	

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P435763

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435866

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436085

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436308

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435918

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P435754

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

Reference Method: EPA 8321B
Batch ID: P435663

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: P435665

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: P435763

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435866

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436085

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: P436308

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: P435918

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: P435754

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.8		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P435663

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	115		P	40 - 160
Desmethyl microcystin LR	121		P	40 - 160
Microcystin H11R	111		P	40 - 160
Microcystin HtyR	104		P	40 - 160
Microcystin LA	103		P	40 - 160
Microcystin LF	104		P	40 - 160
Microcystin LR	105		P	40 - 160
Microcystin LW	97.4		P	40 - 160
Microcystin LY	99.4		P	40 - 160
Microcystin RR	100		P	40 - 160
Microcystin WR	111		P	40 - 160
Microcystin YR	97.9		P	40 - 160
Nodularin-R	103		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P435665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	119		P	40 - 150
Neosaxitoxin	112		P	40 - 150
Saxitoxin	106		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435866

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441418	Ammonia-N	98.4	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436085

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441614	Kjeldahl Nitrogen	107	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436308

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441638	NO2NO3-N	97.5	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435918

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441638	Total-P	104	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P435754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441640	O-Phosphate-P	98.9	91.8	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P435663

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441376	Cylindrospermopsin	88.9	88.1	P/P	40 - 160
2441376	Desmethyl microcystin LR	126	121	P/P	40 - 160
2441376	Microcystin HiLR	119	115	P/P	40 - 160
2441376	Microcystin HtyR	113	112	P/P	40 - 160
2441376	Microcystin LA	109	116	P/P	40 - 160
2441376	Microcystin LF	123	121	P/P	40 - 160
2441376	Microcystin LR	102	110	P/P	40 - 160
2441376	Microcystin LW	108	103	P/P	40 - 160
2441376	Microcystin LY	105	107	P/P	40 - 160
2441376	Microcystin RR	105	107	P/P	40 - 160
2441376	Microcystin WR	112	118	P/P	40 - 160
2441376	Microcystin YR	104	108	P/P	40 - 160
2441376	Nodularin-R	111	111	P/P	40 - 160

Reference Method: EPA 8321B
Batch ID: P435665

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2441376	Anatoxin-a	103	105	P/P	40 - 150
2441376	Neosaxitoxin	67.1	64.9	P/P	40 - 150
2441376	Saxitoxin	82.2	81.7	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P435763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441575	Color (true)	1.53	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P435866

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441418	Ammonia-N	2.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436085

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441614	Kjeldahl Nitrogen	5.27	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436308

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441638	NO2NO3-N	0.846	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441638	Total-P	1.79	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P435754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441640	O-Phosphate-P	4.39	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P435663

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441376	Cylindrospermopsin	0.889	Spike	P	0 - 30
2441376	Desmethyl microcystin LR	3.72	Spike	P	0 - 30
2441376	Microcystin HtIR	2.79	Spike	P	0 - 30
2441376	Microcystin HtyR	1.29	Spike	P	0 - 30
2441376	Microcystin LA	5.80	Spike	P	0 - 30
2441376	Microcystin LF	1.08	Spike	P	0 - 30
2441376	Microcystin LR	6.98	Spike	P	0 - 30
2441376	Microcystin LW	4.14	Spike	P	0 - 30
2441376	Microcystin LY	1.80	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P435663

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441376	Microcystin RR	1.27	Spike	P	0 - 30
2441376	Microcystin WR	4.55	Spike	P	0 - 30
2441376	Microcystin YR	3.69	Spike	P	0 - 30
2441376	Nodularin-R	0.635	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P435665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2441376	Anatoxin-a	2.11	Spike	P	0 - 30
2441376	Neosaxitoxin	3.38	Spike	P	0 - 30
2441376	Saxitoxin	0.623	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2441642
Field Sample ID: SEHAB0105

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Anatoxin-a 13C4	127	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	98.8	P	30 - 160

Lab Sample ID: 2441643
Field Sample ID: FB_09282023

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Anatoxin-a 13C4	106	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	96.5	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A121803

Included Lab Sample IDs: 2441642, 2441643

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	117	111	P/P	60 - 160
Desmethyl microcystin LR	122	119	P/P	50 - 160
Microcystin HILR	104	106	P/P	60 - 160
Microcystin HtyR	113	112	P/P	60 - 160
Microcystin LA	106	102	P/P	50 - 160
Microcystin LF	106	107	P/P	60 - 160
Microcystin LR	103	98.4	P/P	60 - 160
Microcystin LW	92.3	95.1	P/P	60 - 160
Microcystin LY	107	104	P/P	60 - 160
Microcystin RR	99.8	105	P/P	60 - 160
Microcystin WR	112	111	P/P	60 - 160
Microcystin YR	97.4	95.4	P/P	60 - 160
Nodularin-R	105	102	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A121836

Included Lab Sample IDs: 2441642, 2441643

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	105	120	P/P	50 - 160
Neosaxitoxin	122	135	P/P	50 - 160
Saxitoxin	113	123	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A121854

Included Lab Sample IDs: 2441640, 2441641

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.5	99.1	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A121858

Included Lab Sample IDs: 2441636, 2441637

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.5	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121913

Included Lab Sample IDs: 2441638, 2441639

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121947

Included Lab Sample IDs: 2441638

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121971

Included Lab Sample IDs: 2441639

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122030

Included Lab Sample IDs: 2441638, 2441639

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122065

Included Lab Sample IDs: 2441638, 2441639

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.5	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)	97.7			1.53	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	98.4	101		2.12
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	107	99.3		5.27
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	97.5	99.5		0.846
EPA 365.1 Rev. 2.0	Total-P	102	104	107		1.79
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.8	98.9	91.8		4.39
EPA 8321B	Anatoxin-a	119	103	105		2.11
	Cylindrospermopsin	115	88.9	88.1		0.889
	Desmethyl microcystin LR	121	126	121		3.72
	Microcystin H ₁ LR	111	119	115		2.79
	Microcystin H ₂ LR	104	113	112		1.29
	Microcystin LA	103	109	116		5.80
	Microcystin LF	104	123	121		1.08
	Microcystin LR	105	102	110		6.98
	Microcystin LW	97.4	108	103		4.14
	Microcystin LY	99.4	105	107		1.80
	Microcystin RR	100	105	107		1.27
	Microcystin WR	111	112	118		4.55
	Microcystin YR	97.9	104	108		3.69
	Neosaxitoxin	112	67.1	64.9		3.38
	Nodularin-R	103	111	111		0.635
	Saxitoxin	106	82.2	81.7		0.623

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2441636, 2441637
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2441638, 2441639
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2441638, 2441639
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2441638, 2441639
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2441638, 2441639
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2441640, 2441641
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2441642, 2441643
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2441642, 2441643

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	09/29/2023			09/29/2023 15:43	Alexis Price	2441636, 2441637
EPA 350.1 Rev. 2.0	09/29/2023			10/03/2023 12:12	Khloe J Berg	2441638
	09/29/2023			10/03/2023 12:13	Khloe J Berg	2441639
EPA 351.2 Rev. 2.0	09/29/2023	10/06/2023 09:23	Samantha L Bates	10/09/2023 16:01	Samantha L Bates	2441638
	09/29/2023	10/06/2023 09:23	Samantha L Bates	10/09/2023 16:02	Samantha L Bates	2441639
EPA 353.2 Rev. 2.0	09/29/2023			10/10/2023 14:05	Fadila Guebre	2441638
	09/29/2023			10/10/2023 14:12	Fadila Guebre	2441639
EPA 365.1 Rev. 2.0	09/29/2023	10/04/2023 10:15	Adam P Silver	10/04/2023 15:01	James L Waggeberby	2441638
	09/29/2023	10/04/2023 10:15	Adam P Silver	10/05/2023 10:31	James L Waggeberby	2441639
EPA 365.1 Rev. 2.0 dissolved	09/29/2023			09/29/2023 14:13	Adam P Silver	2441640
	09/29/2023			09/29/2023 14:19	Adam P Silver	2441641
EPA 8321B	09/29/2023	09/29/2023 13:00	Hana Lee	09/29/2023 21:46	Tae K Lee	2441642
	09/29/2023	09/29/2023 13:00	Hana Lee	09/29/2023 22:00	Tae K Lee	2441643
	09/29/2023	09/29/2023 13:00	Hana Lee	09/30/2023 07:24	Tae K Lee	2441642
	09/29/2023	09/29/2023 13:00	Hana Lee	09/30/2023 07:40	Tae K Lee	2441643