

Chemical Analysis Report

WQAP-2023-03-03-02

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

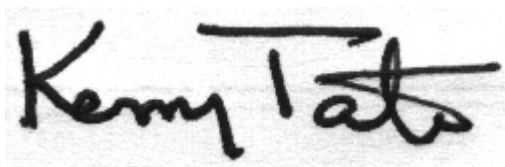
Event Description: **Algal Bloom Response - CEROC**
Request ID: **RQ-2023-02-27-46**
Customer: **WQAP**
Project ID: **BLOOM-RESP**

Send Reports to:
FL Dept. of Environmental Protection
3319 Maguire Blvd. Suite 232
Orlando, FL 32803
Attn: Jessie Atchison

For additional information please contact
Colin Wright, Ph.D.
Chris Bowen, B.S.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 20-MAR-2023 14:14

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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: Lake Maitland - Kraft Azalea Garden

Collection Date/Time: 03/02/2023 10:12

Field ID: HABCE0177_LakeMaitland2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391627	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P426747	
		Cylindrospermopsin	0.10	U	ug/L	P426745	
		Desmethyl microcystin LR	0.25	U	ug/L	P426745	
		Microcystin HILR	0.25	U	ug/L	P426745	
		Microcystin HtyR	0.25	U	ug/L	P426745	
		Microcystin LA	0.17	I	ug/L	P426745	
		Microcystin LF	0.10	U	ug/L	P426745	
		Microcystin LR	0.26	I	ug/L	P426745	
		Microcystin LW	0.25	U	ug/L	P426745	
		Microcystin LY	0.10	U	ug/L	P426745	
		Microcystin RR	0.10	U	ug/L	P426745	
		Microcystin WR	0.50	U	ug/L	P426745	
		Neosaxitoxin	0.50	U	ug/L	P426747	
		Microcystin YR	0.25	U	ug/L	P426745	
		Saxitoxin	0.50	U	ug/L	P426747	
		Nodularin-R	0.10	U	ug/L	P426745	
2391635	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P426795	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.51		mg N/L	P427142	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P426929	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P426917	
2391637	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P426678	

Sample Location: Louise Lake - NW Lobe

Collection Date/Time: 03/02/2023 11:42

Field ID: HABCE0183_LouiseLake

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2391628	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P426747	
		Cylindrospermopsin	0.10	U	ug/L	P426745	
		Desmethyl microcystin LR	0.37	I	ug/L	P426745	
		Microcystin HILR	0.25	U	ug/L	P426745	
		Microcystin HtyR	0.25	U	ug/L	P426745	
		Microcystin LA	0.83		ug/L	P426745	
		Microcystin LF	0.10	U	ug/L	P426745	
		Microcystin LR	2.3		ug/L	P426745	
		Microcystin LW	0.25	U	ug/L	P426745	
		Microcystin LY	0.43		ug/L	P426745	
		Microcystin RR	0.10	U	ug/L	P426745	
		Microcystin WR	0.50	U	ug/L	P426745	
		Neosaxitoxin	0.50	U	ug/L	P426747	
		Microcystin YR	0.25	U	ug/L	P426745	
		Saxitoxin	0.50	U	ug/L	P426747	
		Nodularin-R	0.10	U	ug/L	P426745	
2391636	EPA 350.1 Rev. 2.0	Ammonia-N	0.15		mg N/L	P426795	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P427142	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.040		mg N/L	P426929	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P426917	
2391638	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P426678	

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426795

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427142

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426929

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426678

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

Reference Method: EPA 8321B
Batch ID: P426745

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

Reference Method: EPA 8321B
Batch ID: P426747

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: EPA 350.1 Rev. 2.0
Batch ID: P426795

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427142

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: P426929

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426678

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.5		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P426745

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	83.1		P	40 - 150
Desmethyl microcystin LR	69.5		P	40 - 150
Microcystin H1R	80.3		P	40 - 150
Microcystin HtyR	78.6		P	40 - 150
Microcystin LA	74.1		P	40 - 150
Microcystin LF	71.8		P	40 - 150
Microcystin LR	65.9		P	40 - 150
Microcystin LW	106		P	40 - 150
Microcystin LY	89.2		P	40 - 150
Microcystin RR	82.0		P	40 - 150
Microcystin WR	74.2		P	40 - 150
Microcystin YR	83.9		P	40 - 150
Nodularin-R	79.8		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P426747

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	70.7		P	40 - 150
Neosaxitoxin	91.3		P	40 - 150
Saxitoxin	75.4		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426795

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391559	Ammonia-N	98.2	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427142

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2392141	Kjeldahl Nitrogen	93.0	91.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426929

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391635	NO2NO3-N	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391635	Total-P	98.0	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426678

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391515	O-Phosphate-P	100	100	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P426745

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391488	Cylindrospermopsin	102	98.3	P/P	40 - 150
2391488	Desmethyl microcystin LR	95.5	98.0	P/P	40 - 150
2391488	Microcystin HiLR	106	107	P/P	40 - 150
2391488	Microcystin HtyR	107	107	P/P	40 - 150
2391488	Microcystin LA	99.4	95.1	P/P	40 - 150
2391488	Microcystin LF	87.8	102	P/P	40 - 150
2391488	Microcystin LR	96.6	96.3	P/P	40 - 150
2391488	Microcystin LW	118	118	P/P	40 - 150
2391488	Microcystin LY	106	98.6	P/P	40 - 150
2391488	Microcystin RR	105	104	P/P	40 - 150
2391488	Microcystin WR	108	102	P/P	40 - 150
2391488	Microcystin YR	120	115	P/P	40 - 150
2391488	Nodularin-R	118	120	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P426747

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2391488	Anatoxin-a	68.8	68.3	P/P	40 - 150
2391488	Neosaxitoxin	80.2	75.6	P/P	40 - 150
2391488	Saxitoxin	66.3	66.7	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P426795

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391559	Ammonia-N	0.107	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2392141	Kjeldahl Nitrogen	1.20	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P426929

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391635	NO2NO3-N	0.484	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P426917

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391635	Total-P	0.340	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426678

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391515	O-Phosphate-P	0.0997	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P426745

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391488	Cylindrospermopsin	3.24	Spike	P	0 - 30
2391488	Desmethyl microcystin LR	2.55	Spike	P	0 - 30
2391488	Microcystin H1LR	0.984	Spike	P	0 - 30
2391488	Microcystin HtyR	0.118	Spike	P	0 - 30
2391488	Microcystin LA	4.38	Spike	P	0 - 30
2391488	Microcystin LF	14.9	Spike	P	0 - 30
2391488	Microcystin LR	0.253	Spike	P	0 - 30
2391488	Microcystin LW	0.596	Spike	P	0 - 30
2391488	Microcystin LY	7.43	Spike	P	0 - 30
2391488	Microcystin RR	0.334	Spike	P	0 - 30
2391488	Microcystin WR	5.40	Spike	P	0 - 30
2391488	Microcystin YR	3.83	Spike	P	0 - 30
2391488	Nodularin-R	2.01	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P426747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2391488	Anatoxin-a	0.767	Spike	P	0 - 30
2391488	Neosaxitoxin	6.00	Spike	P	0 - 30
2391488	Saxitoxin	0.638	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2391627

Field Sample ID: HABCE0177_LakeMaitland2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	65.1	P	30 - 160
EPA 8321B	Neosaxitoxin-15N7	73.8	P	30 - 160

Lab Sample ID: 2391628

Field Sample ID: HABCE0183_LouiseLake

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	109	P	30 - 160
EPA 8321B	Neosaxitoxin-15N7	56.6	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A117790

Included Lab Sample IDs: 2391637, 2391638

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.3	99.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A117845

Included Lab Sample IDs: 2391635, 2391636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A117891

Included Lab Sample IDs: 2391627, 2391628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	92.3	89.7	P/P	50 - 160
Desmethyl microcystin LR	71.1	76.7	P/P	50 - 160
Microcystin H1IR	76.8	80.4	P/P	50 - 160
Microcystin HtyR	85.6	87.4	P/P	50 - 160
Microcystin LA	81.6	88.2	P/P	50 - 160
Microcystin LF	70.9	82.4	P/P	50 - 160
Microcystin LR	65.2	70.6	P/P	50 - 160
Microcystin LW	80.6	83.4	P/P	50 - 160
Microcystin LY	83.9	77.7	P/P	50 - 160
Microcystin RR	85.4	81.8	P/P	50 - 160
Microcystin WR	82.2	83.5	P/P	50 - 160
Microcystin YR	85.1	87.7	P/P	50 - 160
Nodularin-R	83.5	87.5	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A117894

Included Lab Sample IDs: 2391627, 2391628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	67.5	66.5	P/P	50 - 160
Neosaxitoxin	85.7	88.1	P/P	50 - 160
Saxitoxin	74.4	72.5	P/P	50 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A117895

Included Lab Sample IDs: 2391635, 2391636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A117936

Included Lab Sample IDs: 2391635, 2391636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	98.8	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A117981

Included Lab Sample IDs: 2391635, 2391636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.0	98.1	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 LCS	SMP	MS
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	98.2	98.4			0.107
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	93.0	91.6			1.20
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	104	103	104			0.484
EPA 365.1 Rev. 2.0	Total-P	96.6	98.0	98.3			0.340
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.5	100	100			0.0997
EPA 8321B	Anatoxin-a	70.7	68.8	68.3			0.767
	Cylindrospermopsin	83.1	102	98.3			3.24
	Desmethyl microcystin LR	69.5	95.5	98.0			2.55
	Microcystin HiLR	80.3	106	107			0.984
	Microcystin HtyR	78.6	107	107			0.118
	Microcystin LA	74.1	99.4	95.1			4.38
	Microcystin LF	71.8	87.8	102			14.9
	Microcystin LR	65.9	96.6	96.3			0.253
	Microcystin LW	106	118	118			0.596
	Microcystin LY	89.2	106	98.6			7.43
	Microcystin RR	82.0	105	104			0.334
	Microcystin WR	74.2	108	102			5.40
	Microcystin YR	83.9	120	115			3.83
	Neosaxitoxin	91.3	80.2	75.6			6.00
	Nodularin-R	79.8	118	120			2.01
	Saxitoxin	75.4	66.3	66.7			0.638

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2391635, 2391636
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2391635, 2391636
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2391635, 2391636
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2391635, 2391636
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2391637, 2391638
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2391627, 2391628
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2391627, 2391628

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 350.1 Rev. 2.0	03/03/2023			03/07/2023 11:30	Khloe J Berg	2391635
	03/03/2023			03/07/2023 11:31	Khloe J Berg	2391636
EPA 351.2 Rev. 2.0	03/03/2023	03/09/2023 14:00	Simonne.V. Calhoun	03/14/2023 14:20	Samantha L Bates	2391635
	03/03/2023	03/09/2023 14:00	Simonne.V. Calhoun	03/14/2023 14:21	Samantha L Bates	2391636
EPA 353.2 Rev. 2.0	03/03/2023			03/09/2023 11:00	Beverly Y. Sanders	2391635
	03/03/2023			03/09/2023 11:13	Beverly Y. Sanders	2391636
EPA 365.1 Rev. 2.0	03/03/2023	03/09/2023 13:42	Adam P Silver	03/10/2023 13:42	James L Waggerby	2391635
	03/03/2023	03/09/2023 13:42	Adam P Silver	03/10/2023 13:43	James L Waggerby	2391636
EPA 365.1 Rev. 2.0 dissolved	03/03/2023			03/03/2023 14:31	James L Waggerby	2391637
	03/03/2023			03/03/2023 14:32	James L Waggerby	2391638
EPA 8321B	03/03/2023	03/08/2023 13:00	Manjita Shrestha	03/08/2023 20:25	Manjita Shrestha	2391627
	03/03/2023	03/08/2023 13:00	Manjita Shrestha	03/08/2023 20:42	Manjita Shrestha	2391628
	03/03/2023	03/08/2023 13:00	Manjita Shrestha	03/09/2023 07:48	Manjita Shrestha	2391627
	03/03/2023	03/08/2023 13:00	Manjita Shrestha	03/09/2023 08:02	Manjita Shrestha	2391628