Chemical Analysis Report

WQAP-2023-05-19-04

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

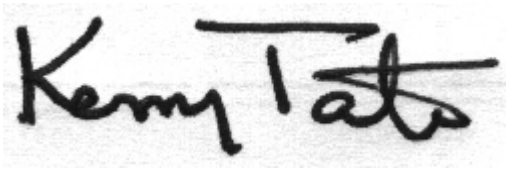
Event Description: **Algal Bloom Response -SOROC**
Request ID: **RQ-2023-05-01-43**
Customer: **WQAP**
Project ID: **BLOOM-RESP**

Send Reports to:
FL Dept. of Environmental Protection
2295 Victoria AVE
Suite 364
Fort Myers, FL 33901
Attn: Kirby Wolfe

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: 05-JUN-2023 12:17



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: Peace River - Crews Park Boat Ramp **Collection Date/Time: 05/18/2023 11:10**

Field ID: HAB-SD-051823-1110 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2411272	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P430083	
		Cylindrospermopsin	0.10	U	ug/L	P430082	
		Desmethyl microcystin LR	0.25	U	ug/L	P430082	
		Microcystin HilR	0.25	U	ug/L	P430082	
		Microcystin HtyR	0.25	U	ug/L	P430082	
		Microcystin LA	0.20	I	ug/L	P430082	
		Microcystin LF	0.10	U	ug/L	P430082	
		Microcystin LR	0.88	I	ug/L	P430082	
		Microcystin LW	0.25	U	ug/L	P430082	
		Microcystin LY	0.10	U	ug/L	P430082	
		Microcystin RR	0.10	U	ug/L	P430082	
		Microcystin WR	0.50	U	ug/L	P430082	
		Neosaxitoxin	0.50	U	ug/L	P430083	
		Microcystin YR	0.25	U	ug/L	P430082	
		Saxitoxin	0.50	U	ug/L	P430083	
		Nodularin-R	0.10	U	ug/L	P430082	
2411274	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P430565	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.9		mg N/L	P430321	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P430678	
	EPA 365.1 Rev. 2.0	Total-P	1.2		mg P/L	P430214	
2411276	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.80		mg P/L	P430133	

Sample Location: Lake Apthorpe - Boat Ramp **Collection Date/Time: 05/18/2023 10:00**

Field ID: HAB-SD-051823-1000 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2411273	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P430083	
		Cylindrospermopsin	0.10	U	ug/L	P430082	
		Desmethyl microcystin LR	0.25	U	ug/L	P430082	
		Microcystin HilR	0.25	U	ug/L	P430082	
		Microcystin HtyR	0.25	U	ug/L	P430082	
		Microcystin LA	0.10	I	ug/L	P430082	
		Microcystin LF	0.10	U	ug/L	P430082	
		Microcystin LR	0.25	U	ug/L	P430082	
		Microcystin LW	0.25	U	ug/L	P430082	
		Microcystin LY	0.10	U	ug/L	P430082	
		Microcystin RR	0.10	U	ug/L	P430082	
		Microcystin WR	0.50	U	ug/L	P430082	
		Neosaxitoxin	0.50	U	ug/L	P430083	
		Microcystin YR	0.25	U	ug/L	P430082	
		Saxitoxin	0.50	U	ug/L	P430083	
		Nodularin-R	0.10	U	ug/L	P430082	
2411275	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P430565	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P430321	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P430678	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P430214	
2411277	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P430133	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430565

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430321

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430678

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430214

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430133

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

Reference Method: EPA 8321B
Batch ID: P430082

Component	Result	Code	Units
Cylindrospermopsin	0.10	U	ug/L
Desmethyl microcystin LR	0.25	U	ug/L
Microcystin HilR	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: P430083

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: P430565

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430321

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430678

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430214

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.1		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430133

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

Reference Method: EPA 8321B
Batch ID: P430082

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	86.5		P	40 - 150
Desmethyl microcystin LR	100		P	40 - 150
Microcystin HilR	109		P	40 - 150
Microcystin HtyR	90.3		P	40 - 150
Microcystin LA	117		P	40 - 150
Microcystin LF	92.7		P	40 - 150
Microcystin LR	105		P	40 - 150
Microcystin LW	87.8		P	40 - 150
Microcystin LY	119		P	40 - 150
Microcystin RR	84.9		P	40 - 150
Microcystin WR	90.9		P	40 - 150
Microcystin YR	98.9		P	40 - 150
Nodularin-R	99.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430083

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	89.6		P	40 - 150
Neosaxitoxin	87.6		P	40 - 150
Saxitoxin	81.2		P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430565

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411219	Ammonia-N	99.0	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411275	Kjeldahl Nitrogen	105	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430678

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411262	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430214

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411261	Total-P	99.6	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430133

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411277	O-Phosphate-P	92.3	92.4	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P430082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411009	Cylindrospermopsin	103	100	P/P	40 - 150
2411009	Desmethyl microcystin LR	124	133	P/P	40 - 150
2411009	Microcystin HilR	132	127	P/P	40 - 150
2411009	Microcystin HtyR	118	113	P/P	40 - 150
2411009	Microcystin LA	125	140	P/P	40 - 150
2411009	Microcystin LF	107	110	P/P	40 - 150
2411009	Microcystin LR	142	139	P/P	40 - 150
2411009	Microcystin LW	121	102	P/P	40 - 150
2411009	Microcystin LY	130	109	P/P	40 - 150
2411009	Microcystin RR	102	103	P/P	40 - 150
2411009	Microcystin WR	129	116	P/P	40 - 150
2411009	Microcystin YR	116	122	P/P	40 - 150
2411009	Nodularin-R	122	118	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P430083

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2411009	Anatoxin-a	90.6	88.7	P/P	40 - 150
2411009	Neosaxitoxin	67.9	67.2	P/P	40 - 150
2411009	Saxitoxin	68.5	68.6	P/P	40 - 150

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411219	Ammonia-N	1.17	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411275	Kjeldahl Nitrogen	1.92	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430678

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411262	NO2NO3-N	0.473	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411261	Total-P	0.117	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P430133

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411277	O-Phosphate-P	0.108	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P430082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411009	Cylindrospermopsin	2.24	Spike	P	0 - 30
2411009	Desmethyl microcystin LR	6.38	Spike	P	0 - 30
2411009	Microcystin HilR	3.49	Spike	P	0 - 30
2411009	Microcystin HtyR	4.71	Spike	P	0 - 30
2411009	Microcystin LA	10.9	Spike	P	0 - 30
2411009	Microcystin LF	3.05	Spike	P	0 - 30
2411009	Microcystin LR	2.20	Spike	P	0 - 30
2411009	Microcystin LW	16.9	Spike	P	0 - 30
2411009	Microcystin LY	17.6	Spike	P	0 - 30
2411009	Microcystin RR	0.546	Spike	P	0 - 30
2411009	Microcystin WR	11.2	Spike	P	0 - 30
2411009	Microcystin YR	4.74	Spike	P	0 - 30
2411009	Nodularin-R	2.92	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P430083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2411009	Anatoxin-a	2.07	Spike	P	0 - 30
2411009	Neosaxitoxin	0.963	Spike	P	0 - 30
2411009	Saxitoxin	0.236	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2411272
Field Sample ID: HAB-SD-051823-1110

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	144	P	30 - 160
EPA 8321B	Saxitoxin-15N7	64.0	P	30 - 160

Lab Sample ID: 2411273
Field Sample ID: HAB-SD-051823-1000

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	110	P	30 - 160
EPA 8321B	Saxitoxin-15N7	74.9	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A119285
Included Lab Sample IDs: 2411276, 2411277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	98.6	P/P	90 - 110
O-Phosphate-P	99.5	98.9	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A119318
Included Lab Sample IDs: 2411272, 2411273

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	85.7	89.2	P/P	50 - 160
Desmethyl microcystin LR	118	120	P/P	50 - 160
Microcystin HilR	121	119	P/P	50 - 160
Microcystin HtyR	99.2	104	P/P	50 - 160
Microcystin LA	129	114	P/P	50 - 160
Microcystin LF	112	117	P/P	50 - 160
Microcystin LR	118	134	P/P	50 - 160
Microcystin LW	111	108	P/P	50 - 160
Microcystin LY	114	118	P/P	50 - 160
Microcystin RR	91.5	89.8	P/P	50 - 160
Microcystin WR	112	105	P/P	50 - 160
Microcystin YR	114	110	P/P	50 - 160
Nodularin-R	102	107	P/P	50 - 160

Reference Method: EPA 8321B
Run ID: A119320
Included Lab Sample IDs: 2411272, 2411273

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	90.4	90.3	P/P	50 - 160
Neosaxitoxin	84.5	80.9	P/P	50 - 160
Saxitoxin	83.6	83.2	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A119374
Included Lab Sample IDs: 2411274

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A119379
Included Lab Sample IDs: 2411275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A119401
Included Lab Sample IDs: 2411274, 2411275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	98.8	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A119472
Included Lab Sample IDs: 2411274, 2411275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	99.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A119514
Included Lab Sample IDs: 2411274, 2411275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	105	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	97.4	99.0	100			1.17
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.9	105	102			1.92
EPA 353.2 Rev. 2.0	NO2NO3-N	105	106	106			0.473
EPA 365.1 Rev. 2.0	Total-P	99.1	99.6	99.7			0.117
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	92.3	92.4			0.108
EPA 8321B	Anatoxin-a	89.6	90.6	88.7			2.07
	Cylindrospermopsin	86.5	100	103			2.24
	Desmethyl microcystin LR	100	124	133			6.38
	Microcystin HilR	109	132	127			3.49
	Microcystin HtyR	90.3	118	113			4.71
	Microcystin LA	117	125	140			10.9
	Microcystin LF	92.7	107	110			3.05
	Microcystin LR	105	142	139			2.20
	Microcystin LW	87.8	121	102			16.9
	Microcystin LY	119	130	109			17.6
	Microcystin RR	84.9	103	102			0.546
	Microcystin WR	90.9	129	116			11.2
	Microcystin YR	98.9	122	116			4.74
	Neosaxitoxin	87.6	67.9	67.2			0.963
	Nodularin-R	99.7	118	122			2.92
	Saxitoxin	81.2	68.5	68.6			0.236

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2411274, 2411275
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2411274, 2411275
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2411274, 2411275
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2411274, 2411275
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2411276, 2411277
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2411272, 2411273
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2411272, 2411273

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	05/19/2023			05/30/2023 14:46	Khloe J Berg	2411274
	05/19/2023			05/30/2023 14:47	Khloe J Berg	2411275
EPA 351.2 Rev. 2.0	05/19/2023	05/24/2023 11:48	Dana G. Hughes	05/25/2023 10:41	Samantha L Bates	2411274
	05/19/2023	05/24/2023 11:48	Dana G. Hughes	05/25/2023 10:42	Samantha L Bates	2411275
EPA 353.2 Rev. 2.0	05/19/2023			06/01/2023 10:16	Beverly Y. Sanders	2411274
	05/19/2023			06/01/2023 10:17	Beverly Y. Sanders	2411275
EPA 365.1 Rev. 2.0	05/19/2023	05/23/2023 14:40	Simonne.V. Calhoun	05/24/2023 11:40	Simonne.V. Calhoun	2411274
	05/19/2023	05/23/2023 14:40	Simonne.V. Calhoun	05/24/2023 11:57	Simonne.V. Calhoun	2411275
EPA 365.1 Rev. 2.0 dissolved	05/19/2023			05/19/2023 15:25	Elise M. Gillis	2411277
	05/19/2023			05/19/2023 15:38	Elise M. Gillis	2411276
EPA 8321B	05/19/2023	05/22/2023 09:00	Touraj Touran	05/22/2023 15:47	Touraj Touran	2411272
	05/19/2023	05/22/2023 09:00	Touraj Touran	05/22/2023 16:04	Touraj Touran	2411273
	05/19/2023	05/22/2023 09:00	Touraj Touran	05/23/2023 01:47	Touraj Touran	2411272
	05/19/2023	05/22/2023 09:00	Touraj Touran	05/23/2023 02:01	Touraj Touran	2411273