

Chemical Analysis Report

NW-DIST-2024-05-08-01

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

Event Description: **Algal Bloom Response - NW ROC**
Request ID: **RQ-2024-05-06-50**
Customer: **NW-DIST**
Project ID: **BLOOM-RESP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: Myranda Butler

For additional information please contact
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 11-JUN-2024 10:01



NON-CONFORMANCE REPORT INCLUDED

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 ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2487597	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P445393	
		Cylindrospermopsin	0.10	U	ug/L	P445392	
		Desmethyl microcystin LR	0.25	U	ug/L	P445392	
		Microcystin H11R	0.25	U	ug/L	P445392	
		Microcystin HtyR	0.25	U	ug/L	P445392	
		Microcystin LA	0.10	U	ug/L	P445392	
		Microcystin LF	0.10	U	ug/L	P445392	
		Microcystin LR	0.25	U	ug/L	P445392	
		Microcystin LW	0.25	U	ug/L	P445392	
		Microcystin LY	0.10	U	ug/L	P445392	
		Microcystin RR	0.10	U	ug/L	P445392	
		Microcystin WR	0.50	U	ug/L	P445392	
		Neosaxitoxin	0.50	U	ug/L	P445393	
		Microcystin YR	0.25	U	ug/L	P445392	
		Saxitoxin	0.50	U	ug/L	P445393	
Nodularin-R	0.10	U	ug/L	P445392			

Sample Location: Deerpoint Lake near center

Collection Date/Time: 05/07/2024 12:35

Field ID: NWHAB0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2487594	DEP SOP: NU-094-1	Color (true)	20	A	PCU	P445437	
2487595	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P445732	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.13	IY	mg N/L	P445696	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UYQ	mg N/L	P446223	
	EPA 365.1 Rev. 2.0	Total-P	0.008	Y	mg P/L	P445667	
2487596	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P445450	

Ref. Method and Comment:
EPA 350.1 Rev. 2.0: Sample was stored at room temperature for multiple days because of a power failure at the laboratory.
EPA 351.2 Rev. 2.0: Sample was stored at room temperature for multiple days because of a power failure at the laboratory.
EPA 353.2 Rev. 2.0: Sample was stored at room temperature for multiple days and analyzed out of hold time because of a power failure at the laboratory.
EPA 365.1 Rev. 2.0: Total-P: Sample was stored at room temperature for multiple days because of a power failure at the laboratory.

Non-Conformance Report

NCR ID: 10508

Event(s)

NW-DIST-2024-05-08-01

Job(s)

TLH-2024-05-08-08

Sample(s)

Test(s)

NCR Type: CUSTODY

NCR Category: General

Observation: Due to power outage caused by storm damages on 05/10/2024, samples exceeded maximum allowable temperature.

Resolution: Data will be qualified as appropriate.

Authorized by/Date: Sarah A Nixon 6/10/2024

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P445437

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445732

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445696

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P446223

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445667

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P445450

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

Reference Method: EPA 8321B
Batch ID: P445392

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: P445393

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: P445437

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445732

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445696

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P446223

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445667

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P445450

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

Reference Method: EPA 8321B
Batch ID: P445392

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	82.3		P	40 - 160
Desmethyl microcystin LR	89.2		P	40 - 160
Microcystin H1LR	89.5		P	40 - 160
Microcystin HtyR	95.9		P	40 - 160
Microcystin LA	90.2		P	40 - 160
Microcystin LF	94.9		P	40 - 160
Microcystin LR	98.3		P	40 - 160
Microcystin LW	99.2		P	40 - 160
Microcystin LY	97.1		P	40 - 160
Microcystin RR	94.6		P	40 - 160
Microcystin WR	96.3		P	40 - 160
Microcystin YR	104		P	40 - 160
Nodularin-R	94.5		P	40 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P445393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	116		P	40 - 150
Neosaxitoxin	84.0		P	40 - 150
Saxitoxin	90.8		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2487381	Ammonia-N	93.8	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2487595	Kjeldahl Nitrogen	101	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P446223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2491661	NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445667

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2487824	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P445450

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2487970	O-Phosphate-P	103	103	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P445392

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2487582	Cylindrospermopsin	82.4	71.9	P/P	40 - 160
2487582	Desmethyl microcystin LR	91.6	80.9	P/P	40 - 160
2487582	Microcystin HiLR	94.6	81.5	P/P	40 - 160
2487582	Microcystin HtyR	93.1	81.7	P/P	40 - 160
2487582	Microcystin LA	92.2	79.3	P/P	40 - 160
2487582	Microcystin LF	98.7	94.6	P/P	40 - 160
2487582	Microcystin LR	96.9	83.3	P/P	40 - 160
2487582	Microcystin LW	98.5	91.6	P/P	40 - 160
2487582	Microcystin LY	91.4	82.5	P/P	40 - 160
2487582	Microcystin RR	98.7	86.4	P/P	40 - 160
2487582	Microcystin WR	97.8	85.6	P/P	40 - 160
2487582	Microcystin YR	105	93.1	P/P	40 - 160
2487582	Nodularin-R	99.0	87.3	P/P	40 - 160

Reference Method: EPA 8321B
Batch ID: P445393

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2487582	Anatoxin-a	115	99.1	P/P	40 - 150
2487582	Neosaxitoxin	53.3	45.7	P/P	40 - 150
2487582	Saxitoxin	66.3	57.6	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P445437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487594	Color (true)	1.44	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P445732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487381	Ammonia-N	2.44	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P445696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487595	Kjeldahl Nitrogen	1.42	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P446223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2491661	NO2NO3-N	0.501	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P445667

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487824	Total-P	0.468	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P445450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487970	O-Phosphate-P	0.252	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P445392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487582	Cylindrospermopsin	13.5	Spike	P	0 - 30
2487582	Desmethyl microcystin LR	12.4	Spike	P	0 - 30
2487582	Microcystin HtIR	14.9	Spike	P	0 - 30
2487582	Microcystin HtyR	13.1	Spike	P	0 - 30
2487582	Microcystin LA	15.1	Spike	P	0 - 30
2487582	Microcystin LF	4.29	Spike	P	0 - 30
2487582	Microcystin LR	15.0	Spike	P	0 - 30
2487582	Microcystin LW	7.28	Spike	P	0 - 30
2487582	Microcystin LY	10.2	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P445392

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487582	Microcystin RR	13.3	Spike	P	0 - 30
2487582	Microcystin WR	13.3	Spike	P	0 - 30
2487582	Microcystin YR	11.9	Spike	P	0 - 30
2487582	Nodularin-R	12.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P445393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2487582	Anatoxin-a	15.2	Spike	P	0 - 30
2487582	Neosaxitoxin	15.3	Spike	P	0 - 30
2487582	Saxitoxin	14.0	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2487597
Field Sample ID: NWHAB0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Anatoxin-a 13C4	98.0	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	96.3	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A125751

Included Lab Sample IDs: 2487594

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.1	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A125757

Included Lab Sample IDs: 2487596

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.0	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A125762

Included Lab Sample IDs: 2487597

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	116	113	P/P	50 - 160
Neosaxitoxin	98.4	97.8	P/P	50 - 160
Saxitoxin	103	102	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A125787

Included Lab Sample IDs: 2487597

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	91.3	90.4	P/P	60 - 160
Desmethyl microcystin LR	98.1	96.9	P/P	60 - 160
Microcystin HILR	100	98.3	P/P	60 - 160
Microcystin HtyR	103	105	P/P	60 - 160
Microcystin LA	98.7	96.6	P/P	50 - 160
Microcystin LF	117	116	P/P	50 - 160
Microcystin LR	104	102	P/P	60 - 160
Microcystin LW	111	107	P/P	60 - 160
Microcystin LY	115	119	P/P	60 - 160
Microcystin RR	111	106	P/P	60 - 160
Microcystin WR	101	103	P/P	60 - 160
Microcystin YR	110	107	P/P	60 - 160
Nodularin-R	102	104	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A125888

Included Lab Sample IDs: 2487595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A125890

Included Lab Sample IDs: 2487595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.2	96.2	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A125915

Included Lab Sample IDs: 2487595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.7	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A126056

Included Lab Sample IDs: 2487595

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.0	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)	99.2				1.44	
EPA 350.1 Rev. 2.0	Ammonia-N	95.2	93.8	96.8			2.44
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	101	99.0			1.42
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	99.5	100			0.501
EPA 365.1 Rev. 2.0	Total-P	101	102	102			0.468
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.9	103	103			0.252
EPA 8321B	Anatoxin-a	116	115	99.1			15.2
	Cylindrospermopsin	82.3	82.4	71.9			13.5
	Desmethyl microcystin LR	89.2	91.6	80.9			12.4
	Microcystin HILR	89.5	94.6	81.5			14.9
	Microcystin HtyR	95.9	93.1	81.7			13.1
	Microcystin LA	90.2	92.2	79.3			15.1
	Microcystin LF	94.9	98.7	94.6			4.29
	Microcystin LR	98.3	96.9	83.3			15.0
	Microcystin LW	99.2	98.5	91.6			7.28
	Microcystin LY	97.1	91.4	82.5			10.2
	Microcystin RR	94.6	98.7	86.4			13.3
	Microcystin WR	96.3	97.8	85.6			13.3
	Microcystin YR	104	105	93.1			11.9
	Neosaxitoxin	84.0	53.3	45.7			15.3
	Nodularin-R	94.5	99.0	87.3			12.5
	Saxitoxin	90.8	66.3	57.6			14.0

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2487594
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2487595
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2487595
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2487595
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2487595
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2487596
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2487597
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2487597

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	05/08/2024			05/08/2024 13:46	Jessica K Wilks	2487594
EPA 350.1 Rev. 2.0	05/08/2024			05/28/2024 13:46	Khloe J Berg	2487595
EPA 351.2 Rev. 2.0	05/08/2024	05/28/2024 13:10	Simonne.V. Calhoun	05/30/2024 11:19	Robyn Blevins	2487595
EPA 353.2 Rev. 2.0	05/08/2024			06/07/2024 14:54	Fadila Guebre	2487595
EPA 365.1 Rev. 2.0	05/08/2024	05/24/2024 13:22	Adam P Silver	05/28/2024 15:14	Elise M. Gillis	2487595
EPA 365.1 Rev. 2.0 dissolved	05/08/2024			05/08/2024 15:06	Elise M. Gillis	2487596
EPA 8321B	05/08/2024	05/08/2024 11:00	Samatha Luckman	05/09/2024 02:02	Samatha Luckman	2487597
	05/08/2024	05/08/2024 11:00	Samatha Luckman	05/09/2024 13:25	Samatha Luckman	2487597