

Chemical Analysis Report

WQAP-2022-07-27-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

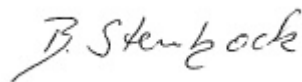
Event Description: **Algal Bloom Response - Orange Co**
Request ID: **RQ-2022-07-25-56**
Customer: **WQAP**
Project ID: **BLOOM-RESP**

Send Reports to:
FL Dept. of Environmental Protection
3319 Maguire Blvd
Orlando, FL 32083
Attn: Matthew Bearden

For additional information please contact
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 11-AUG-2022 11:49



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 Location: Lake Speer - NW Lobe

Collection Date/Time: 07/26/2022 09:50

Field ID: HABOC0009_LakeSpeer1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344156	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P417147	
		Cylindrospermopsin	0.10	U	ug/L	P417146	
		Desmethyl microcystin LR	0.25	U	ug/L	P417146	
		Microcystin HILR	0.25	U	ug/L	P417146	
		Microcystin HtyR	0.25	U	ug/L	P417146	
		Microcystin LA	0.10	U	ug/L	P417146	
		Microcystin LF	0.10	U	ug/L	P417146	
		Microcystin LR	0.32	I	ug/L	P417146	
		Microcystin LW	0.25	U	ug/L	P417146	
		Microcystin LY	0.10	U	ug/L	P417146	
		Microcystin RR	0.15	I	ug/L	P417146	
		Microcystin WR	0.50	U	ug/L	P417146	
		Microcystin YR	0.25	U	ug/L	P417146	
		Nodularin-R	0.10	U	ug/L	P417146	
2344158	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P417391	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P417282	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P417403	
	EPA 365.1 Rev. 2.0	Total-P	0.054		mg P/L	P417377	
2344160	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P417247	

Sample Location: Cypress Lake - WEST LOBE

Collection Date/Time: 07/26/2022 11:00

Field ID: HABOC0008_CypressLake2

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2344157	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P417147	
		Cylindrospermopsin	0.10	U	ug/L	P417146	
		Desmethyl microcystin LR	0.25	U	ug/L	P417146	
		Microcystin H1R	0.25	U	ug/L	P417146	
		Microcystin HtyR	0.25	U	ug/L	P417146	
		Microcystin LA	0.10	U	ug/L	P417146	
		Microcystin LF	0.10	U	ug/L	P417146	
		Microcystin LR	0.25	U	ug/L	P417146	
		Microcystin LW	0.25	U	ug/L	P417146	
		Microcystin LY	0.10	U	ug/L	P417146	
		Microcystin RR	0.10	U	ug/L	P417146	
		Microcystin WR	0.50	U	ug/L	P417146	
		Microcystin YR	0.25	U	ug/L	P417146	
		Nodularin-R	0.10	U	ug/L	P417146	
2344159	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P417391	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P417282	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P417403	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P417377	
2344161	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P417247	

Non-Conformance Report

NCR ID: 9486

Event(s)

WQAP-2022-07-27-01

Job(s)

TLH-2022-07-27-34

Sample(s)

2344157

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Sample Integrity

Observation: Sample received with cracked cap.

Resolution: Seal on cracked cap still intact upon receipt.
Cracked cap replaced.

Authorized by/Date: Kyle Klug 7/29/2022

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: EPA 350.1 Rev. 2.0
Batch ID: P417391

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417282

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417403

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P417377

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P417247

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

Reference Method: EPA 8321B
Batch ID: P417146

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: P417147

Component	Result	Code	Units
Anatoxin-a	0.25	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417391

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417282

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	103		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417403

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P417377

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P417247

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

Reference Method: EPA 8321B
Batch ID: P417146

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	89.4		P	40 - 150
Desmethyl microcystin LR	92.0		P	40 - 150
Microcystin HILR	81.3		P	40 - 150
Microcystin HtyR	84.5		P	40 - 150
Microcystin LA	81.6		P	40 - 150
Microcystin LF	115		P	40 - 150
Microcystin LR	99.5		P	40 - 150
Microcystin LW	102		P	40 - 150
Microcystin LY	73.4		P	40 - 150
Microcystin RR	93.3		P	40 - 150
Microcystin WR	94.6		P	40 - 150
Microcystin YR	88.8		P	40 - 150
Nodularin-R	83.8		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P417147

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	92.0		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417391

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344204	Ammonia-N	107	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P417282

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344159	Kjeldahl Nitrogen	106	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P417403

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2344111	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P417377

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2343987	Total-P	106	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P417247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2343974	O-Phosphate-P	101	106	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P417146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2343670	Cylindrospermopsin	89.3	92.7	P/P	40 - 150
2343670	Desmethyl microcystin LR	105	105	P/P	40 - 150
2343670	Microcystin HiLR	88.5	91.3	P/P	40 - 150
2343670	Microcystin HtyR	97.3	103	P/P	40 - 150
2343670	Microcystin LA	83.7	87.2	P/P	40 - 150
2343670	Microcystin LF	86.8	116	P/P	40 - 150
2343670	Microcystin LR	110	123	P/P	40 - 150
2343670	Microcystin LW	82.3	73.8	P/P	40 - 150
2343670	Microcystin LY	77.0	83.2	P/P	40 - 150
2343670	Microcystin RR	95.8	97.9	P/P	40 - 150
2343670	Microcystin WR	103	112	P/P	40 - 150
2343670	Microcystin YR	99.9	112	P/P	40 - 150
2343670	Nodularin-R	93.8	96.8	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P417147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2343514	Anatoxin-a	93.4	94.3	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P417391

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344204	Ammonia-N	3.19	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P417282

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344159	Kjeldahl Nitrogen	2.07	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P417403

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2344111	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P417377

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2343987	Total-P	1.93	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P417247

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2343974	O-Phosphate-P	4.75	Spike	P	0 - 20

Reference Method: EPA 8321B

Batch ID: P417146

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2343670	Cylindrospermopsin	3.77	Spike	P	0 - 30
2343670	Desmethyl microcystin LR	0.194	Spike	P	0 - 30
2343670	Microcystin H1LR	3.18	Spike	P	0 - 30
2343670	Microcystin HtyR	5.66	Spike	P	0 - 30
2343670	Microcystin LA	4.09	Spike	P	0 - 30
2343670	Microcystin LF	28.8	Spike	P	0 - 30
2343670	Microcystin LR	11.6	Spike	P	0 - 30
2343670	Microcystin LW	10.9	Spike	P	0 - 30
2343670	Microcystin LY	7.79	Spike	P	0 - 30
2343670	Microcystin RR	2.18	Spike	P	0 - 30
2343670	Microcystin WR	8.36	Spike	P	0 - 30
2343670	Microcystin YR	11.7	Spike	P	0 - 30
2343670	Nodularin-R	3.13	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8321B
Batch ID: P417147

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2343514	Anatoxin-a	0.889	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2344156

Field Sample ID: HABOC0009_LakeSpeer1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	132	P	30 - 160
EPA 8321B	Neosaxitoxin-15N7	79.3	P	30 - 160

Lab Sample ID: 2344157

Field Sample ID: HABOC0008_CypressLake2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	128	P	30 - 160
EPA 8321B	Neosaxitoxin-15N7	83.4	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A113732

Included Lab Sample IDs: 2344160, 2344161

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	100	P/P	90 - 110
O-Phosphate-P	102	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A113743

Included Lab Sample IDs: 2344156, 2344157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	87.8	88.2	P/P	50 - 160
Desmethyl microcystin LR	98.8	103	P/P	50 - 160
Microcystin HIR	86.4	86.3	P/P	50 - 160
Microcystin HtyR	94.2	97.1	P/P	50 - 160
Microcystin LA	96.3	92.3	P/P	50 - 160
Microcystin LF	120	106	P/P	50 - 160
Microcystin LR	95.4	102	P/P	50 - 160
Microcystin LW	89.3	77.3	P/P	50 - 160
Microcystin LY	87.0	82.4	P/P	50 - 160
Microcystin RR	93.0	94.2	P/P	50 - 160
Microcystin WR	110	112	P/P	50 - 160
Microcystin YR	86.0	96.8	P/P	50 - 160
Nodularin-R	88.1	85.1	P/P	50 - 160

Reference Method: EPA 8321B

Run ID: A113774

Included Lab Sample IDs: 2344156, 2344157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	94.7	92.9	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A113790

Included Lab Sample IDs: 2344158, 2344159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A113795

Included Lab Sample IDs: 2344158, 2344159

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A113807

Included Lab Sample IDs: 2344158, 2344159

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A113825

Included Lab Sample IDs: 2344158

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.9	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A113829

Included Lab Sample IDs: 2344159

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	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	
					LCS	MS
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	107	103		3.19
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	106	102		2.07
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	102	102		0.0
EPA 365.1 Rev. 2.0	Total-P	105	106	104		1.93
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	101	106		4.75
EPA 8321B	Anatoxin-a	92.0	93.4	94.3		0.889
	Cylindrospermopsin	89.4	89.3	92.7		3.77
	Desmethyl microcystin LR	92.0	105	105		0.194
	Microcystin HiLR	81.3	88.5	91.3		3.18
	Microcystin HtyR	84.5	97.3	103		5.66
	Microcystin LA	81.6	83.7	87.2		4.09
	Microcystin LF	115	86.8	116		28.8
	Microcystin LR	99.5	110	123		11.6
	Microcystin LW	102	82.3	73.8		10.9
	Microcystin LY	73.4	77.0	83.2		7.79
	Microcystin RR	93.3	95.8	97.9		2.18
	Microcystin WR	94.6	103	112		8.36
	Microcystin YR	88.8	99.9	112		11.7
	Nodularin-R	83.8	93.8	96.8		3.13

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2344158, 2344159
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2344158, 2344159
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2344158, 2344159
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2344158, 2344159
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2344160, 2344161
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2344156, 2344157
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2344156, 2344157

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	07/27/2022			07/29/2022 10:22	Ping Hua	2344158
	07/27/2022			07/29/2022 10:24	Ping Hua	2344159
EPA 351.2 Rev. 2.0	07/27/2022	07/28/2022 16:20	Simonne.V. Calhoun	07/29/2022 14:45	Samantha L Bates	2344158
	07/27/2022	07/28/2022 16:20	Simonne.V. Calhoun	07/29/2022 14:47	Samantha L Bates	2344159
EPA 353.2 Rev. 2.0	07/27/2022			07/29/2022 10:50	Beverly Y. Sanders	2344158
	07/27/2022			07/29/2022 10:52	Beverly Y. Sanders	2344159
EPA 365.1 Rev. 2.0	07/27/2022	07/29/2022 15:30	Simonne.V. Calhoun	08/01/2022 10:26	James L Waggeberby	2344158
	07/27/2022	07/29/2022 15:30	Simonne.V. Calhoun	08/01/2022 14:17	James L Waggeberby	2344159
EPA 365.1 Rev. 2.0 dissolved	07/27/2022			07/27/2022 12:33	Chandler E Cox	2344160
	07/27/2022			07/27/2022 12:38	Chandler E Cox	2344161
EPA 8321B	07/27/2022	07/27/2022 12:00	Manjita Shrestha	07/27/2022 17:35	Manjita Shrestha	2344156
	07/27/2022	07/27/2022 12:00	Manjita Shrestha	07/27/2022 17:52	Manjita Shrestha	2344157
	07/27/2022	07/27/2022 12:00	Manjita Shrestha	07/28/2022 15:58	Manjita Shrestha	2344156
	07/27/2022	07/27/2022 12:00	Manjita Shrestha	07/28/2022 16:12	Manjita Shrestha	2344157