Chemical Analysis Report

WQAP-2023-03-28-01

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

Event Description: **Algae Bloom Response NEROC-as needed**
Request ID: **RQ-2023-03-06-56**
Customer: **WQAP**
Project ID: **BLOOM-RESP**

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Certified by: Colin Wright, Program Administrator

Date Certified: 10-APR-2023 11:40

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: GEORGES LAKE AT CENTER HAB **Collection Date/Time: 03/27/2023 11:50**

Field ID: NEHAB0098 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2396579	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P427810	
		Cylindrospermopsin	0.10	U	ug/L	P427745	
		Desmethyl microcystin LR	0.25	U	ug/L	P427745	
		Microcystin HilR	0.25	U	ug/L	P427745	
		Microcystin HtyR	0.25	U	ug/L	P427745	
		Microcystin LA	0.10	U	ug/L	P427745	
		Microcystin LF	0.10	U	ug/L	P427745	
		Microcystin LR	0.94	I	ug/L	P427745	
		Microcystin LW	0.25	U	ug/L	P427745	
		Microcystin LY	0.10	U	ug/L	P427745	
		Microcystin RR	1.7		ug/L	P427745	
		Microcystin WR	0.50	U	ug/L	P427745	
		Neosaxitoxin	0.50	U	ug/L	P427810	
		Microcystin YR	0.25	U	ug/L	P427745	
		Saxitoxin	0.50	U	ug/L	P427810	
		Nodularin-R	0.10	U	ug/L	P427745	
2396588	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P427877	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P427794	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427993	
	EPA 365.1 Rev. 2.0	Total-P	0.058		mg P/L	P427870	
2396590	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P427765	

Sample Location: GEORGES LAKE AT BOAT RAMP **Collection Date/Time: 03/27/2023 12:15**

Field ID: NEHAB0099 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2396580	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P427810	
		Cylindrospermopsin	0.10	U	ug/L	P427745	
		Desmethyl microcystin LR	0.25	U	ug/L	P427745	
		Microcystin HilR	0.25	U	ug/L	P427745	
		Microcystin HtyR	0.25	U	ug/L	P427745	
		Microcystin LA	0.10	U	ug/L	P427745	
		Microcystin LF	0.10	U	ug/L	P427745	
		Microcystin LR	1.4		ug/L	P427745	
		Microcystin LW	0.25	U	ug/L	P427745	
		Microcystin LY	0.10	U	ug/L	P427745	
		Microcystin RR	2.0		ug/L	P427745	
		Microcystin WR	0.50	U	ug/L	P427745	
		Neosaxitoxin	0.50	U	ug/L	P427810	
		Microcystin YR	0.25	U	ug/L	P427745	
		Saxitoxin	0.50	U	ug/L	P427810	
		Nodularin-R	0.10	U	ug/L	P427745	
2396589	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P427877	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P427794	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427993	
	EPA 365.1 Rev. 2.0	Total-P	0.093		mg P/L	P427870	
2396591	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P427765	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427877

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427794

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427993

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427870

Component	Result	Code	Units
Total-P	0.010	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P427765

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

Reference Method: EPA 8321B
Batch ID: P427745

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: P427810

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: P427877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427794

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427993

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: P427870

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P427765

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

Reference Method: EPA 8321B
Batch ID: P427745

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cylindrospermopsin	80.3		P	40 - 150
Desmethyl microcystin LR	102		P	40 - 150
Microcystin HilR	111		P	40 - 150
Microcystin HtyR	109		P	40 - 150
Microcystin LA	90.2		P	40 - 150
Microcystin LF	111		P	40 - 150
Microcystin LR	102		P	40 - 150
Microcystin LW	102		P	40 - 150
Microcystin LY	93.7		P	40 - 150
Microcystin RR	96.5		P	40 - 150
Microcystin WR	115		P	40 - 150
Microcystin YR	111		P	40 - 150
Nodularin-R	98.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P427810

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	60.1		P	40 - 150
Neosaxitoxin	83.5		P	40 - 150
Saxitoxin	68.0		P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396564	Ammonia-N	98.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427794

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396564	Kjeldahl Nitrogen	101	93.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427993

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396535	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427870

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396603	Total-P	98.5	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P427765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396517	O-Phosphate-P	99.5	99.3	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P427745

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396579	Cylindrospermopsin	82.8	78.0	P/P	40 - 150
2396579	Desmethyl microcystin LR	106	103	P/P	40 - 150
2396579	Microcystin HilR	119	108	P/P	40 - 150
2396579	Microcystin HtyR	109	108	P/P	40 - 150
2396579	Microcystin LA	82.4	90.5	P/P	40 - 150
2396579	Microcystin LF	105	98.4	P/P	40 - 150
2396579	Microcystin LR	104	98.6	P/P	40 - 150
2396579	Microcystin LW	112	103	P/P	40 - 150
2396579	Microcystin LY	84.7	85.5	P/P	40 - 150
2396579	Microcystin RR	92.0	95.1	P/P	40 - 150
2396579	Microcystin WR	113	112	P/P	40 - 150
2396579	Microcystin YR	110	111	P/P	40 - 150
2396579	Nodularin-R	99.7	99.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P427810

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2396579	Anatoxin-a	64.8	65.1	P/P	40 - 150
2396579	Neosaxitoxin	74.3	70.2	P/P	40 - 150
2396579	Saxitoxin	63.1	58.3	P/P	40 - 150

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396564	Ammonia-N	0.968	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427794

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396564	Kjeldahl Nitrogen	6.81	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396535	NO2NO3-N	0.266	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396603	Total-P	0.450	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P427765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396517	O-Phosphate-P	0.164	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P427745

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396579	Cylindrospermopsin	5.93	Spike	P	0 - 30
2396579	Desmethyl microcystin LR	3.24	Spike	P	0 - 30
2396579	Microcystin HilR	10.2	Spike	P	0 - 30
2396579	Microcystin HtyR	0.686	Spike	P	0 - 30
2396579	Microcystin LA	9.26	Spike	P	0 - 30
2396579	Microcystin LF	6.55	Spike	P	0 - 30
2396579	Microcystin LR	4.81	Spike	P	0 - 30
2396579	Microcystin LW	8.43	Spike	P	0 - 30
2396579	Microcystin LY	0.863	Spike	P	0 - 30
2396579	Microcystin RR	2.81	Spike	P	0 - 30
2396579	Microcystin WR	0.771	Spike	P	0 - 30
2396579	Microcystin YR	1.10	Spike	P	0 - 30
2396579	Nodularin-R	0.704	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P427810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2396579	Anatoxin-a	0.393	Spike	P	0 - 30
2396579	Neosaxitoxin	5.68	Spike	P	0 - 30
2396579	Saxitoxin	7.87	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2396579
Field Sample ID: NEHAB0098

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	123	P	30 - 160
EPA 8321B	Neosaxitoxin-15N7	66.1	P	30 - 160

Lab Sample ID: 2396580
Field Sample ID: NEHAB0099

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	108	P	30 - 160
EPA 8321B	Neosaxitoxin-15N7	72.3	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A118238
Included Lab Sample IDs: 2396590, 2396591

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.5	98.2	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A118292
Included Lab Sample IDs: 2396579, 2396580

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cylindrospermopsin	73.2	80.5	P/P	50 - 160
Desmethyl microcystin LR	102	113	P/P	50 - 160
Microcystin HilR	108	115	P/P	50 - 160
Microcystin HtyR	105	109	P/P	50 - 160
Microcystin LA	83.5	109	P/P	50 - 160
Microcystin LF	87.0	95.3	P/P	50 - 160
Microcystin LR	106	110	P/P	50 - 160
Microcystin LW	93.0	118	P/P	50 - 160
Microcystin LY	83.2	100	P/P	50 - 160
Microcystin RR	90.2	97.5	P/P	50 - 160
Microcystin WR	108	107	P/P	50 - 160
Microcystin YR	107	114	P/P	50 - 160
Nodularin-R	95.5	105	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A118293
Included Lab Sample IDs: 2396588, 2396589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	99.1	P/P	90 - 110
Ammonia-N	99.3	99.6	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A118300
Included Lab Sample IDs: 2396579, 2396580

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	61.1	60.1	P/P	50 - 160
Anatoxin-a	62.4	61.4	P/P	50 - 160
Neosaxitoxin	78.1	76.0	P/P	50 - 160
Neosaxitoxin	83.6	76.6	P/P	50 - 160
Saxitoxin	65.8	67.5	P/P	50 - 160
Saxitoxin	68.0	65.1	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A118317
Included Lab Sample IDs: 2396588, 2396589

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A118347
Included Lab Sample IDs: 2396588, 2396589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A118361
Included Lab Sample IDs: 2396588, 2396589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	104	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	95.8	98.4	100			0.968
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.8	101	93.2			6.81
EPA 353.2 Rev. 2.0	NO2NO3-N	104	102	102			0.266
EPA 365.1 Rev. 2.0	Total-P	98.7	98.5	99.3			0.450
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.4	99.5	99.3			0.164
EPA 8321B	Anatoxin-a	60.1	64.8	65.1			0.393
	Cylindrospermopsin	80.3	82.8	78.0			5.93
	Desmethyl microcystin LR	102	106	103			3.24
	Microcystin HilR	111	119	108			10.2
	Microcystin HtyR	109	109	108			0.686
	Microcystin LA	90.2	82.4	90.5			9.26
	Microcystin LF	111	105	98.4			6.55
	Microcystin LR	102	104	98.6			4.81
	Microcystin LW	102	112	103			8.43
	Microcystin LY	93.7	84.7	85.5			0.863
	Microcystin RR	96.5	92.0	95.1			2.81
	Microcystin WR	115	113	112			0.771
	Microcystin YR	111	110	111			1.10
	Neosaxitoxin	83.5	74.3	70.2			5.68
	Nodularin-R	98.0	99.7	99.0			0.704
	Saxitoxin	68.0	63.1	58.3			7.87

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2396588, 2396589
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2396588, 2396589
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2396588, 2396589
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2396588, 2396589
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2396590, 2396591
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2396579, 2396580
EPA 8321B	Saxitoxin in water matrices by HPLC/MS/MS	2396579, 2396580

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	03/28/2023			03/30/2023 12:46	Khloe J Berg	2396589
	03/28/2023			03/30/2023 13:38	Khloe J Berg	2396588
EPA 351.2 Rev. 2.0	03/28/2023	03/30/2023 12:39	Simonne.V. Calhoun	04/03/2023 14:38	Samantha L Bates	2396588
	03/28/2023	03/30/2023 12:39	Simonne.V. Calhoun	04/03/2023 14:40	Samantha L Bates	2396589
EPA 353.2 Rev. 2.0	03/28/2023			04/04/2023 10:01	Beverly Y. Sanders	2396588
	03/28/2023			04/04/2023 10:02	Beverly Y. Sanders	2396589
EPA 365.1 Rev. 2.0	03/28/2023	03/30/2023 02:30	Alexis Price	03/31/2023 12:58	James L Waggerby	2396588
	03/28/2023	03/30/2023 02:30	Alexis Price	03/31/2023 12:59	James L Waggerby	2396589
EPA 365.1 Rev. 2.0 dissolved	03/28/2023			03/28/2023 15:16	Elise M. Gillis	2396590
	03/28/2023			03/28/2023 15:17	Elise M. Gillis	2396591
EPA 8321B	03/28/2023	03/30/2023 08:00	Manjita Shrestha	03/30/2023 10:10	Manjita Shrestha	2396579
	03/28/2023	03/30/2023 08:00	Manjita Shrestha	03/30/2023 10:27	Manjita Shrestha	2396580
	03/28/2023	03/30/2023 08:00	Manjita Shrestha	03/30/2023 15:46	Manjita Shrestha	2396580
	03/28/2023	03/30/2023 08:00	Manjita Shrestha	03/31/2023 08:04	Manjita Shrestha	2396579