

Chemical Analysis Report

WQAP-2022-04-12-01

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

Event Description: **Algal Bloom Response - CEROC**
Request ID: **RQ-2022-03-21-11**
Customer: **WQAP**
Project ID: **BLOOM-RESP**

Send Reports to:
FL Dept. of Environmental Protection
3319 Maguire Blvd. Suite 232
Orlando, FL 32803
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 29-APR-2022 13:06

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first 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: Dead River Canal - Bluegill Ave

Collection Date/Time: 04/11/2022 11:45

Field ID: HABCE0115_DeadRiverCanal

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318196	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P412242	
		Cylindrospermopsin	0.10	U	ug/L	P412242	
		Desmethyl microcystin LR	0.25	U	ug/L	P412242	
		Microcystin HilR**	0.25	U	ug/L	P412242	RPD
		Microcystin HtyR**	0.25	U	ug/L	P412242	RPD
		Microcystin LA	0.10	U	ug/L	P412242	
		Microcystin LF	0.10	U	ug/L	P412242	
		Microcystin LR	0.25	U	ug/L	P412242	
		Microcystin LW	0.25	U	ug/L	P412242	
		Microcystin LY	0.10	U	ug/L	P412242	
		Microcystin RR	0.10	U	ug/L	P412242	
		Microcystin WR	0.50	U	ug/L	P412242	RPD
		Microcystin YR	0.25	U	ug/L	P412242	
		Nodularin-R**	0.10	U	ug/L	P412242	
2318198	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P412376	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P412523	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P412335	
	EPA 365.1 Rev. 2.0	Total-P	0.28		mg P/L	P412447	
2318200	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.072		mg P/L	P412255	

Sample Location: Lake Sue - Lakeshore Dr. West Lobe

Collection Date/Time: 04/11/2022 13:24

Field ID: HABCE0110_LakeSue1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318197	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P412242	
		Cylindrospermopsin	0.10	U	ug/L	P412242	
		Desmethyl microcystin LR	0.25	U	ug/L	P412242	
		Microcystin HIR**	0.25	U	ug/L	P412242	RPD
		Microcystin HtyR**	0.25	U	ug/L	P412242	RPD
		Microcystin LA	0.56		ug/L	P412242	
		Microcystin LF	0.10	U	ug/L	P412242	
		Microcystin LR	0.25	U	ug/L	P412242	
		Microcystin LW	0.25	U	ug/L	P412242	
		Microcystin LY	0.10	U	ug/L	P412242	
		Microcystin RR	0.10	U	ug/L	P412242	
		Microcystin WR	0.50	U	ug/L	P412242	RPD
		Microcystin YR	0.25	U	ug/L	P412242	
		Nodularin-R**	0.10	U	ug/L	P412242	
2318199	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P412376	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P412525	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P412335	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P412447	
2318201	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P412255	

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412376

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412523

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412525

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412335

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412447

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P412255

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

Reference Method: EPA 8321B
Batch ID: P412242

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

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412376

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412523

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412525

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: P412335

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412447

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P412255

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.4		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P412242

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	94.9		P	40 - 150
Cylindrospermopsin	93.9		P	40 - 150
Desmethyl microcystin LR	102		P	40 - 150
Microcystin H1LR	94.8		P	40 - 150
Microcystin HtyR	103		P	40 - 150
Microcystin LA	98.6		P	40 - 150
Microcystin LF	105		P	40 - 150
Microcystin LR	87.6		P	40 - 150
Microcystin LW	102		P	40 - 150
Microcystin LY	93.3		P	40 - 150
Microcystin RR	99.8		P	40 - 150
Microcystin WR	95.7		P	40 - 150
Microcystin YR	105		P	40 - 150
Nodularin-R	97.1		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P412376

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318067	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P412523

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318070	Kjeldahl Nitrogen	97.3	94.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P412525

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2317902	Kjeldahl Nitrogen	94.6	96.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P412335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318198	NO2NO3-N	97.0	96.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P412447

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318070	Total-P	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P412255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318201	O-Phosphate-P	95.9	98.4	P/P	90 - 110

Reference Method: EPA 8321B

Batch ID: P412242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318161	Anatoxin-a	95.6	125	P/P	40 - 150
2318161	Cylindrospermopsin	100	124	P/P	40 - 150
2318161	Desmethyl microcystin LR	100	132	P/P	40 - 150
2318161	Microcystin H1R	93.8	131	P/P	40 - 150
2318161	Microcystin HtyR	98.1	133	P/P	40 - 150
2318161	Microcystin LA	97.0	123	P/P	40 - 150
2318161	Microcystin LF	102	130	P/P	40 - 150
2318161	Microcystin LR	102	121	P/P	40 - 150
2318161	Microcystin LW	98.9	128	P/P	40 - 150
2318161	Microcystin LY	99.3	120	P/P	40 - 150
2318161	Microcystin RR	98.0	123	P/P	40 - 150
2318161	Microcystin WR	90.3	126	P/P	40 - 150
2318161	Microcystin YR	100	122	P/P	40 - 150
2318161	Nodularin-R	107	131	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412376

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318067	Ammonia-N	1.52	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318070	Kjeldahl Nitrogen	1.93	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2317902	Kjeldahl Nitrogen	1.25	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318198	NO2NO3-N	0.482	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412447

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318070	Total-P	1.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P412255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318201	O-Phosphate-P	2.57	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P412242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318161	Anatoxin-a	26.7	Spike	P	0 - 30
2318161	Cylindrospermopsin	21.7	Spike	P	0 - 30
2318161	Desmethyl microcystin LR	27.5	Spike	P	0 - 30
2318161	Microcystin HiLR	33.0	Spike	F	0 - 30
2318161	Microcystin HtyR	30.1	Spike	F	0 - 30
2318161	Microcystin LA	24.1	Spike	P	0 - 30
2318161	Microcystin LF	23.9	Spike	P	0 - 30
2318161	Microcystin LR	17.6	Spike	P	0 - 30
2318161	Microcystin LW	26.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P412242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318161	Microcystin LY	18.9	Spike	P	0 - 30
2318161	Microcystin RR	23.0	Spike	P	0 - 30
2318161	Microcystin WR	33.2	Spike	F	0 - 30
2318161	Microcystin YR	19.4	Spike	P	0 - 30
2318161	Nodularin-R	19.8	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2318196

Field Sample ID: HABCE0115_DeadRiverCanal

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	113	P	30 - 160

Lab Sample ID: 2318197

Field Sample ID: HABCE0110_LakeSue1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR ethyl-d5	112	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A111431

Included Lab Sample IDs: 2318200, 2318201

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111459

Included Lab Sample IDs: 2318198, 2318199

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111476

Included Lab Sample IDs: 2318198, 2318199

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	98.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A111482

Included Lab Sample IDs: 2318196, 2318197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	107	110	P/P	50 - 160
Cylindrospermopsin	104	104	P/P	60 - 160
Desmethyl microcystin LR	100	103	P/P	60 - 160
Microcystin H1R	112	108	P/P	60 - 160
Microcystin HtyR	107	111	P/P	60 - 160
Microcystin LA	98.6	110	P/P	50 - 160
Microcystin LF	112	110	P/P	60 - 160
Microcystin LR	108	104	P/P	60 - 160
Microcystin LW	99.9	109	P/P	60 - 160
Microcystin LY	106	109	P/P	60 - 160
Microcystin RR	102	110	P/P	60 - 160
Microcystin WR	109	113	P/P	60 - 160
Microcystin YR	105	101	P/P	60 - 160
Nodularin-R	109	104	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111610

Included Lab Sample IDs: 2318198

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111611

Included Lab Sample IDs: 2318199

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111625

Included Lab Sample IDs: 2318198

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.4	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111634

Included Lab Sample IDs: 2318199

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	109	110	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	Precision SMP	MS
EPA 350.1 Rev. 2.0	Ammonia-N	97.8	101	103			1.52
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.2	97.3	94.3			1.93
	Kjeldahl Nitrogen	100	94.6	96.0			1.25
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	97.0	96.6			0.482
EPA 365.1 Rev. 2.0	Total-P	99.0	100	101			1.06
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	95.9	98.4			2.57
EPA 8321B	Anatoxin-a	94.9	95.6	125			26.7
	Cylindrospermopsin	93.9	100	124			21.7
	Desmethyl microcystin LR	102	100	132			27.5
	Microcystin HiLR	94.8	93.8	131			33.0
	Microcystin HtyR	103	98.1	133			30.1
	Microcystin LA	98.6	97.0	123			24.1
	Microcystin LF	105	102	130			23.9
	Microcystin LR	87.6	102	121			17.6
	Microcystin LW	102	98.9	128			26.0
	Microcystin LY	93.3	99.3	120			18.9
	Microcystin RR	99.8	98.0	123			23.0
	Microcystin WR	95.7	90.3	126			33.2
	Microcystin YR	105	100	122			19.4
	Nodularin-R	97.1	107	131			19.8

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2318198, 2318199
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2318198, 2318199
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2318198, 2318199
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2318198, 2318199
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2318200, 2318201
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2318196, 2318197

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	04/12/2022			04/14/2022 14:18	Judith K. Clark	2318199
	04/12/2022			04/14/2022 14:19	Judith K. Clark	2318198
EPA 351.2 Rev. 2.0	04/12/2022	04/20/2022 14:26	Samantha L Bates	04/21/2022 13:43	Samantha L Bates	2318198
	04/12/2022	04/20/2022 14:26	Samantha L Bates	04/22/2022 11:09	Alexandra J Mattheus	2318199
EPA 353.2 Rev. 2.0	04/12/2022			04/13/2022 15:54	Nathaniel J Jones	2318198
	04/12/2022			04/13/2022 16:02	Nathaniel J Jones	2318199
EPA 365.1 Rev. 2.0	04/12/2022	04/19/2022 14:35	Simonne.V. Calhoun	04/20/2022 18:34	Sarah A Nixon	2318198
	04/12/2022	04/19/2022 14:35	Simonne.V. Calhoun	04/21/2022 14:33	James L Waggerby	2318199
EPA 365.1 Rev. 2.0 dissolved	04/12/2022			04/12/2022 14:14	James L Waggerby	2318201
	04/12/2022			04/12/2022 14:19	James L Waggerby	2318200
EPA 8321B	04/12/2022	04/14/2022 08:00	Manjita Shrestha	04/14/2022 10:27	Manjita Shrestha	2318196
	04/12/2022	04/14/2022 08:00	Manjita Shrestha	04/14/2022 10:44	Manjita Shrestha	2318197