Chemical Analysis Report

WQAP-2021-05-25-02

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

Event Description: **Algal Bloom Response - SE ROC**
Request ID: **RQ-2021-05-24-52**
Customer: **WQAP**
Project ID: **BLOOM-RESP**

Send Reports to:
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Jordan Skaggs

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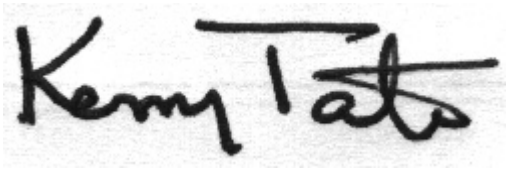
Date Certified: 15-JUN-2021 10:50



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: S308_Lakeside **Collection Date/Time: 05/24/2021 10:40**

Field ID: SEHAB0044 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2249751	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P398658	
		Cylindrospermopsin	0.10	U	ug/L	P398658	
		Desmethyl microcystin LR	0.25	U	ug/L	P398658	
		Microcystin HilR**	0.25	U	ug/L	P398658	
		Microcystin HtyR**	0.25	U	ug/L	P398658	
		Microcystin LA	0.13	I	ug/L	P398658	
		Microcystin LF	0.10	U	ug/L	P398658	
		Microcystin LR	1.8		ug/L	P398658	
		Microcystin LW	0.25	U	ug/L	P398658	
		Microcystin LY	0.10	U	ug/L	P398658	
		Microcystin RR	0.10	U	ug/L	P398658	
		Microcystin WR	0.50	U	ug/L	P398658	
		Microcystin YR	0.25	U	ug/L	P398658	
		Nodularin-R**	0.10	U	ug/L	P398658	
2249753	EPA 350.1 Rev. 2.0	Ammonia-N	0.080		mg N/L	P399183	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P398947	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.40		mg N/L	P398775	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P399032	
2249755	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.096		mg P/L	P398749	

Sample Location: S308_Canalside **Collection Date/Time: 05/24/2021 11:00**

Field ID: SEHAB0045 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2249752	EPA 8321B	Anatoxin-a	0.25	U	ug/L	P398658	
		Cylindrospermopsin	0.10	U	ug/L	P398658	
		Desmethyl microcystin LR	0.25	U	ug/L	P398658	
		Microcystin HilR**	0.25	U	ug/L	P398658	
		Microcystin HtyR**	0.25	U	ug/L	P398658	
		Microcystin LA	0.10	U	ug/L	P398658	
		Microcystin LF	0.10	U	ug/L	P398658	
		Microcystin LR	0.45	I	ug/L	P398658	
		Microcystin LW	0.25	U	ug/L	P398658	
		Microcystin LY	0.10	U	ug/L	P398658	
		Microcystin RR	0.10	U	ug/L	P398658	
		Microcystin WR	0.50	U	ug/L	P398658	
		Microcystin YR	0.25	U	ug/L	P398658	
		Nodularin-R**	0.10	U	ug/L	P398658	
2249754	EPA 350.1 Rev. 2.0	Ammonia-N	0.15		mg N/L	P399450	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P398947	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.41		mg N/L	P398775	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P399032	
2249756	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P398749	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399183

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399450

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398947

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398775

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399032

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398749

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

Reference Method: EPA 8321B
Batch ID: P398658

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 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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399183

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399450

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398947

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398775

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399032

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.6		P	90 - 110

Reference Method: EPA 8321B
Batch ID: P398658

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Anatoxin-a	109		P	40 - 150
Cylindrospermopsin	109		P	40 - 150
Desmethyl microcystin LR	82.9		P	40 - 150
Microcystin HilR	85.9		P	40 - 150
Microcystin HtyR	77.6		P	40 - 150
Microcystin LA	99.9		P	40 - 150
Microcystin LF	98.0		P	40 - 150
Microcystin LR	78.4		P	40 - 150
Microcystin LW	93.0		P	40 - 150
Microcystin LY	84.1		P	40 - 150
Microcystin RR	98.9		P	40 - 150
Microcystin WR	83.5		P	40 - 150
Microcystin YR	75.5		P	40 - 150
Nodularin-R	96.9		P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249557	Ammonia-N	98.4	99.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399450

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249682	Ammonia-N	94.6	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249618	Kjeldahl Nitrogen	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249617	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399032

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249753	Total-P	102	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249782	O-Phosphate-P	94.2	97.1	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P398658

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2249123	Anatoxin-a	104	95.8	P/P	40 - 150
2249123	Cylindrospermopsin	103	96.4	P/P	40 - 150
2249123	Desmethyl microcystin LR	94.3	95.2	P/P	40 - 150
2249123	Microcystin HilR	92.5	87.6	P/P	40 - 150
2249123	Microcystin HtyR	79.7	81.1	P/P	40 - 150
2249123	Microcystin LA	95.8	90.8	P/P	40 - 150
2249123	Microcystin LF	96.7	96.6	P/P	40 - 150
2249123	Microcystin LR	105	91.7	P/P	40 - 150
2249123	Microcystin LW	91.0	89.4	P/P	40 - 150
2249123	Microcystin LY	85.3	82.1	P/P	40 - 150
2249123	Microcystin RR	101	95.0	P/P	40 - 150
2249123	Microcystin WR	87.7	87.1	P/P	40 - 150
2249123	Microcystin YR	76.9	74.2	P/P	40 - 150
2249123	Nodularin-R	110	105	P/P	40 - 150

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249557	Ammonia-N	0.746	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249682	Ammonia-N	3.19	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249618	Kjeldahl Nitrogen	0.196	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249617	NO2NO3-N	0.604	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P399032

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249753	Total-P	1.16	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249782	O-Phosphate-P	3.03	Spike	P	0 - 20

Reference Method: EPA 8321B
Batch ID: P398658

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249123	Anatoxin-a	7.89	Spike	P	0 - 30
2249123	Cylindrospermopsin	6.37	Spike	P	0 - 30
2249123	Desmethyl microcystin LR	1.01	Spike	P	0 - 30
2249123	Microcystin HilR	5.44	Spike	P	0 - 30
2249123	Microcystin HtyR	1.77	Spike	P	0 - 30
2249123	Microcystin LA	5.35	Spike	P	0 - 30
2249123	Microcystin LF	0.150	Spike	P	0 - 30
2249123	Microcystin LR	7.80	Spike	P	0 - 30
2249123	Microcystin LW	1.77	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P398658

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2249123	Microcystin LY	3.80	Spike	P	0 - 30
2249123	Microcystin RR	6.44	Spike	P	0 - 30
2249123	Microcystin WR	0.713	Spike	P	0 - 30
2249123	Microcystin YR	3.64	Spike	P	0 - 30
2249123	Nodularin-R	4.48	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2249751
Field Sample ID: SEHAB0044

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR-d7	80.6	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	81.4	P	30 - 160

Lab Sample ID: 2249752
Field Sample ID: SEHAB0045

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Microcystin LR-d7	73.4	P	30 - 160
EPA 8321B	Microcystin LR ethyl-d5	70.1	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A105645
Included Lab Sample IDs: 2249751, 2249752

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Anatoxin-a	90.0	101	P/P	50 - 160
Cylindrospermopsin	99.7	106	P/P	50 - 160
Desmethyl microcystin LR	84.9	83.5	P/P	50 - 160
Microcystin HilR	82.8	88.6	P/P	50 - 160
Microcystin HtyR	75.7	80.4	P/P	50 - 160
Microcystin LA	97.5	99.1	P/P	50 - 160
Microcystin LF	104	106	P/P	50 - 160
Microcystin LR	80.9	79.9	P/P	50 - 160
Microcystin LW	92.3	95.4	P/P	50 - 160
Microcystin LY	87.1	89.0	P/P	50 - 160
Microcystin RR	93.4	99.6	P/P	50 - 160
Microcystin WR	86.6	86.8	P/P	50 - 160
Microcystin YR	77.3	71.0	P/P	50 - 160
Nodularin-R	95.6	98.1	P/P	50 - 160

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A105649
Included Lab Sample IDs: 2249755, 2249756

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.1	98.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A105660
Included Lab Sample IDs: 2249753, 2249754

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A105794
Included Lab Sample IDs: 2249753, 2249754

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.6	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A105810
Included Lab Sample IDs: 2249753, 2249754

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	102	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A105849
Included Lab Sample IDs: 2249753

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	99.2	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A105965
Included Lab Sample IDs: 2249754

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.6	95.5	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	SMP	MS
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	98.4	99.4			0.746
	Ammonia-N	96.0	94.6	98.6			3.19
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.8	101	101			0.196
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	101	100			0.604
EPA 365.1 Rev. 2.0	Total-P	106	102	104			1.16
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.6	94.2	97.1			3.03
EPA 8321B	Anatoxin-a	109	104	95.8			7.89
	Cylindrospermopsin	109	103	96.4			6.37
	Desmethyl microcystin LR	82.9	94.3	95.2			1.01
	Microcystin HilR	85.9	92.5	87.6			5.44
	Microcystin HtyR	77.6	79.7	81.1			1.77
	Microcystin LA	99.9	95.8	90.8			5.35
	Microcystin LF	98.0	96.7	96.6			0.150
	Microcystin LR	78.4	105	91.7			7.80
	Microcystin LW	93.0	91.0	89.4			1.77
	Microcystin LY	84.1	85.3	82.1			3.80
	Microcystin RR	98.9	101	95.0			6.44
	Microcystin WR	83.5	87.7	87.1			0.713
	Microcystin YR	75.5	76.9	74.2			3.64
	Nodularin-R	96.9	110	105			4.48

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2249753, 2249754
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2249753, 2249754
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2249753, 2249754
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2249753, 2249754
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2249755, 2249756
EPA 8321B	Microcystins in water matrices by HPLC/MS/MS	2249751, 2249752

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	05/25/2021			06/03/2021 15:25	Roberta Tatti	2249753
	05/25/2021			06/09/2021 13:58	Ping Hua	2249754
EPA 351.2 Rev. 2.0	05/25/2021	05/27/2021 13:30	Benjamin T. Nordmann	06/01/2021 13:23	Virginia P. Brown	2249753
	05/25/2021	05/27/2021 13:30	Benjamin T. Nordmann	06/01/2021 13:24	Virginia P. Brown	2249754
EPA 353.2 Rev. 2.0	05/25/2021			05/26/2021 09:34	Beverly Y. Sanders	2249753
	05/25/2021			05/26/2021 09:35	Beverly Y. Sanders	2249754
EPA 365.1 Rev. 2.0	05/25/2021	06/01/2021 13:09	Yen Ta	06/02/2021 10:31	Shengyu Ding	2249753
	05/25/2021	06/01/2021 13:09	Yen Ta	06/02/2021 10:34	Shengyu Ding	2249754
EPA 365.1 Rev. 2.0 dissolved	05/25/2021			05/25/2021 15:32	Ping Hua	2249756
	05/25/2021			05/25/2021 15:34	Ping Hua	2249755
EPA 8321B	05/25/2021	05/25/2021 11:30	Pramila Ghimire	05/25/2021 14:42	Pramila Ghimire	2249751
	05/25/2021	05/25/2021 11:30	Pramila Ghimire	05/25/2021 14:59	Pramila Ghimire	2249752