

Chemical Analysis Report

SO-DIST-2021-01-27-01

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

Event Description: **2021 SMP : Everglades**

Request ID: **RQ-2021-01-25-51**

Customer: **SO-DIST**

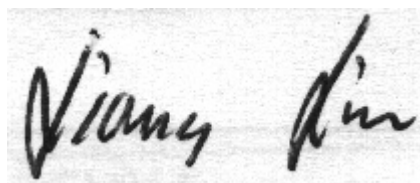
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Chris Hormuth

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Liang Lin, Environmental Administrator

Date Certified: 17-FEB-2021 14:48

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

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 group are included in this report: Nutrients.

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: 8069 - Enre5

Collection Date/Time: 01/26/2021 11:50

Field ID: G5SD0036

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2221768	EPA 180.1 Rev. 2.0	Turbidity	4.0		NTU	P393076	
	EPA 300.0 Rev. 2.1	Bromide	64		mg Br/L	P393555	
	SM 2320 B-2011	Total Alkalinity	124	A	mg CaCO3/L	P393216	
	SM 2540 D-2011	TSS	3	I	mg/L	P393362	
	SM 4500 F-C-2011	Fluoride	1.1		mg F/L	P393219	
2221771	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P393459	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P393543	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393112	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P393316	
	SM 5310 B-2011	Organic Carbon	3.9		mg C/L	P393265	
2221774	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P393114	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: G5SD0039

Collection Date/Time: 01/26/2021 13:20

Field ID: G5SD0039

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2221769	EPA 180.1 Rev. 2.0	Turbidity	4.4		NTU	P393076	
	EPA 300.0 Rev. 2.1	Bromide	67		mg Br/L	P393555	
	SM 2320 B-2011	Total Alkalinity	127		mg CaCO3/L	P393216	
	SM 2540 D-2011	TSS	5	I	mg/L	P393362	
	SM 4500 F-C-2011	Fluoride	1.1		mg F/L	P393219	
2221772	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P393459	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38	I	mg N/L	P393543	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393112	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P393316	
	SM 5310 B-2011	Organic Carbon	4.0		mg C/L	P393265	
2221775	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P393114	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: 8067 Enre 9 Near First Bay

Collection Date/Time: 01/26/2021 12:45

Field ID: G5SD0107

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2221770	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P393076	
	EPA 300.0 Rev. 2.1	Bromide	64		mg Br/L	P393555	
	SM 2320 B-2011	Total Alkalinity	125		mg CaCO3/L	P393216	
	SM 2540 D-2011	TSS	4	I	mg/L	P393362	
	SM 4500 F-C-2011	Fluoride	1.1		mg F/L	P393219	
2221773	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P393459	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34	I	mg N/L	P393543	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393112	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P393316	
	SM 5310 B-2011	Organic Carbon	3.4		mg C/L	P393265	
2221776	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P393114	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P393076

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393459

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393543

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393112

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393316

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393114

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

Reference Method: SM 2320 B-2011
Batch ID: P393216

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 D-2011
Batch ID: P393362

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P393219

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P393265

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393459

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393543

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393112

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: P393316

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393114

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

Reference Method: SM 2320 B-2011
Batch ID: P393216

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.8		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P393219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P393265

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222197	Bromide	101		P	90 - 110
2222279	Bromide	101	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220828	Ammonia-N	98.9	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221391	Kjeldahl Nitrogen	104	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221619	NO2NO3-N	98.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393316

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221563	Total-P	101	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393114

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2221774	O-Phosphate-P	101	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P393219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2220715	Fluoride	104	102	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P393265

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2222201	Organic Carbon	99.4	99.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P393076

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221860	Turbidity	1.94	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P393555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222279	Bromide	0.371	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P393459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220828	Ammonia-N	3.34	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221391	Kjeldahl Nitrogen	1.25	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221619	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393316

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221563	Total-P	2.65	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393114

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221774	O-Phosphate-P	0.297	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P393216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2221768	Total Alkalinity	1.09	Sample	P	0 - 8.1

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P393219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2220715	Fluoride	0.915	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P393265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2222201	Organic Carbon	0.134	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A103288

Included Lab Sample IDs: 2221768, 2221769, 2221770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	101	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103302

Included Lab Sample IDs: 2221771, 2221772, 2221773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A103306

Included Lab Sample IDs: 2221774, 2221775, 2221776

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.4	P/P	90 - 110
O-Phosphate-P	99.5	101	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A103352

Included Lab Sample IDs: 2221768, 2221769, 2221770

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.9	94.9	P/P	90 - 110
Total Alkalinity	94.9	92.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A103352

Included Lab Sample IDs: 2221768, 2221769, 2221770

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

Reference Method: SM 5310 B-2011

Run ID: A103374

Included Lab Sample IDs: 2221771, 2221772, 2221773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	98.4	P/P	90 - 110
Organic Carbon	98.4	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A103445

Included Lab Sample IDs: 2221771, 2221772, 2221773

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103455

Included Lab Sample IDs: 2221771, 2221772, 2221773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103482

Included Lab Sample IDs: 2221768, 2221769, 2221770

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A103527

Included Lab Sample IDs: 2221771, 2221772, 2221773

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	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	MS
EPA 180.1 Rev. 2.0	Turbidity					1.94	
EPA 300.0 Rev. 2.1	Bromide	103	101	101	101		0.371
EPA 350.1 Rev. 2.0	Ammonia-N	100	98.9	103			3.34
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	104	102			1.25
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	98.5	99.0			0.506
EPA 365.1 Rev. 2.0	Total-P	104	101	104			2.65
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	101	101			0.297
SM 2320 B-2011	Total Alkalinity	96.8				1.09	
SM 4500 F-C-2011	Fluoride	98.7	104	102			0.915
SM 5310 B-2011	Organic Carbon	100	99.4	99.2			0.134

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2221768, 2221769, 2221770
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2221768, 2221769, 2221770
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2221771, 2221772, 2221773
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2221771, 2221772, 2221773
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2221771, 2221772, 2221773
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2221771, 2221772, 2221773
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2221774, 2221775, 2221776
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2221768, 2221769, 2221770
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2221768, 2221769, 2221770
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2221768, 2221769, 2221770
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2221771, 2221772, 2221773

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	01/27/2021			01/27/2021 16:06	Yen Ta	2221768, 2221769, 2221770
EPA 300.0 Rev. 2.1	01/27/2021			02/08/2021 23:02	Lipi Saha	2221768
	01/27/2021			02/08/2021 23:20	Lipi Saha	2221769
	01/27/2021			02/08/2021 23:38	Lipi Saha	2221770
EPA 350.1 Rev. 2.0	01/27/2021			02/07/2021 10:12	Ping Hua	2221771
	01/27/2021			02/07/2021 10:14	Ping Hua	2221772
	01/27/2021			02/07/2021 10:15	Ping Hua	2221773
EPA 351.2 Rev. 2.0	01/27/2021	02/09/2021 11:41	Yen Ta	02/10/2021 16:44	Julia Storbeck	2221771
	01/27/2021	02/09/2021 11:41	Yen Ta	02/10/2021 16:46	Julia Storbeck	2221772
	01/27/2021	02/09/2021 11:41	Yen Ta	02/10/2021 16:47	Julia Storbeck	2221773
EPA 353.2 Rev. 2.0	01/27/2021			01/29/2021 08:10	Beverly Y. Sanders	2221771
	01/27/2021			01/29/2021 08:11	Beverly Y. Sanders	2221772
	01/27/2021			01/29/2021 08:13	Beverly Y. Sanders	2221773
EPA 365.1 Rev. 2.0	01/27/2021	02/03/2021 16:16	Madeline Gruver	02/05/2021 14:49	Shengyu Wang	2221771
	01/27/2021	02/03/2021 16:16	Madeline Gruver	02/05/2021 14:50	Shengyu Wang	2221772
	01/27/2021	02/03/2021 16:16	Madeline Gruver	02/05/2021 14:51	Shengyu Wang	2221773
EPA 365.1 Rev. 2.0 dissolved	01/27/2021			01/27/2021 19:36	Virginia P. Brown	2221774
	01/27/2021			01/27/2021 19:43	Virginia P. Brown	2221775
	01/27/2021			01/27/2021 19:44	Virginia P. Brown	2221776
SM 2320 B-2011	01/27/2021			01/30/2021 05:17	Dale L. Simmons	2221768
	01/27/2021			01/30/2021 05:55	Dale L. Simmons	2221769
	01/27/2021			01/30/2021 06:50	Dale L. Simmons	2221770
SM 2540 D-2011	01/27/2021			01/29/2021 15:32	Yijie Li	2221768, 2221769, 2221770
SM 4500 F-C-2011	01/27/2021			01/30/2021 04:39	Dale L. Simmons	2221768
	01/27/2021			01/30/2021 04:45	Dale L. Simmons	2221769
	01/27/2021			01/30/2021 04:50	Dale L. Simmons	2221770
SM 5310 B-2011	01/27/2021			02/02/2021 10:27	Madeline Gruver	2221771
	01/27/2021			02/02/2021 10:51	Madeline Gruver	2221772
	01/27/2021			02/02/2021 11:28	Madeline Gruver	2221773