

Chemical Analysis Report

NW-DIST-2020-11-24-02

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

Event Description: **98 Whaler Run**
Request ID: **RQ-2020-11-09-27**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

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: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 16-DEC-2020 16:50



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 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: Hogtown Bayou Mouth

Collection Date/Time: 11/23/2020 10:57

Field ID: G3NW0184

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2209312	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P390437	
	EPA 300.0 Rev. 2.1	Bromide	38		mg Br/L	P390683	
	SM 2320 B-2011	Total Alkalinity	79		mg CaCO3/L	P390501	
	SM 2540 D-2011	TSS	3	U	mg/L	P390769	
	SM 4500 F-C-2011	Fluoride	0.74		mg F/L	P390504	MS
2209315	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P390493	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22	I	mg N/L	P390657	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.038		mg N/L	P390512	
	EPA 365.1 Rev. 2.0	Total-P	0.009	I	mg P/L	P390623	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P390553	
2209318	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P390431	

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: Boggy Bayou Mouth

Collection Date/Time: 11/23/2020 14:19

Field ID: G3NW0186

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2209321	EPA 180.1 Rev. 2.0	Turbidity	0.65		NTU	P390437	
	EPA 300.0 Rev. 2.1	Bromide	38		mg Br/L	P390683	
	SM 2320 B-2011	Total Alkalinity	73		mg CaCO3/L	P390501	
	SM 2540 D-2011	TSS	3	UA	mg/L	P390769	
	SM 4500 F-C-2011	Fluoride	0.73		mg F/L	P390504	MS
2209322	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P390493	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.16	U	mg N/L	P390657	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.027		mg N/L	P390512	
	EPA 365.1 Rev. 2.0	Total-P	0.008	I	mg P/L	P390623	
	SM 5310 B-2011	Organic Carbon	3.0		mg C/L	P390553	
2209323	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P390431	

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: Joes Bayou

Collection Date/Time: 11/23/2020 13:11

Field ID: G3NW0182

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2209313	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P390437	
	EPA 300.0 Rev. 2.1	Bromide	40		mg Br/L	P390683	
	SM 2320 B-2011	Total Alkalinity	81	A	mg CaCO3/L	P390501	
	SM 2540 D-2011	TSS	3	U	mg/L	P390769	
	SM 4500 F-C-2011	Fluoride	0.77	J	mg F/L	P390504	MS
2209316	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P390493	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22	I	mg N/L	P390657	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P390512	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P390623	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P390553	
2209319	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P390431	

Ref. Method and Comment:

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

SM 4500 F-C-2011: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P390437

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390683

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P390493

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390657

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P390512

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P390623

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P390431

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

Reference Method: SM 2320 B-2011
Batch ID: P390501

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

Reference Method: SM 2540 D-2011
Batch ID: P390769

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500 F-C-2011
Batch ID: P390504

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P390553

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: P390683

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P390493

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390657

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P390512

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P390623

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: P390431

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

Reference Method: SM 2320 B-2011
Batch ID: P390501

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P390504

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P390553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	103		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209372	Bromide	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P390493

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209315	Ammonia-N	104	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209270	Kjeldahl Nitrogen	96.4	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P390512

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209268	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P390623

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209267	Total-P	96.4	94.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P390431

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209323	O-Phosphate-P	97.2	98.0	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P390504

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209313	Fluoride	106	107	P/F	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P390553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2209315	Organic Carbon	101	100	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P390437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2208989	Turbidity	2.17	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P390683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209372	Bromide	0.390	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P390493

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209315	Ammonia-N	0.857	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P390657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209270	Kjeldahl Nitrogen	7.36	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P390512

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209268	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P390623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209267	Total-P	1.67	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P390431

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209323	O-Phosphate-P	0.784	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P390501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209313	Total Alkalinity	1.14	Sample	P	0 - 8.1

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P390504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209313	Fluoride	0.959	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P390553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2209315	Organic Carbon	1.01	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A102288

Included Lab Sample IDs: 2209318, 2209319, 2209323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.2	P/P	90 - 110
O-Phosphate-P	98.9	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A102290

Included Lab Sample IDs: 2209312, 2209313, 2209321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.0	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A102322

Included Lab Sample IDs: 2209315, 2209316, 2209322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.6	100	P/P	90 - 110
Ammonia-N	99.8	99.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A102325

Included Lab Sample IDs: 2209312, 2209313, 2209321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.8	103	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A102325

Included Lab Sample IDs: 2209312, 2209313, 2209321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A102329

Included Lab Sample IDs: 2209315, 2209316, 2209322

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

Reference Method: SM 5310 B-2011

Run ID: A102346

Included Lab Sample IDs: 2209315, 2209316, 2209322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	103	P/P	90 - 110
Organic Carbon	103	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A102396

Included Lab Sample IDs: 2209315, 2209316, 2209322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.5	98.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A102411

Included Lab Sample IDs: 2209312, 2209313, 2209321

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A102412

Included Lab Sample IDs: 2209315, 2209316, 2209322

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	94.3	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				2.17	
EPA 300.0 Rev. 2.1	Bromide	106	102	102		0.390
EPA 350.1 Rev. 2.0	Ammonia-N	101	104	103		0.857
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	96.4	104		7.36
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	103	103		0.0
EPA 365.1 Rev. 2.0	Total-P	105	96.4	94.8		1.67
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	97.2	98.0		0.784
SM 2320 B-2011	Total Alkalinity	101			1.14	
SM 4500 F-C-2011	Fluoride	102	106	107		0.959
SM 5310 B-2011	Organic Carbon	103	101	100		1.01

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2209312, 2209313, 2209321
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2209312, 2209313, 2209321
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2209315, 2209316, 2209322
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2209315, 2209316, 2209322
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2209315, 2209316, 2209322
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2209315, 2209316, 2209322
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2209318, 2209319, 2209323
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2209312, 2209313, 2209321
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2209312, 2209313, 2209321
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2209312, 2209313, 2209321
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2209315, 2209316, 2209322

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	11/24/2020			11/24/2020 17:06	Yen Ta	2209312, 2209313, 2209321
EPA 300.0 Rev. 2.1	11/24/2020			12/01/2020 19:08	Lipi Saha	2209312
	11/24/2020			12/01/2020 19:26	Lipi Saha	2209313
	11/24/2020			12/01/2020 19:44	Lipi Saha	2209321
EPA 350.1 Rev. 2.0	11/24/2020			11/29/2020 11:12	Ping Hua	2209315
	11/24/2020			11/29/2020 11:16	Ping Hua	2209316
	11/24/2020			11/29/2020 11:24	Ping Hua	2209322
EPA 351.2 Rev. 2.0	11/24/2020	12/03/2020 16:30	David Boose	12/04/2020 09:01	Elliott Rodriguez	2209315
	11/24/2020	12/03/2020 16:30	David Boose	12/04/2020 09:03	Elliott Rodriguez	2209316
	11/24/2020	12/03/2020 16:30	David Boose	12/04/2020 09:05	Elliott Rodriguez	2209322
EPA 353.2 Rev. 2.0	11/24/2020			11/30/2020 11:39	Beverly Y. Sanders	2209315
	11/24/2020			11/30/2020 11:40	Beverly Y. Sanders	2209316
	11/24/2020			11/30/2020 11:41	Beverly Y. Sanders	2209322
EPA 365.1 Rev. 2.0	11/24/2020	12/02/2020 16:51	Madeline Gruver	12/03/2020 14:02	Shengyu Wang	2209315
	11/24/2020	12/02/2020 16:51	Madeline Gruver	12/03/2020 14:03	Shengyu Wang	2209316
	11/24/2020	12/02/2020 16:51	Madeline Gruver	12/03/2020 14:04	Shengyu Wang	2209322
EPA 365.1 Rev. 2.0 dissolved	11/24/2020			11/24/2020 16:11	Blanca Fach	2209323
	11/24/2020			11/24/2020 16:18	Blanca Fach	2209318
	11/24/2020			11/24/2020 16:19	Blanca Fach	2209319
SM 2320 B-2011	11/24/2020			11/26/2020 01:40	Dale L. Simmons	2209313
	11/24/2020			11/26/2020 01:53	Dale L. Simmons	2209312
	11/24/2020			11/26/2020 02:05	Dale L. Simmons	2209321
SM 2540 D-2011	11/24/2020			11/25/2020 11:25	Yijie Li	2209312, 2209313, 2209321
SM 4500 F-C-2011	11/24/2020			11/26/2020 00:54	Dale L. Simmons	2209313
	11/24/2020			11/26/2020 01:08	Dale L. Simmons	2209312
	11/24/2020			11/26/2020 01:13	Dale L. Simmons	2209321
SM 5310 B-2011	11/24/2020			12/01/2020 00:50	Madeline Gruver	2209315
	11/24/2020			12/01/2020 01:51	Madeline Gruver	2209316
	11/24/2020			12/01/2020 02:03	Madeline Gruver	2209322