Chemical Analysis Report

NW-DIST-2020-10-20-02

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-2020-10-12-46**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
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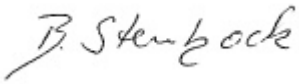
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 10-NOV-2020 11:59



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 Center **Collection Date/Time: 10/19/2020 10:37**

Field ID: G3NW0181 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203425	EPA 180.1 Rev. 2.0	Turbidity	4.3		NTU	P388976	
	EPA 300.0 Rev. 2.1	Bromide	20		mg Br/L	P389482	
	SM 2320 B-2011	Total Alkalinity	52		mg CaCO3/L	P389114	
	SM 2540 D-2011	TSS	3	I	mg/L	P389312	
	SM 4500 F-C-2011	Fluoride	0.38		mg F/L	P389779	
2203427	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P389202	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40	I	mg N/L	P389099	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P389072	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P389258	
	SM 5310 B-2011	Organic Carbon	6.0		mg C/L	P389070	
2203429	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P388990	

Sample Location: Joes Bayou **Collection Date/Time: 10/19/2020 13:02**

Field ID: G3NW0182 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203426	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P388976	
	EPA 300.0 Rev. 2.1	Bromide	20		mg Br/L	P389482	
	SM 2320 B-2011	Total Alkalinity	50		mg CaCO3/L	P389114	
	SM 2540 D-2011	TSS	3	I	mg/L	P389312	
	SM 4500 F-C-2011	Fluoride	0.37		mg F/L	P389779	
2203428	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P389202	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41		mg N/L	P389099	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.034		mg N/L	P389072	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P389258	
	SM 5310 B-2011	Organic Carbon	5.8		mg C/L	P389070	
2203430	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P388990	

Sample Location: Boggy Bayou Mouth **Collection Date/Time: 10/19/2020 14:04**

Field ID: G3NW0186 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203431	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P388977	
	EPA 300.0 Rev. 2.1	Bromide	14		mg Br/L	P389482	
	SM 2320 B-2011	Total Alkalinity	35	A	mg CaCO3/L	P389114	
	SM 2540 D-2011	TSS	2	I	mg/L	P389311	
	SM 4500 F-C-2011	Fluoride	0.25		mg F/L	P389779	
2203432	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P389202	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31	I	mg N/L	P389099	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P389072	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P389258	
	SM 5310 B-2011	Organic Carbon	4.3		mg C/L	P389070	
2203433	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P388990	

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: P388976

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388977

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389482

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389099

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389072

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389258

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388990

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

Reference Method: SM 2320 B-2011
Batch ID: P389114

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P389311

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P389312

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P389779

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P389070

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: P389482

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389099

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	109		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389072

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: P389258

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388990

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

Reference Method: SM 2320 B-2011
Batch ID: P389114

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P389779

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.5		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P389070

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202265	Bromide	101	106	P/P	90 - 110
2202645	Bromide	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203427	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389099

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203762	Kjeldahl Nitrogen	105	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389072

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202807	NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202958	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203429	O-Phosphate-P	99.9	101	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P389779

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205576	Fluoride	103	104	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P389070

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202957	Organic Carbon	98.1	98.3	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203363	Turbidity	5.35	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203584	Turbidity	1.30	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202265	Bromide	3.22	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203427	Ammonia-N	1.17	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389099

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203762	Kjeldahl Nitrogen	2.81	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389072

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202807	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202958	Total-P	0.894	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203429	O-Phosphate-P	0.897	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P389114

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203431	Total Alkalinity	1.79	Sample	P	0 - 8.1

Reference Method: SM 2540 D-2011
Batch ID: P389312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202806	TSS	4.76	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P389779

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205576	Fluoride	0.487	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P389070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202957	Organic Carbon	0.220	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: A101640
Included Lab Sample IDs: 2203425, 2203426, 2203431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.0	P/P	95 - 105
Turbidity	99.0	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A101645
Included Lab Sample IDs: 2203429, 2203430, 2203433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.3	99.5	P/P	90 - 110
O-Phosphate-P	99.5	99.4	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A101673
Included Lab Sample IDs: 2203427, 2203428, 2203432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.1	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A101675
Included Lab Sample IDs: 2203427, 2203428, 2203432

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

Reference Method: SM 2320 B-2011
Run ID: A101694
Included Lab Sample IDs: 2203425, 2203426, 2203431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.1	103	P/P	90 - 110
Total Alkalinity	100	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A101732
Included Lab Sample IDs: 2203427, 2203428, 2203432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A101736
Included Lab Sample IDs: 2203427, 2203428, 2203432

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A101803
Included Lab Sample IDs: 2203427, 2203428, 2203432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	95.2	96.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A101855
Included Lab Sample IDs: 2203425, 2203426, 2203431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	97.8	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A101970
Included Lab Sample IDs: 2203425, 2203426, 2203431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.5	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 180.1 Rev. 2.0	Turbidity						5.35	
	Turbidity						1.30	
EPA 300.0 Rev. 2.1	Bromide	106	101	106	102			3.22
EPA 350.1 Rev. 2.0	Ammonia-N	102	102	104				1.17
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	109	105	109				2.81
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	99.0	99.0				0.0
EPA 365.1 Rev. 2.0	Total-P	103	103	104				0.894
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.2	99.9	101				0.897
SM 2320 B-2011	Total Alkalinity	102					1.79	
SM 2540 D-2011	TSS						4.76	
SM 4500 F-C-2011	Fluoride	94.5	103	104				0.487
SM 5310 B-2011	Organic Carbon	99.6	98.1	98.3				0.220

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2203425, 2203426, 2203431
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2203425, 2203426, 2203431
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2203427, 2203428, 2203432
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2203427, 2203428, 2203432
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2203427, 2203428, 2203432
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2203427, 2203428, 2203432
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2203429, 2203430, 2203433
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2203425, 2203426, 2203431
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2203425, 2203426, 2203431
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2203425, 2203426, 2203431
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2203427, 2203428, 2203432

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	10/20/2020			10/20/2020 16:02	Yen Ta	2203425, 2203426, 2203431
EPA 300.0 Rev. 2.1	10/20/2020			10/29/2020 06:05	Lipi Saha	2203425
	10/20/2020			10/29/2020 06:23	Lipi Saha	2203426
	10/20/2020			10/29/2020 06:41	Lipi Saha	2203431
EPA 350.1 Rev. 2.0	10/20/2020			10/24/2020 17:14	Ping Hua	2203427
	10/20/2020			10/24/2020 17:18	Ping Hua	2203428
	10/20/2020			10/24/2020 17:20	Ping Hua	2203432
EPA 351.2 Rev. 2.0	10/20/2020	10/22/2020 13:40	David Boose	10/23/2020 16:57	Elliott Rodriguez	2203427
	10/20/2020	10/22/2020 13:40	David Boose	10/23/2020 16:58	Elliott Rodriguez	2203428
	10/20/2020	10/22/2020 13:40	David Boose	10/23/2020 17:00	Elliott Rodriguez	2203432
EPA 353.2 Rev. 2.0	10/20/2020			10/22/2020 09:27	Beverly Y. Sanders	2203427
	10/20/2020			10/22/2020 09:28	Beverly Y. Sanders	2203428
	10/20/2020			10/22/2020 09:29	Beverly Y. Sanders	2203432
EPA 365.1 Rev. 2.0	10/20/2020	10/26/2020 13:20	Yen Ta	10/27/2020 15:17	Shengyu Wang	2203427
	10/20/2020	10/26/2020 13:20	Yen Ta	10/27/2020 15:18	Shengyu Wang	2203428
	10/20/2020	10/26/2020 13:20	Yen Ta	10/27/2020 15:19	Shengyu Wang	2203432
EPA 365.1 Rev. 2.0 dissolved	10/20/2020			10/20/2020 16:55	Samantha Davila	2203429
	10/20/2020			10/20/2020 17:01	Samantha Davila	2203430
	10/20/2020			10/20/2020 17:02	Samantha Davila	2203433
SM 2320 B-2011	10/20/2020			10/22/2020 13:32	Samantha Davila	2203431
	10/20/2020			10/22/2020 13:44	Samantha Davila	2203425
	10/20/2020			10/22/2020 14:38	Samantha Davila	2203426
SM 2540 D-2011	10/20/2020			10/21/2020 15:19	Yijie Li	2203425, 2203426, 2203431
SM 4500 F-C-2011	10/20/2020			11/05/2020 00:56	Samantha Davila	2203425
	10/20/2020			11/05/2020 01:01	Samantha Davila	2203426
	10/20/2020			11/05/2020 01:06	Samantha Davila	2203431
SM 5310 B-2011	10/20/2020			10/22/2020 04:47	Lauren Lees	2203427
	10/20/2020			10/22/2020 05:12	Lauren Lees	2203428
	10/20/2020			10/22/2020 05:24	Lauren Lees	2203432