

Chemical Analysis Report

NW-DIST-2022-12-12-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

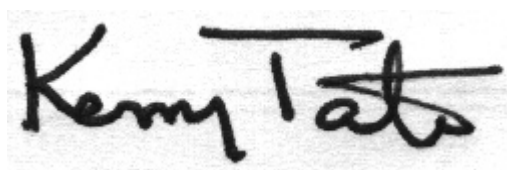
Event Description: **Priority Sampling**
Request ID: **RQ-2022-12-19-23**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

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: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 29-DEC-2022 11:16

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

NON-CONFORMANCE REPORT INCLUDED

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: Direct Runoff to Bay off of Roberts Rd

Collection Date/Time: 12/08/2022 11:45

Field ID: G3NW0239

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374312	DEP SOP: NU-094-1	Color (true)	76	YQ	PCU	P423474	
	EPA 180.1 Rev. 2.0	Turbidity	6.8	YQ	NTU	P423469	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P423712	
		Sulfate	5.6	Y	mg SO4/L	P423806	
	SM 2320 B-2011	Total Alkalinity	0.65	UY	mg CaCO3/L	P423720	
	SM 2540 C-2015	TDS	46	Y	mg/L	P423777	
	SM 2540 D-2015	TSS	12	Y	mg/L	P423652	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P423723	
2374313	EPA 350.1 Rev. 2.0	Ammonia-N	0.024	Y	mg N/L	P423784	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37	Y	mg N/L	P423517	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P423582	
	EPA 365.1 Rev. 2.0	Total-P	0.018	Y	mg P/L	P423477	
	SM 5310 B-2011	Organic Carbon	11	Y	mg C/L	P423644	

Ref. Method and Comment:

DEP SOP: NU-094-1: The sample expired prior to receipt. Sample received outside of the acceptable temperature range. Please see NCR.

EPA 180.1 Rev. 2.0: The sample expired prior to receipt. Sample received outside of the acceptable temperature range. Please see NCR.

EPA 300.0 Rev. 2.1: Sulfate: Sample received outside of the acceptable temperature range. Please see NCR.

SM 2320 B-2011: Sample received outside of the acceptable temperature range. Please see NCR.

SM 2540 C-2015: Sample received outside of the acceptable temperature range. Please see NCR.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.

EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.

EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

SM 5310 B-2011: Sample received outside of the acceptable temperature range. Please see NCR.

Non-Conformance Report

NCR ID: 9649

Event(s)

NW-DIST-2022-12-12-01

Job(s)

Sample(s)

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived late, samples received outside the temperature range.

Resolution: Samples will be qualified as appropriate.

Customer contacted, email correspondence attached to sample submittal forms.

Authorized by/Date: Kyle Klug 12/19/2022

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.

Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P423474

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423469

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423712

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423806

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423784

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423517

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423582

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423477

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

Reference Method: SM 2320 B-2011
Batch ID: P423720

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P423777

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P423652

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P423644

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P423474

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423469

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423712

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423806

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423784

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423517

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	108		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423582

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423477

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

Reference Method: SM 2320 B-2011
Batch ID: P423720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.8		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P423777

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	98.0		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P423652

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.8		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P423644

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374252	Chloride	92.9		P	90 - 110
2374368	Chloride	94.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374252	Sulfate	98.9		P	90 - 110
2374368	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423784

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374305	Ammonia-N	99.2	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374369	Kjeldahl Nitrogen	98.3	98.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423582

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374274	NO2NO3-N	96.0	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374343	Total-P	102	103	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374318	Fluoride	100	98.6	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P423644

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374360	Organic Carbon	98.1	99.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P423474

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374251	Color (true)	3.11	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374251	Turbidity	0.346	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374252	Chloride	3.69	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374252	Sulfate	0.00254	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423784

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374305	Ammonia-N	2.30	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374369	Kjeldahl Nitrogen	0.0324	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423582

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374274	NO2NO3-N	0.284	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374343	Total-P	1.15	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P423720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374318	Total Alkalinity	1.80	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P423777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373795	TDS	6.45	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374318	Fluoride	0.966	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P423644

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374360	Organic Carbon	0.712	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A116398

Included Lab Sample IDs: 2374312

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A116410

Included Lab Sample IDs: 2374312

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

Reference Method: DEP SOP: NU-094-1

Run ID: A116412

Included Lab Sample IDs: 2374312

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.3	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A116459

Included Lab Sample IDs: 2374313

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.5	96.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116467

Included Lab Sample IDs: 2374313

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116476

Included Lab Sample IDs: 2374313

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.8	94.4	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A116493

Included Lab Sample IDs: 2374313

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.2	100	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A116543

Included Lab Sample IDs: 2374312

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.2	96.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A116543

Included Lab Sample IDs: 2374312

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A116559

Included Lab Sample IDs: 2374312

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A116577

Included Lab Sample IDs: 2374313

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	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		LCS	Precision	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	101				3.11	
EPA 180.1 Rev. 2.0	Turbidity	101				0.346	
EPA 300.0 Rev. 2.1	Chloride	96.2	92.9	94.8		3.69	
	Sulfate	101	98.9	100		0.0025	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	99.2	102			2.30
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	98.3	98.3			0.0324
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	96.0	96.5			0.284
EPA 365.1 Rev. 2.0	Total-P	104	102	103			1.15
SM 2320 B-2011	Total Alkalinity	96.8				1.80	
SM 2540 C-2015	TDS	98.0				6.45	
SM 2540 D-2015	TSS	94.8					
SM 4500-F- C-2011	Fluoride	102	100	98.6			0.966
SM 5310 B-2011	Organic Carbon	98.2	98.1	99.2			0.712

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2374312
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2374312
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2374312
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2374312
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2374313
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2374313
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2374313
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2374313
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2374312
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2374312
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2374312
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2374312
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2374313

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	12/12/2022			12/13/2022 15:51	Alexis Price	2374312
EPA 180.1 Rev. 2.0	12/12/2022			12/13/2022 15:30	Chandler E Cox	2374312
EPA 300.0 Rev. 2.1	12/12/2022			12/16/2022 17:42	Anna M. Plaviak	2374312
	12/12/2022			12/20/2022 15:24	Anna M. Plaviak	2374312
EPA 350.1 Rev. 2.0	12/12/2022			12/20/2022 15:23	Judith K. Clark	2374313
EPA 351.2 Rev. 2.0	12/12/2022	12/14/2022 13:18	Simonne.V. Calhoun	12/15/2022 14:00	Samantha L Bates	2374313
EPA 353.2 Rev. 2.0	12/12/2022			12/13/2022 11:26	Beverly Y. Sanders	2374313
EPA 365.1 Rev. 2.0	12/12/2022	12/14/2022 13:07	Adam P Silver	12/15/2022 12:17	Simonne.V. Calhoun	2374313
SM 2320 B-2011	12/12/2022			12/17/2022 11:15	Dale L. Simmons	2374312
SM 2540 C-2015	12/12/2022			12/13/2022 14:45	Yijie Li	2374312
SM 2540 D-2015	12/12/2022			12/13/2022 14:45	Yijie Li	2374312
SM 4500-F- C-2011	12/12/2022			12/17/2022 11:15	Dale L. Simmons	2374312
SM 5310 B-2011	12/12/2022			12/15/2022 22:43	Khloe J Berg	2374313