Chemical Analysis Report

NE-DIST-2024-01-31-01

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

Event Description: **Suwannee Lakes 2024**
Request ID: **RQ-2024-01-22-28**
Customer: **NE-DIST**
Project ID: **SMP**

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Date Certified: 19-FEB-2024 13:14

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: Peacock Lake Center **Collection Date/Time: 01/30/2024 10:15**

Field ID: 21020097 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464473	DEP SOP: NU-094-1	Color (true)	140		PCU	P440733	
	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P440729	
	EPA 300.0 Rev. 2.1	Chloride	6.8		mg Cl/L	P441023	
		Sulfate	3.7		mg SO4/L	P441026	
	SM 2320 B-2011	Total Alkalinity	8.6		mg CaCO3/L	P440908	
	SM 2540 C-2015	TDS	60		mg/L	P441270	
	SM 2540 D-2015	TSS	5	I	mg/L	P441046	
	SM 4500-F- C-2011	Fluoride	0.10		mg F/L	P440911	
2464474	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P441062	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P440754	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P440946	
	EPA 365.1 Rev. 2.0	Total-P	0.39		mg P/L	P440838	
	SM 5310 B-2014	Organic Carbon	15		mg C/L	P440901	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Low Lake Center **Collection Date/Time: 01/30/2024 11:00**

Field ID: 21020065 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464475	DEP SOP: NU-094-1	Color (true)	150		PCU	P440733	
	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P440729	
	EPA 300.0 Rev. 2.1	Chloride	7.3		mg Cl/L	P441023	
		Sulfate	4.3		mg SO4/L	P441026	
	SM 2320 B-2011	Total Alkalinity	5.7		mg CaCO3/L	P440908	
	SM 2540 C-2015	TDS	66		mg/L	P441270	
	SM 2540 D-2015	TSS	4	I	mg/L	P441046	
	SM 4500-F- C-2011	Fluoride	0.073	I	mg F/L	P440911	
2464476	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P441062	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P440754	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P440946	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P440838	
	SM 5310 B-2014	Organic Carbon	14		mg C/L	P440901	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P440733

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440729

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441023

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441062

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440754

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440946

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440838

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

Reference Method: SM 2320 B-2011
Batch ID: P440908

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: P441270

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P441046

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P440901

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: P440733

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440729

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441023

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441062

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440754

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	107		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440946

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: P440838

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

Reference Method: SM 2320 B-2011
Batch ID: P440908

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.7		P	92 - 105

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P441270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	98.0		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P441046

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.8		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P440901

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: P441023

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464439	Chloride	99.8		P	90 - 110
2464519	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464439	Sulfate	96.3		P	90 - 110
2464519	Sulfate	99.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441062

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464474	Ammonia-N	100	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464442	Kjeldahl Nitrogen	104	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464474	NO2NO3-N	96.5	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464528	Total-P	106	108	P/P	90 - 110

Reference Method: SM 5310 B-2014
Batch ID: P440901

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464521	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P440733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464485	Color (true)	1.98	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464412	Turbidity	8.77	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441023

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464439	Chloride	0.343	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464439	Sulfate	0.766	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441062

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464474	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464442	Kjeldahl Nitrogen	2.33	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464474	NO2NO3-N	1.54	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464528	Total-P	1.79	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P440908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	Total Alkalinity	0.759	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P441270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464211	TDS	7.31	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P440901

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464521	Organic Carbon	0.0696	Spike	P	0 - 15

* 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: A123922
Included Lab Sample IDs: 2464473, 2464475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A123923
Included Lab Sample IDs: 2464473, 2464475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.2	100	P/P	90 - 110

Reference Method: SM 5310 B-2014
Run ID: A123983
Included Lab Sample IDs: 2464474, 2464476

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.1	120	P/P	85 - 115

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A123984
Included Lab Sample IDs: 2464474, 2464476

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	101	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A123986
Included Lab Sample IDs: 2464473, 2464475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.0	97.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A123986
Included Lab Sample IDs: 2464473, 2464475

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A123996
Included Lab Sample IDs: 2464474, 2464476

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A124002
Included Lab Sample IDs: 2464474, 2464476

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124027
Included Lab Sample IDs: 2464473, 2464475

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A124042
Included Lab Sample IDs: 2464474, 2464476

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	96.9	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
DEP SOP: NU-094-1	Color (true)	100				1.98	
EPA 180.1 Rev. 2.0	Turbidity	104				8.77	
EPA 300.0 Rev. 2.1	Chloride	103	99.8	101		0.343	
	Sulfate	101	96.3	99.3		0.766	
EPA 350.1 Rev. 2.0	Ammonia-N	94.8	100	100			0.0
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	104	99.6			2.33
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	96.5	98.0			1.54
EPA 365.1 Rev. 2.0	Total-P	105	106	108			1.79
SM 2320 B-2011	Total Alkalinity	97.7				0.759	
SM 2540 C-2015	TDS	98.0				7.31	
SM 2540 D-2015	TSS	96.8					
SM 4500-F- C-2011	Fluoride	102					0.0
SM 5310 B-2014	Organic Carbon	100	101	101			0.0696

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2464473, 2464475
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2464473, 2464475
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2464473, 2464475
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2464473, 2464475
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2464474, 2464476
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2464474, 2464476
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2464474, 2464476
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2464474, 2464476
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2464473, 2464475
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2464473, 2464475
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2464473, 2464475
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2464473, 2464475
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2464474, 2464476

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	01/31/2024			01/31/2024 15:29	Chandler E Cox	2464473
	01/31/2024			01/31/2024 15:30	Chandler E Cox	2464475
EPA 180.1 Rev. 2.0	01/31/2024			01/31/2024 13:46	Dipa Joshi	2464473
	01/31/2024			01/31/2024 13:47	Dipa Joshi	2464475
EPA 300.0 Rev. 2.1	01/31/2024			02/06/2024 12:16	James L Waggerby	2464473
	01/31/2024			02/06/2024 12:31	James L Waggerby	2464475
EPA 350.1 Rev. 2.0	01/31/2024			02/07/2024 12:50	Kenneth H Lee	2464474
	01/31/2024			02/07/2024 12:51	Kenneth H Lee	2464476
EPA 351.2 Rev. 2.0	01/31/2024	02/01/2024 11:30	Samantha L Bates	02/02/2024 12:53	Samantha L Bates	2464474
	01/31/2024	02/01/2024 11:30	Samantha L Bates	02/02/2024 12:55	Samantha L Bates	2464476
EPA 353.2 Rev. 2.0	01/31/2024			02/05/2024 13:34	Fadila Guebre	2464474
	01/31/2024			02/05/2024 13:40	Fadila Guebre	2464476
EPA 365.1 Rev. 2.0	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 11:18	Chandler E Cox	2464474
	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 11:20	Chandler E Cox	2464476
SM 2320 B-2011	01/31/2024			02/03/2024 06:23	Dale L. Simmons	2464473
	01/31/2024			02/03/2024 06:34	Dale L. Simmons	2464475
SM 2540 C-2015	01/31/2024			02/02/2024 15:41	Yijie Li	2464473, 2464475
SM 2540 D-2015	01/31/2024			02/02/2024 15:41	Yijie Li	2464473, 2464475
SM 4500-F- C-2011	01/31/2024			02/03/2024 06:23	Dale L. Simmons	2464473
	01/31/2024			02/03/2024 06:34	Dale L. Simmons	2464475
SM 5310 B-2014	01/31/2024			02/02/2024 01:07	Elise M. Gillis	2464474
	01/31/2024			02/02/2024 01:21	Elise M. Gillis	2464476