Chemical Analysis Report

SO-DIST-2022-09-09-01

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

Event Description: **2022 SMP : Highland Lakes**
Request ID: **RQ-2022-08-08-68**
Customer: **SO-DIST**
Project ID: **SMP**

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FLDEP South District Office
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 27-SEP-2022 10:04

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: Lake Apthorpe **Collection Date/Time: 09/08/2022 10:00**

Field ID: G4SD0185 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2355470	DEP SOP: NU-094-1	Color (true)	13		PCU	P419385	
	EPA 180.1 Rev. 2.0	Turbidity	0.90	I	NTU	P419379	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P419775	
		Sulfate	36		mg SO4/L	P419779	
	SM 2320 B-2011	Total Alkalinity	27		mg CaCO3/L	P419768	
	SM 2540 C-2011	TDS	125		mg/L	P419798	
	SM 2540 D-2011	TSS	2	I	mg/L	P419816	
	SM 4500-F- C-2011	Fluoride	0.053	I	mg F/L	P419772	
2355472	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P419641	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P419519	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P419898	
	EPA 365.1 Rev. 2.0	Total-P	0.007		mg P/L	P419595	
	SM 5310 B-2011	Organic Carbon	7.0		mg C/L	P419638	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Grassy Creek **Collection Date/Time: 09/08/2022 10:30**

Field ID: G4SD0184 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2355474	DEP SOP: NU-094-1	Color (true)	45		PCU	P419385	
	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P419379	
	EPA 300.0 Rev. 2.1	Chloride	17	A	mg Cl/L	P419775	
		Sulfate	27	A	mg SO4/L	P419779	
	SM 2320 B-2011	Total Alkalinity	7.4		mg CaCO3/L	P419768	
	SM 2540 C-2011	TDS	110	A	mg/L	P419799	
	SM 2540 D-2011	TSS	3	I A	mg/L	P419817	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P419772	
2355475	EPA 350.1 Rev. 2.0	Ammonia-N	0.15		mg N/L	P419641	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.96		mg N/L	P419519	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.9		mg N/L	P419898	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P419595	
	SM 5310 B-2011	Organic Carbon	9.4		mg C/L	P419638	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Francis **Collection Date/Time: 09/08/2022 09:20**

Field ID: G4SD0187 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2355471	DEP SOP: NU-094-1	Color (true)	8.2		PCU	P419385	
	EPA 180.1 Rev. 2.0	Turbidity	2.1	A	NTU	P419379	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P419775	
		Sulfate	24		mg SO4/L	P419779	
	SM 2320 B-2011	Total Alkalinity	26		mg CaCO3/L	P419768	
	SM 2540 C-2011	TDS	105		mg/L	P419798	
	SM 2540 D-2011	TSS	3	I	mg/L	P419816	
	SM 4500-F- C-2011	Fluoride	0.062	I	mg F/L	P419772	
2355473	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P419641	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P419518	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P419898	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P419595	
	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P419638	

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: DEP SOP: NU-094-1
Batch ID: P419385

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419379

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419775

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419779

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419641

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419518

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419519

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419898

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419595

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P419768

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

Reference Method: SM 2540 C-2011
Batch ID: P419798

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P419799

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P419816

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P419817

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P419772

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P419638

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: P419385

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.1		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419379

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419775

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419779

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419641

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: P419518

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419519

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: P419898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419595

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P419768

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P419772

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419638

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2355474	Chloride	98.5		P	90 - 110
2355588	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419779

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2355474	Sulfate	96.1		P	90 - 110
2355588	Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419641

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2355473	Ammonia-N	98.6	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2354862	Kjeldahl Nitrogen	99.0	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2355433	NO2NO3-N	98.9	98.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2355472	Total-P	98.2	102	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P419772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2355843	Fluoride	98.2	98.2	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419638

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2355367	Organic Carbon	97.5	97.9	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P419385

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355487	Color (true)	0.0916	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419379

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355471	Turbidity	6.15	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355474	Chloride	0.187	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419779

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355474	Sulfate	0.114	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355473	Ammonia-N	0.748	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2354862	Kjeldahl Nitrogen	2.64	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419519

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355491	Kjeldahl Nitrogen	0.325	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355433	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355472	Total-P	3.81	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P419768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355843	Total Alkalinity	0.566	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P419798

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355366	TDS	7.94	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P419799

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355474	TDS	2.74	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P419772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355843	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P419638

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2355367	Organic Carbon	0.254	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: A114652
Included Lab Sample IDs: 2355470, 2355471, 2355474

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: A114656
Included Lab Sample IDs: 2355470, 2355471, 2355474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	98.9	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A114746
Included Lab Sample IDs: 2355472, 2355473, 2355475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	97.6	P/P	90 - 110
Organic Carbon	97.6	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A114747
Included Lab Sample IDs: 2355472, 2355473, 2355475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A114750
Included Lab Sample IDs: 2355472, 2355473, 2355475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.0	99.6	P/P	90 - 110
Kjeldahl Nitrogen	99.5	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114786
Included Lab Sample IDs: 2355472, 2355473, 2355475

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A114789
Included Lab Sample IDs: 2355470, 2355471, 2355474

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A114801
Included Lab Sample IDs: 2355470, 2355471, 2355474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.7	101	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A114801
Included Lab Sample IDs: 2355470, 2355471, 2355474

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A114826
Included Lab Sample IDs: 2355472, 2355473, 2355475

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	98.5	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
DEP SOP: NU-094-1	Color (true)	98.1				0.0916	
EPA 180.1 Rev. 2.0	Turbidity	97.1				6.15	
EPA 300.0 Rev. 2.1	Chloride	102	98.5	101		0.187	
	Sulfate	101	96.1	99.2		0.114	
EPA 350.1 Rev. 2.0	Ammonia-N	94.8	98.6	99.4			0.748
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.4	99.0	103			2.64
	Kjeldahl Nitrogen	104					0.325
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	98.9	98.9			0.0
EPA 365.1 Rev. 2.0	Total-P	102	98.2	102			3.81
SM 2320 B-2011	Total Alkalinity	101				0.566	
SM 2540 C-2011	TDS					7.94	
	TDS					2.74	
SM 4500-F- C-2011	Fluoride	100	98.2	98.2			0.0
SM 5310 B-2011	Organic Carbon	95.4	97.5	97.9			0.254

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2355470, 2355471, 2355474
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2355470, 2355471, 2355474
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2355470, 2355471, 2355474
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2355470, 2355471, 2355474
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2355472, 2355473, 2355475
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2355472, 2355473, 2355475
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2355472, 2355473, 2355475
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2355472, 2355473, 2355475
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2355470, 2355471, 2355474
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2355470, 2355471, 2355474
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2355470, 2355471, 2355474
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2355470, 2355471, 2355474
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2355472, 2355473, 2355475

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	09/09/2022			09/09/2022 16:21	Samantha L Bates	2355470, 2355471
	09/09/2022			09/09/2022 16:22	Samantha L Bates	2355474
EPA 180.1 Rev. 2.0	09/09/2022			09/09/2022 13:40	Khloe J Berg	2355470
	09/09/2022			09/09/2022 13:44	Khloe J Berg	2355471
	09/09/2022			09/09/2022 13:47	Khloe J Berg	2355474
EPA 300.0 Rev. 2.1	09/09/2022			09/17/2022 00:10	Anna M. Plaviak	2355474
	09/09/2022			09/17/2022 01:40	Anna M. Plaviak	2355470
	09/09/2022			09/17/2022 01:56	Anna M. Plaviak	2355471
EPA 350.1 Rev. 2.0	09/09/2022			09/15/2022 11:29	Ping Hua	2355473
	09/09/2022			09/15/2022 11:35	Ping Hua	2355472
	09/09/2022			09/15/2022 11:36	Ping Hua	2355475
EPA 351.2 Rev. 2.0	09/09/2022	09/14/2022 13:25	Samantha L Bates	09/15/2022 13:00	Samantha L Bates	2355473
	09/09/2022	09/14/2022 13:25	Samantha L Bates	09/15/2022 13:21	Samantha L Bates	2355472
	09/09/2022	09/14/2022 13:25	Samantha L Bates	09/15/2022 13:23	Samantha L Bates	2355475
EPA 353.2 Rev. 2.0	09/09/2022			09/20/2022 13:07	Beverly Y. Sanders	2355472
	09/09/2022			09/20/2022 13:09	Beverly Y. Sanders	2355473
	09/09/2022			09/20/2022 13:10	Beverly Y. Sanders	2355475
EPA 365.1 Rev. 2.0	09/09/2022	09/15/2022 15:47	Adam P Silver	09/16/2022 12:24	James L Waggerby	2355472
	09/09/2022	09/15/2022 15:47	Adam P Silver	09/16/2022 12:26	James L Waggerby	2355473
	09/09/2022	09/15/2022 15:47	Adam P Silver	09/16/2022 12:27	James L Waggerby	2355475
SM 2320 B-2011	09/09/2022			09/17/2022 08:29	Dale L. Simmons	2355470
	09/09/2022			09/17/2022 08:41	Dale L. Simmons	2355471
	09/09/2022			09/17/2022 08:52	Dale L. Simmons	2355474
SM 2540 C-2011	09/09/2022			09/14/2022 15:45	Yijie Li	2355470, 2355471, 2355474
SM 2540 D-2011	09/09/2022			09/14/2022 15:45	Yijie Li	2355470, 2355471, 2355474
SM 4500-F- C-2011	09/09/2022			09/17/2022 08:29	Dale L. Simmons	2355470
	09/09/2022			09/17/2022 08:41	Dale L. Simmons	2355471
	09/09/2022			09/17/2022 08:52	Dale L. Simmons	2355474
SM 5310 B-2011	09/09/2022			09/15/2022 01:16	Khloe J Berg	2355472
	09/09/2022			09/15/2022 01:29	Khloe J Berg	2355473
	09/09/2022			09/15/2022 02:16	Khloe J Berg	2355475