

Chemical Analysis Report

SE-DIST-2024-02-20-01

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

Event Description: **SMP - Central Highlands Canoe**
Request ID: **RQ-2024-01-29-20**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
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Certified by: Marek Topolski, Environmental Specialist III

Date Certified: 12-MAR-2024 13:11

A handwritten signature in black ink, appearing to read "Marek Topolski", with a stylized, flowing script.

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: ARBUCKLE BRANCH AT ARBUCKLE CREEK RD

Collection Date/Time: 02/19/2024 09:55

Field ID: G4SE0149

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2469951	DEP SOP: NU-094-1	Color (true)	200		PCU	P441707	
	EPA 180.1 Rev. 2.0	Turbidity	7.0		NTU	P441716	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P442129	
		Sulfate	12		mg SO4/L	P442133	
	SM 2320 B-2011	Total Alkalinity	8.1		mg CaCO3/L	P442207	
	SM 2540 C-2015	TDS	140		mg/L	P442271	
	SM 2540 D-2015	TSS	9	I	mg/L	P442080	
	SM 4500-F- C-2011	Fluoride	0.054	I	mg F/L	P442485	MS
2469952	EPA 350.1 Rev. 2.0	Ammonia-N	0.14		mg N/L	P441964	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P441848	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.027		mg N/L	P441778	
	EPA 365.1 Rev. 2.0	Total-P	0.066		mg P/L	P441725	
	SM 5310 B-2014	Organic Carbon	30		mg C/L	P441952	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: LAKE CARRIE NEAR CENTER

Collection Date/Time: 02/19/2024 11:05

Field ID: G4SE0164

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2469953	DEP SOP: NU-094-1	Color (true)	130		PCU	P441707	
	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P441716	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P442129	
		Sulfate	5.9		mg SO4/L	P442133	
	SM 2320 B-2011	Total Alkalinity	17		mg CaCO3/L	P442207	
	SM 2540 C-2015	TDS	93		mg/L	P442271	
	SM 2540 D-2015	TSS	4	I	mg/L	P442080	
	SM 4500-F- C-2011	Fluoride	0.045	I	mg F/L	P442485	MS
2469954	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P441964	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P441849	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.012		mg N/L	P441778	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P441725	
	SM 5310 B-2014	Organic Carbon	19		mg C/L	P441952	

Ref. Method and Comment:
 EPA 300.0 Rev. 2.1: Sulfate: 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.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P441707

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P441710

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P441716

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442129

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442133

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441964

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441848

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441849

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441778

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441779

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441725

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

Reference Method: SM 2320 B-2011
Batch ID: P442207

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

Reference Method: SM 2540 C-2015
Batch ID: P442271

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P442080

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P442485

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P441952

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: P441707

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P441710

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P441716

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442129

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442133

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441964

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441848

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441849

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441778

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441779

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441725

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

Reference Method: SM 2320 B-2011
Batch ID: P442207

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P442271

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.2		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P442080

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	104		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P442485

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	105		P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P441952

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.5		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442129

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2469844	Chloride	103		P	90 - 110
2469951	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442133

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2469844	Sulfate	103		P	90 - 110
2469951	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441964

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2469944	Ammonia-N	97.0	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441848

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2469942	Kjeldahl Nitrogen	102	97.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441778

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2469615	NO2NO3-N	100		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441779

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2469967	NO2NO3-N	102	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470060	Total-P	102	105	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P442485

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2470419	Fluoride	105	107	P/F	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P441952

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2469968	Organic Carbon	94.6	95.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P441707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469940	Color (true)	11.2	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P441710

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469798	Color (true)	0.392	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P441716

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469796	Turbidity	9.83	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P442129

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469844	Chloride	3.12	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441964

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469944	Ammonia-N	0.688	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441848

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469942	Kjeldahl Nitrogen	3.21	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P441849

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469943	Kjeldahl Nitrogen	0.366	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441778

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469615	NO2NO3-N	0.897	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441779

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469967	NO2NO3-N	2.48	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P441725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470060	Total-P	3.11	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P442207

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469965	Total Alkalinity	1.91	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P442271

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469849	TDS	4.89	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P442080

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469849	TSS	3.77	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P442485

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2470419	Fluoride	1.46	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P441952

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2469968	Organic Carbon	0.479	Spike	P	0 - 15

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

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A124268

Included Lab Sample IDs: 2469953

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

Reference Method: DEP SOP: NU-094-1

Run ID: A124270

Included Lab Sample IDs: 2469951, 2469955

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.5	99.6	P/P	90 - 110
Color (true)	99.6	99.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A124273

Included Lab Sample IDs: 2469951, 2469953, 2469955

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A124314

Included Lab Sample IDs: 2469952, 2469954, 2469956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	101	P/P	90 - 110
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A124317

Included Lab Sample IDs: 2469952, 2469956

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A124324

Included Lab Sample IDs: 2469954

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

Reference Method: SM 5310 B-2014

Run ID: A124385

Included Lab Sample IDs: 2469952, 2469954, 2469956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.0	116	P/P	85 - 115

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A124389

Included Lab Sample IDs: 2469952, 2469954, 2469956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A124410

Included Lab Sample IDs: 2469952, 2469954, 2469956

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	97.2	P/P	90 - 110
Kjeldahl Nitrogen	99.4	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A124439

Included Lab Sample IDs: 2469951, 2469953, 2469955

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	104	P/P	90 - 110
Chloride	107	102	P/P	90 - 110
Sulfate	102	104	P/P	90 - 110
Sulfate	106	102	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A124499

Included Lab Sample IDs: 2469951, 2469953, 2469955

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.0	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A124624

Included Lab Sample IDs: 2469951, 2469953, 2469955

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	105	106	P/P	90 - 110
Fluoride	106	105	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
DEP SOP: NU-094-1	Color (true)	100			11.2	
	Color (true)	102			0.392	
EPA 180.1 Rev. 2.0	Turbidity	103			9.83	
EPA 300.0 Rev. 2.1	Chloride	106	103	104	3.12	
	Sulfate	105	103	103		
EPA 350.1 Rev. 2.0	Ammonia-N	95.6	97.0	96.2		0.688
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.8	102	97.1		3.21
	Kjeldahl Nitrogen	97.0				0.366
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100			0.897
	NO2NO3-N	102	102	99.5		2.48
EPA 365.1 Rev. 2.0	Total-P	101	102	105		3.11
SM 2320 B-2011	Total Alkalinity	99.1			1.91	
SM 2540 C-2015	TDS	93.2			4.89	
SM 2540 D-2015	TSS	104			3.77	
SM 4500-F- C-2011	Fluoride	105	105	107		1.46
SM 5310 B-2014	Organic Carbon	96.5	94.6	95.2		0.479

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2469951, 2469953, 2469955
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2469951, 2469953, 2469955
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2469951, 2469953, 2469955
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2469951, 2469953, 2469955
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2469952, 2469954, 2469956
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2469952, 2469954, 2469956
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2469952, 2469954, 2469956
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2469952, 2469954, 2469956
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2469951, 2469953, 2469955
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2469951, 2469953, 2469955
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2469951, 2469953, 2469955
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2469951, 2469953, 2469955
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2469952, 2469954, 2469956

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	02/20/2024			02/20/2024 14:20	Jessica K Wilks	2469953
	02/20/2024			02/20/2024 15:09	Jessica K Wilks	2469955
	02/20/2024			02/20/2024 15:13	Jessica K Wilks	2469951
EPA 180.1 Rev. 2.0	02/20/2024			02/20/2024 13:13	Dipa Joshi	2469955
	02/20/2024			02/20/2024 13:59	Dipa Joshi	2469951
	02/20/2024			02/20/2024 14:01	Dipa Joshi	2469953
EPA 300.0 Rev. 2.1	02/20/2024			02/28/2024 12:36	James L Waggeberby	2469951
	02/20/2024			02/28/2024 15:37	James L Waggeberby	2469953
	02/20/2024			02/28/2024 15:53	James L Waggeberby	2469955
EPA 350.1 Rev. 2.0	02/20/2024			02/26/2024 13:20	Kenneth H Lee	2469952
	02/20/2024			02/26/2024 13:22	Kenneth H Lee	2469954
	02/20/2024			02/26/2024 13:23	Kenneth H Lee	2469956
EPA 351.2 Rev. 2.0	02/20/2024	02/23/2024 11:55	Simonne.V. Calhoun	02/27/2024 10:53	Robyn Blevins	2469952
	02/20/2024	02/23/2024 11:55	Simonne.V. Calhoun	02/27/2024 10:55	Robyn Blevins	2469956
	02/20/2024	02/23/2024 11:55	Simonne.V. Calhoun	02/27/2024 11:16	Robyn Blevins	2469954
EPA 353.2 Rev. 2.0	02/20/2024			02/21/2024 11:38	Fadila Guebre	2469952
	02/20/2024			02/21/2024 11:39	Fadila Guebre	2469954
	02/20/2024			02/21/2024 11:46	Fadila Guebre	2469956
EPA 365.1 Rev. 2.0	02/20/2024	02/21/2024 13:37	Adam P Silver	02/22/2024 10:07	James L Waggeberby	2469952
	02/20/2024	02/21/2024 13:37	Adam P Silver	02/22/2024 10:08	James L Waggeberby	2469956
	02/20/2024	02/21/2024 13:37	Adam P Silver	02/22/2024 13:59	James L Waggeberby	2469954
SM 2320 B-2011	02/20/2024			02/29/2024 08:22	Adam P Silver	2469951
	02/20/2024			02/29/2024 08:35	Adam P Silver	2469953
	02/20/2024			02/29/2024 08:45	Adam P Silver	2469955
SM 2540 C-2015	02/20/2024			02/22/2024 16:28	Yijie Li	2469951, 2469953, 2469955
SM 2540 D-2015	02/20/2024			02/22/2024 16:28	Yijie Li	2469951, 2469953, 2469955
SM 4500-F- C-2011	02/20/2024			03/07/2024 07:52	Dale L. Simmons	2469951
	02/20/2024			03/07/2024 07:58	Dale L. Simmons	2469953
	02/20/2024			03/07/2024 08:28	Dale L. Simmons	2469955
SM 5310 B-2014	02/20/2024			02/23/2024 05:44	Kenneth H Lee	2469952
	02/20/2024			02/23/2024 05:59	Kenneth H Lee	2469954
	02/20/2024			02/23/2024 06:14	Kenneth H Lee	2469956