Chemical Analysis Report

CEN-DIST-2022-03-16-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Run 22**
Request ID: **RQ-2022-03-14-28**
Customer: **CEN-DIST**
Project ID: **SMP**

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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: Big Creek @ Lake Nellie Rd **Collection Date/Time: 03/15/2022 11:45**

Field ID: G1CE0117 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2312522	DEP SOP: NU-094-1	Color (true)**	190		PCU	P411192	
	EPA 180.1 Rev. 2.0	Turbidity	0.65	I	NTU	P411208	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P411425	
		Sulfate	0.33	I	mg SO4/L	P411428	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P411339	
	SM 2540 C-2011	TDS	76		mg/L	P411581	
	SM 2540 D-2011	TSS	2	U	mg/L	P411535	
	SM 4500 F-C-2011	Fluoride	0.054	I	mg F/L	P411344	
2312523	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P411187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.93		mg N/L	P411398	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P411381	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P411408	
	SM 5310 B-2011	Organic Carbon	26		mg C/L	P411295	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Double Run Spring Run DS of Double Run Rd **Collection Date/Time: 03/15/2022 13:44**

Field ID: G1CE0122 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2312520	DEP SOP: NU-094-1	Color (true)**	21	A	PCU	P411192	
	EPA 180.1 Rev. 2.0	Turbidity	0.35	I	NTU	P411208	
	EPA 300.0 Rev. 2.1	Chloride	10	A	mg Cl/L	P411425	
		Sulfate	17	A	mg SO4/L	P411428	
	SM 2320 B-2011	Total Alkalinity	53		mg CaCO3/L	P411339	
	SM 2540 C-2011	TDS	118		mg/L	P411581	
	SM 2540 D-2011	TSS	2	U	mg/L	P411535	
	SM 4500 F-C-2011	Fluoride	0.052	I	mg F/L	P411344	
2312521	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P411187	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27		mg N/L	P411464	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.6		mg N/L	P411227	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P411408	
	SM 5310 B-2011	Organic Carbon	3.0		mg C/L	P411351	

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: P411192

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411208

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411425

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411428

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411187

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411398

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411464

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411227

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411381

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411408

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

Reference Method: SM 2320 B-2011
Batch ID: P411339

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

Reference Method: SM 2540 C-2011
Batch ID: P411581

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P411535

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P411344

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P411295

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

Reference Method: SM 5310 B-2011
Batch ID: P411351

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: P411192

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411208

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411425

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411428

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411187

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411398

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411227

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411381

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 365.1 Rev. 2.0
Batch ID: P411408

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

Reference Method: SM 2320 B-2011
Batch ID: P411339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P411344

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.1		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P411295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	105		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P411351

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.1		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411425

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312520	Chloride	104		P	90 - 110
2312561	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312520	Sulfate	103		P	90 - 110
2312561	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312563	Ammonia-N	96.8	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312434	Kjeldahl Nitrogen	96.8	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312787	Kjeldahl Nitrogen	91.8	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411227

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312480	NO2NO3-N	94.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411381

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312563	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312507	Total-P	105	105	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P411344

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2313019	Fluoride	99.5	99.0	P/P	92 - 107

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P411295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312790	Organic Carbon	93.3	98.0	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P411351

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2312914	Organic Carbon	95.3	98.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P411192

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312520	Color (true)	1.72	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312775	Turbidity	10.6	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411425

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312520	Chloride	0.0684	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P411428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312520	Sulfate	0.0741	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312563	Ammonia-N	1.70	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312434	Kjeldahl Nitrogen	1.26	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P411464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312787	Kjeldahl Nitrogen	9.42	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411227

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312480	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312563	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312507	Total-P	0.222	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P411339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313019	Total Alkalinity	0.853	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P411581

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312339	TDS	0.805	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P411344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2313019	Fluoride	0.495	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P411295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312790	Organic Carbon	4.15	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P411351

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2312914	Organic Carbon	2.09	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A110971
Included Lab Sample IDs: 2312521, 2312523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	97.8	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A110977
Included Lab Sample IDs: 2312520, 2312522

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	85 - 115
Color (true)	101	102	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A110981
Included Lab Sample IDs: 2312520, 2312522

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A110993
Included Lab Sample IDs: 2312521

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A110994
Included Lab Sample IDs: 2312520, 2312522

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

Reference Method: SM 5310 B-2011
Run ID: A111024
Included Lab Sample IDs: 2312523

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

Reference Method: SM 2320 B-2011
Run ID: A111051
Included Lab Sample IDs: 2312520, 2312522

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.9	96.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A111051
Included Lab Sample IDs: 2312520, 2312522

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500 F-C-2011
Run ID: A111051
Included Lab Sample IDs: 2312520, 2312522

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

Reference Method: SM 5310 B-2011
Run ID: A111056
Included Lab Sample IDs: 2312521

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	104	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A111075
Included Lab Sample IDs: 2312523

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A111137
Included Lab Sample IDs: 2312521, 2312523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A111154
Included Lab Sample IDs: 2312523

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.9	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A111178
Included Lab Sample IDs: 2312521

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	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		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	102				1.72	
EPA 180.1 Rev. 2.0	Turbidity	96.4				10.6	
EPA 300.0 Rev. 2.1	Chloride	104	104	104		0.0684	
	Sulfate	103	103	103		0.0741	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6	96.8	98.6			1.70
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.2	96.8	98.7			1.26
	Kjeldahl Nitrogen	93.0	91.8	103			9.42
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	94.8				0.0
	NO2NO3-N	102	101	101			0.0
EPA 365.1 Rev. 2.0	Total-P	101	105	105			0.222
SM 2320 B-2011	Total Alkalinity	99.1				0.853	
SM 2540 C-2011	TDS					0.805	
SM 4500 F-C-2011	Fluoride	99.1	99.5	99.0			0.495
SM 5310 B-2011	Organic Carbon	105	93.3	98.0			4.15
	Organic Carbon	93.1	95.3	98.6			2.09

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2312520, 2312522
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2312520, 2312522
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2312520, 2312522
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2312520, 2312522
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2312521, 2312523
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2312521, 2312523
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2312521, 2312523
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2312521, 2312523
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2312520, 2312522
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2312520, 2312522
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2312520, 2312522
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2312520, 2312522
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2312521, 2312523

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	03/16/2022			03/16/2022 16:07	Samantha L Bates	2312520
	03/16/2022			03/16/2022 16:36	Samantha L Bates	2312522
EPA 180.1 Rev. 2.0	03/16/2022			03/16/2022 14:08	Anna M. Plaviak	2312520
	03/16/2022			03/16/2022 14:11	Anna M. Plaviak	2312522
EPA 300.0 Rev. 2.1	03/16/2022			03/19/2022 04:59	Anna M. Plaviak	2312520
	03/16/2022			03/19/2022 06:36	Anna M. Plaviak	2312522
EPA 350.1 Rev. 2.0	03/16/2022			03/16/2022 13:08	Ping Hua	2312521
	03/16/2022			03/16/2022 13:10	Ping Hua	2312523
EPA 351.2 Rev. 2.0	03/16/2022	03/23/2022 10:26	Samantha L Bates	03/25/2022 12:11	Alexandra J Mattheus	2312523
	03/16/2022	03/24/2022 16:16	Samantha L Bates	03/25/2022 15:41	Alexandra J Mattheus	2312521
EPA 353.2 Rev. 2.0	03/16/2022			03/17/2022 11:42	Beverly Y. Sanders	2312521
	03/16/2022			03/22/2022 09:11	Beverly Y. Sanders	2312523
EPA 365.1 Rev. 2.0	03/16/2022	03/22/2022 15:55	Simonne.V. Calhoun	03/24/2022 14:30	James L Waggerby	2312521
	03/16/2022	03/22/2022 15:55	Simonne.V. Calhoun	03/24/2022 14:31	James L Waggerby	2312523
SM 2320 B-2011	03/16/2022			03/18/2022 01:37	Dale L. Simmons	2312520
	03/16/2022			03/18/2022 01:44	Dale L. Simmons	2312522
SM 2540 C-2011	03/16/2022			03/18/2022 15:46	Yijie Li	2312520, 2312522
SM 2540 D-2011	03/16/2022			03/18/2022 15:46	Yijie Li	2312520, 2312522
SM 4500 F-C-2011	03/16/2022			03/18/2022 01:37	Dale L. Simmons	2312520
	03/16/2022			03/18/2022 01:44	Dale L. Simmons	2312522
SM 5310 B-2011	03/16/2022			03/18/2022 07:17	Khloe J Berg	2312523
	03/16/2022			03/19/2022 00:52	Khloe J Berg	2312521