

Chemical Analysis Report

NW-DIST-2022-08-25-02

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

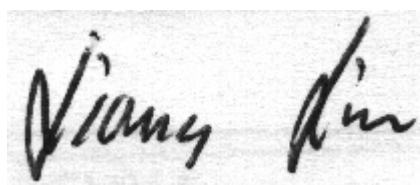
Event Description: **Niceville Run**
Request ID: **RQ-2022-08-22-43**
Customer: **NW-DIST**
Project ID: **SMP**

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

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 14-SEP-2022 10:34

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

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: Shaw Still Branch upstream E College Blvd

Collection Date/Time: 08/24/2022 09:45

Field ID: G3NW0162

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2352372	DEP SOP: NU-094-1	Color (true)	9.1		PCU	P419356	
	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P418702	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P419118	
		Sulfate	13		mg SO4/L	P419123	
	SM 2320 B-2011	Total Alkalinity	42		mg CaCO3/L	P419032	
	SM 2540 C-2011	TDS	79		mg/L	P419111	
	SM 2540 D-2011	TSS	8	I	mg/L	P419148	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P419391	
2352374	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P418886	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27		mg N/L	P418820	
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.5		mg N/L	P419052	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P419131	
	SM 5310 B-2011	Organic Carbon	2.1		mg C/L	P419028	

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: UNNAMED LAKE

Collection Date/Time: 08/24/2022 11:00

Field ID: G3NW0223

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2352376	DEP SOP: NU-094-1	Color (true)	17		PCU	P419356	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P418702	
	EPA 300.0 Rev. 2.1	Chloride	7.1		mg Cl/L	P419118	
		Sulfate	4.2		mg SO4/L	P419123	
	SM 2320 B-2011	Total Alkalinity	5.4		mg CaCO3/L	P419032	
	SM 2540 C-2011	TDS	31		mg/L	P419111	
	SM 2540 D-2011	TSS	2	U	mg/L	P419148	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P419391	
2352377	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P418886	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35		mg N/L	P418822	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.24		mg N/L	P419052	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P419131	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P419028	

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: Direct Runoff to Choctawhatchee Bay below Oregon Drive

Collection Date/Time: 08/24/2022 12:00

Field ID: G3NW0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2352373	DEP SOP: NU-094-1	Color (true)	68		PCU	P419356	
	EPA 180.1 Rev. 2.0	Turbidity	9.4		NTU	P418702	
	EPA 300.0 Rev. 2.1	Chloride	48		mg Cl/L	P419118	
		Sulfate	13		mg SO4/L	P419123	
	SM 2320 B-2011	Total Alkalinity	62		mg CaCO3/L	P419032	
	SM 2540 C-2011	TDS	173		mg/L	P419111	
	SM 2540 D-2011	TSS	6	I	mg/L	P419148	
	SM 4500-F- C-2011	Fluoride	0.073	I	mg F/L	P419391	
2352375	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P418886	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P418822	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P419052	
	EPA 365.1 Rev. 2.0	Total-P	0.064		mg P/L	P419131	
	SM 5310 B-2011	Organic Carbon	8.9		mg C/L	P419028	

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: P419356

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418702

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419118

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419123

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418886

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418820

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418822

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419052

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419131

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: P419032

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2011
Batch ID: P419111

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P419148

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P419391

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P419028

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: P419356

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.8		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418702

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	95.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419118

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419123

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418886

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418820

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418822

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419052

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	103		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419131

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P419032

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

Reference Method: SM 4500-F- C-2011
Batch ID: P419391

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.9		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419118

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352251	Chloride	102		P	90 - 110
2352372	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419123

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352251	Sulfate	98.9		P	90 - 110
2352372	Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352296	Ammonia-N	95.2	95.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351604	Kjeldahl Nitrogen	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418822

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352206	Kjeldahl Nitrogen	106	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419052

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352375	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419131

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352281	Total-P	104	106	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P419391

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352507	Fluoride	97.9	98.7	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352443	Organic Carbon	96.7	97.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P419356

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352306	Color (true)	4.93	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418702

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352318	Turbidity	8.61	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352251	Chloride	0.713	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419123

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352251	Sulfate	0.737	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352296	Ammonia-N	0.195	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351604	Kjeldahl Nitrogen	1.58	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352206	Kjeldahl Nitrogen	0.0426	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419052

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352375	NO2NO3-N	0.304	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352281	Total-P	1.83	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P419032

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352507	Total Alkalinity	1.94	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P419111

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352222	TDS	3.13	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P419391

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352507	Fluoride	0.509	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P419028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352443	Organic Carbon	0.657	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: A114350

Included Lab Sample IDs: 2352372, 2352373, 2352376

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114437

Included Lab Sample IDs: 2352374, 2352375, 2352377

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	96.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114482

Included Lab Sample IDs: 2352374, 2352375, 2352377

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	95.1	P/P	90 - 110
Kjeldahl Nitrogen	99.6	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A114499

Included Lab Sample IDs: 2352374, 2352375, 2352377

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.1	97.6	P/P	90 - 110
Organic Carbon	97.7	99.2	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A114506

Included Lab Sample IDs: 2352372, 2352373, 2352376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.2	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114510

Included Lab Sample IDs: 2352374, 2352375, 2352377

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A114542

Included Lab Sample IDs: 2352372, 2352373, 2352376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Chloride	102	103	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110
Sulfate	102	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114610

Included Lab Sample IDs: 2352375

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

Reference Method: DEP SOP: NU-094-1

Run ID: A114636

Included Lab Sample IDs: 2352372, 2352373, 2352376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.0	97.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114650

Included Lab Sample IDs: 2352374, 2352377

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

Reference Method: SM 4500-F- C-2011

Run ID: A114660

Included Lab Sample IDs: 2352372, 2352373, 2352376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	100	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)	96.8			4.93	
EPA 180.1 Rev. 2.0	Turbidity	95.8			8.61	
EPA 300.0 Rev. 2.1	Chloride	103	102	102	0.713	
	Sulfate	100	98.9	96.9	0.737	
EPA 350.1 Rev. 2.0	Ammonia-N	96.8	95.2	95.4		0.195
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	103	102		1.58
	Kjeldahl Nitrogen	97.8	106	105		0.0426
EPA 353.2 Rev. 2.0	NO2NO3-N	103	102	102		0.304
EPA 365.1 Rev. 2.0	Total-P	104	104	106		1.83
SM 2320 B-2011	Total Alkalinity	101			1.94	
SM 2540 C-2011	TDS				3.13	
SM 4500-F- C-2011	Fluoride	101	97.9	98.7		0.509
SM 5310 B-2011	Organic Carbon	95.9	96.7	97.4		0.657

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2352372, 2352373, 2352376
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2352372, 2352373, 2352376
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2352372, 2352373, 2352376
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2352372, 2352373, 2352376
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2352374, 2352375, 2352377
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2352374, 2352375, 2352377
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2352374, 2352375, 2352377
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2352374, 2352375, 2352377
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2352372, 2352373, 2352376
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2352372, 2352373, 2352376
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2352372, 2352373, 2352376
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2352372, 2352373, 2352376
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2352374, 2352375, 2352377

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	08/25/2022			08/25/2022 15:31	Anna M. Plaviak	2352372
	08/25/2022			08/25/2022 15:32	Anna M. Plaviak	2352373, 2352376
	08/25/2022			08/25/2022 14:22	Chandler E Cox	2352372
EPA 180.1 Rev. 2.0	08/25/2022			08/25/2022 14:23	Chandler E Cox	2352373
	08/25/2022			08/25/2022 14:25	Chandler E Cox	2352376
	08/25/2022			09/03/2022 08:25	Anna M. Plaviak	2352372
EPA 300.0 Rev. 2.1	08/25/2022			09/03/2022 12:12	Anna M. Plaviak	2352373
	08/25/2022			09/03/2022 12:27	Anna M. Plaviak	2352376
	08/25/2022			08/30/2022 14:50	Judith K. Clark	2352374
EPA 350.1 Rev. 2.0	08/25/2022			08/30/2022 14:52	Judith K. Clark	2352375
	08/25/2022			08/30/2022 14:53	Judith K. Clark	2352377
	08/25/2022	08/30/2022 14:31	Samantha L Bates	09/01/2022 10:53	Alexandra J Mattheus	2352374
EPA 351.2 Rev. 2.0	08/25/2022	08/30/2022 14:31	Samantha L Bates	09/01/2022 11:06	Alexandra J Mattheus	2352375
	08/25/2022	08/30/2022 14:31	Samantha L Bates	09/01/2022 11:08	Alexandra J Mattheus	2352377
	08/25/2022			09/02/2022 10:14	Judith K. Clark	2352375
EPA 353.2 Rev. 2.0	08/25/2022			09/02/2022 10:20	Judith K. Clark	2352374
	08/25/2022			09/02/2022 10:23	Judith K. Clark	2352377
	08/25/2022	09/07/2022 16:10	Simonne.V. Calhoun	09/08/2022 12:03	Simonne.V. Calhoun	2352375
EPA 365.1 Rev. 2.0	08/25/2022	09/07/2022 16:10	Simonne.V. Calhoun	09/09/2022 13:15	James L Waggeberby	2352374
	08/25/2022	09/07/2022 16:10	Simonne.V. Calhoun	09/09/2022 13:16	James L Waggeberby	2352377
	08/25/2022			09/01/2022 16:44	Dale L. Simmons	2352372
SM 2320 B-2011	08/25/2022			09/01/2022 16:52	Dale L. Simmons	2352373
	08/25/2022			09/01/2022 17:00	Dale L. Simmons	2352376
	08/25/2022			08/29/2022 16:08	Yijie Li	2352372, 2352373, 2352376
SM 2540 C-2011	08/25/2022			08/29/2022 16:08	Yijie Li	2352372, 2352373, 2352376
SM 2540 D-2011	08/25/2022			09/09/2022 19:54	Dale L. Simmons	2352372
	08/25/2022			09/09/2022 19:59	Dale L. Simmons	2352373
	08/25/2022			09/09/2022 20:04	Dale L. Simmons	2352376
SM 4500-F- C-2011	08/25/2022			09/01/2022 15:53	Khloe J Berg	2352377
	08/25/2022			09/01/2022 21:12	Khloe J Berg	2352374
	08/25/2022			09/01/2022 21:32	Khloe J Berg	2352375