

Chemical Analysis Report

SW-DIST-2023-03-09-03

Florida DEP Laboratory
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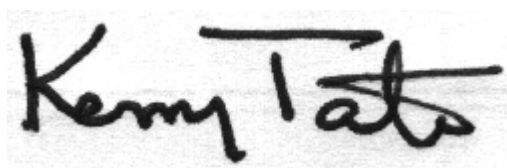
Event Description: **Run 4**
Request ID: **RQ-2023-03-06-18**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 28-MAR-2023 13:41

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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: Crystal Lake @ Center

Collection Date/Time: 03/08/2023 09:50

Field ID: G3SW0076

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2393189	DEP SOP: NU-094-1	Color (true)	24		PCU	P426951	
	EPA 180.1 Rev. 2.0	Turbidity	4.8		NTU	P426953	
	EPA 300.0 Rev. 2.1	Chloride	9.6		mg Cl/L	P427505	
		Sulfate	5.6		mg SO4/L	P427507	
	SM 2320 B-2011	Total Alkalinity	35		mg CaCO3/L	P427114	
	SM 2540 C-2015	TDS	78		mg/L	P427512	
	SM 2540 D-2015	TSS	6	I	mg/L	P427358	
	SM 4500-F- C-2011	Fluoride	0.18		mg F/L	P427295	
2393191	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P427083	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P427158	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427128	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P427224	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P427324	
2393193	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P426959	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Little Banana Lake @ Center

Collection Date/Time: 03/08/2023 10:40

Field ID: G3SW0102

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2393190	DEP SOP: NU-094-1	Color (true)	21		PCU	P426952	
	EPA 180.1 Rev. 2.0	Turbidity	9.2		NTU	P426953	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P427505	
		Sulfate	2.8		mg SO4/L	P427507	
	SM 2320 B-2011	Total Alkalinity	68		mg CaCO3/L	P427114	
	SM 2540 C-2015	TDS	129		mg/L	P427512	
	SM 2540 D-2015	TSS	11		mg/L	P427358	
	SM 4500-F- C-2011	Fluoride	0.53		mg F/L	P427295	
2393192	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P427083	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.3		mg N/L	P427248	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P427128	
	EPA 365.1 Rev. 2.0	Total-P	0.35		mg P/L	P427224	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P427324	
2393194	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.14		mg P/L	P426959	

Ref. Method and Comment:

SM 2540 D-2015: 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: P426951

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P426952

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P426953

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427505

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427507

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427083

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427158

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427248

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427128

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: P427224

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426959

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: SM 2320 B-2011
Batch ID: P427114

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

Reference Method: SM 2540 C-2015
Batch ID: P427512

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P427358

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P427295

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P427324

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: P426951

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P426952

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P426953

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427505

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427507

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427083

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427158

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427248

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427128

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427224

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426959

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.5		P	90 - 110

Reference Method: SM 2320 B-2011
Batch ID: P427114

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.4		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P427512

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

Reference Method: SM 2540 D-2015
Batch ID: P427358

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.7		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P427295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.7		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P427324

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2392998	Chloride	102		P	90 - 110
2393134	Chloride	99.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2392998	Sulfate	100		P	90 - 110
2393134	Sulfate	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427083

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393171	Ammonia-N	97.2	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427158

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393191	Kjeldahl Nitrogen	105	97.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427128

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393116	NO2NO3-N	94.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393205	Total-P	103	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426959

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393018	O-Phosphate-P	92.3	92.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P427295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393233	Fluoride	99.1	99.1	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P427324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2393172	Organic Carbon	97.9	99.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P426951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393168	Color (true)	1.14	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P426952

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393218	Color (true)	0.512	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P426953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2392929	Turbidity	1.42	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2392998	Chloride	1.08	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2392998	Sulfate	1.46	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393171	Ammonia-N	0.328	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427158

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393191	Kjeldahl Nitrogen	4.38	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427248

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393192	Kjeldahl Nitrogen	4.82	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427128

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393116	NO2NO3-N	0.235	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393205	Total-P	1.97	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P426959

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393018	O-Phosphate-P	0.203	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P427114

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393556	Total Alkalinity	0.490	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P427512

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393123	TDS	3.13	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P427295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393233	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P427324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2393172	Organic Carbon	0.960	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: A117905

Included Lab Sample IDs: 2393189, 2393190

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

Reference Method: DEP SOP: NU-094-1

Run ID: A117906

Included Lab Sample IDs: 2393189, 2393190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.8	99.8	P/P	90 - 110
Color (true)	99.9	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A117910

Included Lab Sample IDs: 2393193, 2393194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A117961

Included Lab Sample IDs: 2393191, 2393192

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	97.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A117971

Included Lab Sample IDs: 2393189, 2393190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.9	95.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A117976

Included Lab Sample IDs: 2393191, 2393192

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

Reference Method: SM 4500-F- C-2011

Run ID: A118053

Included Lab Sample IDs: 2393189, 2393190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118059

Included Lab Sample IDs: 2393192

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.5	98.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118064

Included Lab Sample IDs: 2393191

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

Reference Method: SM 5310 B-2011

Run ID: A118072

Included Lab Sample IDs: 2393191, 2393192

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	98.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118079

Included Lab Sample IDs: 2393191

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.8	90.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118082

Included Lab Sample IDs: 2393192

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	105	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118124

Included Lab Sample IDs: 2393189, 2393190

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.3	100	P/P	90 - 110
Sulfate	98.3	101	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)	99.3			1.14	
	Color (true)	99.6			0.512	
EPA 180.1 Rev. 2.0	Turbidity	100			1.42	
EPA 300.0 Rev. 2.1	Chloride	101	102	99.9	1.08	
	Sulfate	101	100	98.6	1.46	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	97.2	96.8		0.328
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	105	97.7		4.38
	Kjeldahl Nitrogen	110				4.82
EPA 353.2 Rev. 2.0	NO2NO3-N	101	94.8			0.235
EPA 365.1 Rev. 2.0	Total-P	101	103	105		1.97
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.5	92.3	92.5		0.203
SM 2320 B-2011	Total Alkalinity	96.4			0.490	
SM 2540 C-2015	TDS	107			3.13	
SM 2540 D-2015	TSS	91.7				
SM 4500-F- C-2011	Fluoride	95.7	99.1	99.1		0.0
SM 5310 B-2011	Organic Carbon	96.6	97.9	99.2		0.960

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2393189, 2393190
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2393189, 2393190
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2393189, 2393190
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2393189, 2393190
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2393191, 2393192
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2393191, 2393192
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2393191, 2393192
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2393191, 2393192
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2393193, 2393194
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2393189, 2393190
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2393189, 2393190
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2393189, 2393190
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2393189, 2393190
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2393191, 2393192

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	03/09/2023			03/09/2023 13:48	Alexis Price	2393189
	03/09/2023			03/09/2023 13:51	Alexis Price	2393190
EPA 180.1 Rev. 2.0	03/09/2023			03/09/2023 13:59	Chandler E Cox	2393189, 2393190
EPA 300.0 Rev. 2.1	03/09/2023			03/22/2023 01:43	Anna M. Plaviak	2393189
	03/09/2023			03/22/2023 01:59	Anna M. Plaviak	2393190
EPA 350.1 Rev. 2.0	03/09/2023			03/13/2023 13:48	Khloe J Berg	2393191
	03/09/2023			03/13/2023 13:49	Khloe J Berg	2393192
EPA 351.2 Rev. 2.0	03/09/2023	03/15/2023 13:00	Simonne.V. Calhoun	03/20/2023 11:33	Samantha L Bates	2393191
	03/09/2023	03/16/2023 13:04	Simonne.V. Calhoun	03/20/2023 13:19	Samantha L Bates	2393192
EPA 353.2 Rev. 2.0	03/09/2023			03/14/2023 11:01	Beverly Y. Sanders	2393191
	03/09/2023			03/14/2023 11:02	Beverly Y. Sanders	2393192
EPA 365.1 Rev. 2.0	03/09/2023	03/16/2023 16:36	Adam P Silver	03/17/2023 14:20	James L Waggeberby	2393192
	03/09/2023	03/16/2023 16:36	Adam P Silver	03/17/2023 16:44	James L Waggeberby	2393191
EPA 365.1 Rev. 2.0 dissolved	03/09/2023			03/09/2023 15:25	Elise M. Gillis	2393193
	03/09/2023			03/09/2023 15:26	Elise M. Gillis	2393194
SM 2320 B-2011	03/09/2023			03/14/2023 03:59	Chandler E Cox	2393189
	03/09/2023			03/14/2023 04:14	Chandler E Cox	2393190
SM 2540 C-2015	03/09/2023			03/14/2023 16:02	Yijie Li	2393189, 2393190
SM 2540 D-2015	03/09/2023			03/14/2023 16:02	Yijie Li	2393189, 2393190
SM 4500-F- C-2011	03/09/2023			03/17/2023 00:33	Dale L. Simmons	2393189
	03/09/2023			03/17/2023 00:38	Dale L. Simmons	2393190
SM 5310 B-2011	03/09/2023			03/15/2023 23:41	Elise M. Gillis	2393191
	03/09/2023			03/15/2023 23:56	Elise M. Gillis	2393192