Chemical Analysis Report

CEN-DIST-2023-04-07-01

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

Event Description: **Run 12**
Request ID: **RQ-2023-04-03-33**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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FL Dept. of Environmental Protection
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Certified by: Colin Wright, Program Administrator

Date Certified: 28-APR-2023 08:34

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Nutrients.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

A - Value reported is the mean of two or more determinations.
B - Results based on colony counts outside the acceptable range.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J - Estimated value and/or the analysis did not meet established quality control criteria.
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
V - Analyte was detected in both sample and method blank.
X - Too few individuals to calculate SCI value.
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Lake Warren at Center **Collection Date/Time: 04/06/2023 10:49**

Field ID: G4CE0236 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399329	DEP SOP: NU-094-1	Color (true)	35		PCU	P428219	
	EPA 180.1 Rev. 2.0	Turbidity	13		NTU	P428211	
	EPA 300.0 Rev. 2.1	Chloride	29		mg Cl/L	P428575	
		Sulfate	15		mg SO4/L	P428578	
	SM 2320 B-2011	Total Alkalinity	37		mg CaCO3/L	P428357	
	SM 2540 C-2015	TDS	130		mg/L	P428708	
	SM 2540 D-2015	TSS	10		mg/L	P428570	
	SM 4500-F- C-2011	Fluoride	0.071	I	mg F/L	P428729	
2399331	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P428520	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P428676	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P428684	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P428340	
	SM 5310 B-2011	Organic Carbon	9.9		mg C/L	P428348	

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.

Sample Location: Hourglass Lake at Center **Collection Date/Time: 04/06/2023 11:35**

Field ID: G4CE0178 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399330	DEP SOP: NU-094-1	Color (true)	19		PCU	P428219	
	EPA 180.1 Rev. 2.0	Turbidity	4.1		NTU	P428211	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P428575	
		Sulfate	23		mg SO4/L	P428578	
	SM 2320 B-2011	Total Alkalinity	47		mg CaCO3/L	P428507	
	SM 2540 C-2015	TDS	134		mg/L	P428709	
	SM 2540 D-2015	TSS	7	I	mg/L	P428571	
	SM 4500-F- C-2011	Fluoride	0.028	I	mg F/L	P428730	
2399332	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P428520	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.90		mg N/L	P428676	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P428685	
	EPA 365.1 Rev. 2.0	Total-P	0.074		mg P/L	P428340	
	SM 5310 B-2011	Organic Carbon	7.3		mg C/L	P428348	

Ref. Method and Comment:
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: P428219

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428211

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428575

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428578

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428520

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428676

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428684

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428685

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428340

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: P428357

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

Reference Method: SM 2320 B-2011
Batch ID: P428507

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

Reference Method: SM 2540 C-2015
Batch ID: P428708

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P428709

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P428570

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P428571

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P428729

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P428730

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P428348

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: P428219

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428211

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428575

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428520

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428676

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	109		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428684

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428685

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428340

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P428357

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.9		P	94 - 106

Reference Method: SM 2320 B-2011
Batch ID: P428507

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.2		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P428708

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

Reference Method: SM 2540 C-2015
Batch ID: P428709

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

Reference Method: SM 2540 D-2015
Batch ID: P428570

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.4		P	85 - 106

Reference Method: SM 2540 D-2015
Batch ID: P428571

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	102		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P428729

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

Reference Method: SM 4500-F- C-2011
Batch ID: P428730

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

Reference Method: SM 5310 B-2011
Batch ID: P428348

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399273	Chloride	97.1		P	90 - 110
2399277	Chloride	96.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399273	Sulfate	94.1		P	90 - 110
2399277	Sulfate	93.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428520

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399332	Ammonia-N	109	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399212	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399332	NO2NO3-N	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428340

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399366	Total-P	101	99.8	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P428729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399299	Fluoride	104	104	P/P	94 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P428730

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399380	Fluoride	104	104	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P428348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399086	Organic Carbon	95.8	96.0	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P428219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399274	Color (true)	0.970	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428211

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399277	Turbidity	6.34	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399273	Chloride	2.13	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399273	Sulfate	3.04	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428520

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399332	Ammonia-N	5.83	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428676

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399331	Kjeldahl Nitrogen	2.21	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399212	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399332	NO2NO3-N	1.45	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399366	Total-P	1.32	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P428357

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398875	Total Alkalinity	2.12	Sample	P	0 - 3.8

Reference Method: SM 2320 B-2011
Batch ID: P428507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399381	Total Alkalinity	1.47	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P428708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398876	TDS	6.33	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P428709

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398940	TDS	5.83	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P428571

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398839	TSS	0.0	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P428729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399299	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 4500-F- C-2011
Batch ID: P428730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399380	Fluoride	0.0	Spike	P	0 - 1.6

Quality Assurance Report
Precision

Reference Method: SM 5310 B-2011
Batch ID: P428348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399086	Organic Carbon	0.159	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: A118453
Included Lab Sample IDs: 2399329, 2399330

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

Reference Method: DEP SOP: NU-094-1
Run ID: A118456
Included Lab Sample IDs: 2399329, 2399330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A118517
Included Lab Sample IDs: 2399331, 2399332

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	96.6	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A118519
Included Lab Sample IDs: 2399329

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.3	94.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A118547
Included Lab Sample IDs: 2399331, 2399332

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

Reference Method: SM 2320 B-2011
Run ID: A118577
Included Lab Sample IDs: 2399330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	92.8	94.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A118584
Included Lab Sample IDs: 2399331, 2399332

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	97.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A118603
Included Lab Sample IDs: 2399329, 2399330

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.7	99.2	P/P	90 - 110
Sulfate	97.9	98.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A118653
Included Lab Sample IDs: 2399331, 2399332

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	104	P/P	90 - 110
NO2NO3-N	104	103	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A118673
Included Lab Sample IDs: 2399329, 2399330

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A118695
Included Lab Sample IDs: 2399331, 2399332

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.1	97.5	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	98.9				0.970	
EPA 180.1 Rev. 2.0	Turbidity	99.2				6.34	
EPA 300.0 Rev. 2.1	Chloride	101	97.1	96.8		2.13	
	Sulfate	98.2	94.1	93.6		3.04	
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	109	103			5.83
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	109					2.21
EPA 353.2 Rev. 2.0	NO2NO3-N	106	101	102			0.494
	NO2NO3-N	108	103	104			1.45
EPA 365.1 Rev. 2.0	Total-P	99.0	101	99.8			1.32
SM 2320 B-2011	Total Alkalinity	94.9				2.12	
	Total Alkalinity	96.2				1.47	
SM 2540 C-2015	TDS	96.8				6.33	
	TDS	101				5.83	
SM 2540 D-2015	TSS	96.4					
	TSS	102				0.0	
SM 4500-F- C-2011	Fluoride	101	104	104			0.0
	Fluoride	100	104	104			0.0
SM 5310 B-2011	Organic Carbon	93.2	95.8	96.0			0.159

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2399329, 2399330
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2399329, 2399330
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2399329, 2399330
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2399329, 2399330
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2399331, 2399332
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2399331, 2399332
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2399331, 2399332
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2399331, 2399332
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2399329, 2399330
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2399329, 2399330
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2399329, 2399330
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2399329, 2399330
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2399331, 2399332

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	04/07/2023			04/07/2023 16:07	Alexis Price	2399329
	04/07/2023			04/07/2023 16:08	Alexis Price	2399330
EPA 180.1 Rev. 2.0	04/07/2023			04/07/2023 14:06	Chandler E Cox	2399329, 2399330
EPA 300.0 Rev. 2.1	04/07/2023			04/15/2023 01:33	Anna M. Plaviak	2399329
	04/07/2023			04/15/2023 01:48	Anna M. Plaviak	2399330
EPA 350.1 Rev. 2.0	04/07/2023			04/14/2023 13:15	Ping Hua	2399332
	04/07/2023			04/14/2023 13:19	Ping Hua	2399331
EPA 351.2 Rev. 2.0	04/07/2023	04/19/2023 11:19	Dana G. Hughes	04/20/2023 12:32	Ping Hua	2399331
	04/07/2023	04/19/2023 11:19	Dana G. Hughes	04/20/2023 12:37	Ping Hua	2399332
EPA 353.2 Rev. 2.0	04/07/2023			04/19/2023 09:46	Beverly Y. Sanders	2399331
	04/07/2023			04/19/2023 09:53	Beverly Y. Sanders	2399332
EPA 365.1 Rev. 2.0	04/07/2023	04/12/2023 12:30	Simonne.V. Calhoun	04/13/2023 09:15	James L Waggerby	2399331
	04/07/2023	04/12/2023 12:30	Simonne.V. Calhoun	04/13/2023 09:17	James L Waggerby	2399332
SM 2320 B-2011	04/07/2023			04/12/2023 08:40	Dale L. Simmons	2399329
	04/07/2023			04/13/2023 16:17	Dale L. Simmons	2399330
SM 2540 C-2015	04/07/2023			04/10/2023 16:07	Yijie Li	2399329, 2399330
SM 2540 D-2015	04/07/2023			04/10/2023 16:07	Yijie Li	2399329, 2399330
SM 4500-F- C-2011	04/07/2023			04/19/2023 22:33	Dale L. Simmons	2399329
	04/07/2023			04/19/2023 23:33	Dale L. Simmons	2399330
SM 5310 B-2011	04/07/2023			04/11/2023 22:34	Elise M. Gillis	2399331
	04/07/2023			04/11/2023 22:51	Elise M. Gillis	2399332