

Chemical Analysis Report

CEN-DIST-2022-03-31-01

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

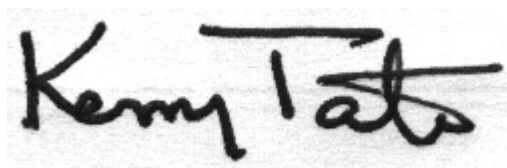
Event Description: **Run 19**
Request ID: **RQ-2022-03-28-17**
Customer: **CEN-DIST**
Project ID: **SMP**

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 27-APR-2022 10:02

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the "T" and a long horizontal stroke at the end.

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: Reed Canal @ Reed Canal Park

Collection Date/Time: 03/30/2022 11:15

Field ID: G5CE0156

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315569	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P411823	
	SM 2320 B-2011	Total Alkalinity	248		mg CaCO3/L	P412136	
	SM 2540 D-2011	TSS	2	U	mg/L	P412021	
	SM 4500-F- C-2011	Fluoride	0.15		mg F/L	P412139	
2315571	EPA 350.1 Rev. 2.0	Ammonia-N	0.080		mg N/L	P412705	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P412768	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.070		mg N/L	P411860	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P411941	
	SM 5310 B-2011	Organic Carbon	8.7		mg C/L	P412046	

Ref. Method and Comment:

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

SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Holly Hill Ditch @ Ridgewood

Collection Date/Time: 03/30/2022 12:10

Field ID: G5CE0158

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2315570	EPA 180.1 Rev. 2.0	Turbidity	4.2	A	NTU	P411823	
	SM 2320 B-2011	Total Alkalinity	147		mg CaCO3/L	P412056	
	SM 2540 D-2011	TSS	6	IA	mg/L	P412023	
	SM 4500-F- C-2011	Fluoride	0.53		mg F/L	P412058	
2315572	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P411977	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P412173	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.068		mg N/L	P411950	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P411948	
	SM 5310 B-2011	Organic Carbon	8.3		mg C/L	P412109	

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: EPA 180.1 Rev. 2.0
Batch ID: P411823

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411977

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412705

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412173

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412768

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411860

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411950

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411941

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411948

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: P412056

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

Reference Method: SM 2320 B-2011
Batch ID: P412136

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

Reference Method: SM 2540 D-2011
Batch ID: P412021

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P412023

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P412058

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P412139

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P412046

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

Reference Method: SM 5310 B-2011
Batch ID: P412109

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411823

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411977

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	93.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412705

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: P412173

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412768

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411860

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	92.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411950

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411941

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411948

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P412056

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.1		P	94 - 106

Reference Method: SM 2320 B-2011
Batch ID: P412136

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.9		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P412058

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	93 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P412139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.8		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P412046

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

Reference Method: SM 5310 B-2011
Batch ID: P412109

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411977

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315618	Ammonia-N	101	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315512	Ammonia-N	99.2	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315365	Kjeldahl Nitrogen	96.6	94.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319058	Kjeldahl Nitrogen	106	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411860

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315540	NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315548	NO2NO3-N	95.9	95.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315647	Total-P	104	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315383	Total-P	93.9	95.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P412058

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315608	Fluoride	93.4	95.6	P/P	92 - 107

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P412046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315649	Organic Carbon	95.5	96.4	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P412109

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2315572	Organic Carbon	94.1	97.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P411823

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315570	Turbidity	0.943	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P411977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315618	Ammonia-N	1.66	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315512	Ammonia-N	2.00	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315365	Kjeldahl Nitrogen	1.96	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319058	Kjeldahl Nitrogen	1.25	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315540	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P411950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315548	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315647	Total-P	1.77	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P411948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315383	Total-P	1.51	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P412056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315608	Total Alkalinity	1.38	Sample	P	0 - 5.2

Reference Method: SM 2320 B-2011
Batch ID: P412136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316812	Total Alkalinity	0.997	Sample	P	0 - 5.2

Reference Method: SM 4500-F- C-2011
Batch ID: P412058

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315608	Fluoride	1.50	Spike	P	0 - 2.1

Reference Method: SM 4500-F- C-2011
Batch ID: P412139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2316812	Fluoride	0.475	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P412046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315649	Organic Carbon	0.471	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P412109

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2315572	Organic Carbon	2.50	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: A111257

Included Lab Sample IDs: 2315569, 2315570

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111270

Included Lab Sample IDs: 2315571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	97.5	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111302

Included Lab Sample IDs: 2315572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111307

Included Lab Sample IDs: 2315572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.3	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111336

Included Lab Sample IDs: 2315572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.4	99.4	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A111353

Included Lab Sample IDs: 2315571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.5	96.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A111357

Included Lab Sample IDs: 2315570

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.4	98.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A111357

Included Lab Sample IDs: 2315570

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.0	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A111373

Included Lab Sample IDs: 2315572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.7	95.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111379

Included Lab Sample IDs: 2315571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.1	97.3	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A111388

Included Lab Sample IDs: 2315569

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.5	97.9	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A111388

Included Lab Sample IDs: 2315569

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111515

Included Lab Sample IDs: 2315572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.4	95.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111601

Included Lab Sample IDs: 2315571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111695

Included Lab Sample IDs: 2315571

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.6	98.0	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 SMP	MS
					LCS	
EPA 180.1 Rev. 2.0	Turbidity	96.2			0.943	
EPA 350.1 Rev. 2.0	Ammonia-N	93.4	101	99.0		1.66
	Ammonia-N	98.4	99.2	101		2.00
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.6	96.6	94.4		1.96
	Kjeldahl Nitrogen	101	106	104		1.25
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	92.0	98.5	98.5		0.0
	NO ₂ NO ₃ -N	99.0	95.9	95.9		0.0
EPA 365.1 Rev. 2.0	Total-P	101	104	101		1.77
	Total-P	101	93.9	95.3		1.51
SM 2320 B-2011	Total Alkalinity	98.1			1.38	
	Total Alkalinity	97.9			0.997	
SM 4500-F- C-2011	Fluoride	96.9	93.4	95.6		1.50
	Fluoride	98.8				0.475
SM 5310 B-2011	Organic Carbon	97.4	95.5	96.4		0.471
	Organic Carbon	99.0	94.1	97.0		2.50

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2315569, 2315570
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2315571, 2315572
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2315571, 2315572
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2315571, 2315572
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2315571, 2315572
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2315569, 2315570
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2315569, 2315570
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2315569, 2315570
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2315571, 2315572

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	03/31/2022			03/31/2022 13:53	Khloe J Berg	2315570
	03/31/2022			03/31/2022 14:21	Khloe J Berg	2315569
EPA 350.1 Rev. 2.0	03/31/2022			04/05/2022 13:16	Ping Hua	2315572
	03/31/2022			04/21/2022 10:35	Ping Hua	2315571
EPA 351.2 Rev. 2.0	03/31/2022	04/12/2022 17:00	Samantha L Bates	04/15/2022 14:23	Alexandra J Mattheus	2315572
	03/31/2022	04/25/2022 12:07	Alexandra J Mattheus	04/26/2022 14:17	Alexandra J Mattheus	2315571
EPA 353.2 Rev. 2.0	03/31/2022			04/01/2022 10:14	Beverly Y. Sanders	2315571
	03/31/2022			04/05/2022 09:28	Beverly Y. Sanders	2315572
EPA 365.1 Rev. 2.0	03/31/2022	04/05/2022 17:35	Simonne.V. Calhoun	04/06/2022 12:23	Sarah A Nixon	2315572
	03/31/2022	04/07/2022 10:00	Simonne.V. Calhoun	04/07/2022 17:08	Sarah A Nixon	2315571
SM 2320 B-2011	03/31/2022			04/06/2022 22:00	Dale L. Simmons	2315570
	03/31/2022			04/08/2022 04:03	Dale L. Simmons	2315569
SM 2540 D-2011	03/31/2022			04/05/2022 14:26	Blanca Fach	2315569, 2315570
SM 4500-F- C-2011	03/31/2022			04/06/2022 18:13	Dale L. Simmons	2315570
	03/31/2022			04/08/2022 04:03	Dale L. Simmons	2315569
SM 5310 B-2011	03/31/2022			04/06/2022 23:14	Khloe J Berg	2315571
	03/31/2022			04/07/2022 21:53	Khloe J Berg	2315572