

Chemical Analysis Report

CEN-DIST-2022-11-04-03

Florida DEP Laboratory
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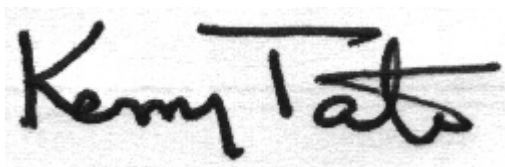
Event Description: **Lakes: Effie, Leonore, Isabell**
Request ID: **RQ-2022-10-31-23**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 01-DEC-2022 11:37

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: Lake Effie @ Center

Collection Date/Time: 11/03/2022 12:15

Field ID: G3CE0036

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2367656	DEP SOP: NU-094-1	Color (true)	120		PCU	P421982	
	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P421961	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P422247	
		Sulfate	6.6		mg SO4/L	P422250	
	SM 2320 B-2011	Total Alkalinity	87		mg CaCO3/L	P422256	
	SM 2540 C-2015	TDS	152		mg/L	P422521	
	SM 2540 D-2015	TSS	14		mg/L	P422339	
2367657	SM 4500-F- C-2011	Fluoride	0.071	I	mg F/L	P422896	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P422437	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.2		mg N/L	P422242	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422144	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P422193	
2367658	SM 5310 B-2011	Organic Carbon	18		mg C/L	P422611	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P421942	

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: FB

Collection Date/Time: 11/03/2022 12:35

Field ID: FB_11032022

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2367659	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P421982	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P421961	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P422247	
		Sulfate	0.20	U	mg SO4/L	P422250	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P422256	
	SM 2540 C-2015	TDS	15	U	mg/L	P422521	
	SM 2540 D-2015	TSS	2	U	mg/L	P422339	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P422896	
2367660	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P422437	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P422242	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422144	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P422193	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P422612	
2367661	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P421942	

Ref. Method and Comment:

SM 2540 D-2015: 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: P421982

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421961

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422247

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422437

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422242

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422144

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422193

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421942

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P422256

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

Reference Method: SM 2540 C-2015
Batch ID: P422521

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P422339

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P422611

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

Reference Method: SM 5310 B-2011
Batch ID: P422612

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: P421982

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421961

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422437

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422242

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422144

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422193

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421942

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P422256

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

Reference Method: SM 2540 C-2015
Batch ID: P422521

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

Reference Method: SM 2540 D-2015
Batch ID: P422339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	98.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

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

Reference Method: SM 5310 B-2011
Batch ID: P422611

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

Reference Method: SM 5310 B-2011
Batch ID: P422612

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 300.0 Rev. 2.1
Batch ID: P422247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367639	Chloride	105		P	90 - 110
2367672	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367639	Sulfate	109		P	90 - 110
2367672	Sulfate	110		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422437

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367777	Ammonia-N	98.6	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367475	Kjeldahl Nitrogen	93.4	95.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367641	NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422193

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367634	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367781	O-Phosphate-P	98.1	98.9	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367774	Fluoride	101	102	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P422611

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367614	Organic Carbon	98.4		P	85 - 115

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P422612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367641	Organic Carbon	100		P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P421982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367674	Color (true)	2.44	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421961

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367640	Turbidity	2.87	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367639	Chloride	0.107	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367639	Sulfate	0.285	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367777	Ammonia-N	0.188	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367475	Kjeldahl Nitrogen	1.56	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367641	NO2NO3-N	0.667	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422193

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367634	Total-P	0.418	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367781	O-Phosphate-P	0.715	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P422256

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367355	Total Alkalinity	0.815	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P422521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367474	TDS	6.61	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367774	Fluoride	0.972	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P422611

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367614	Organic Carbon	1.60	Sample	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P422612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367641	Organic Carbon	0.442	Sample	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A115753

Included Lab Sample IDs: 2367658, 2367661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	102	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A115758

Included Lab Sample IDs: 2367656, 2367659

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: A115768

Included Lab Sample IDs: 2367656, 2367659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A115800

Included Lab Sample IDs: 2367656, 2367659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.7	102	P/P	90 - 110
Sulfate	101	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A115831

Included Lab Sample IDs: 2367657, 2367660

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

Reference Method: SM 2320 B-2011

Run ID: A115885

Included Lab Sample IDs: 2367656, 2367659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.3	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A115889

Included Lab Sample IDs: 2367657

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A115901

Included Lab Sample IDs: 2367660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	98.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A115946

Included Lab Sample IDs: 2367657, 2367660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.2	94.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A115966

Included Lab Sample IDs: 2367657, 2367660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	98.4	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A116047

Included Lab Sample IDs: 2367657, 2367660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.9	97.8	P/P	90 - 110
Organic Carbon	98.3	99.9	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A116180

Included Lab Sample IDs: 2367656, 2367659

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	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)	101			2.44	
EPA 180.1 Rev. 2.0	Turbidity	101			2.87	
EPA 300.0 Rev. 2.1	Chloride	105	105	106	0.107	
	Sulfate	107	109	110	0.285	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6	98.6	98.8		0.188
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.6	93.4	95.1		1.56
EPA 353.2 Rev. 2.0	NO2NO3-N	106	99.5			0.667
EPA 365.1 Rev. 2.0	Total-P	106	105	106		0.418
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	98.1	98.9		0.715
SM 2320 B-2011	Total Alkalinity	96.2			0.815	
SM 2540 C-2015	TDS	104			6.61	
SM 2540 D-2015	TSS	98.1				
SM 4500-F- C-2011	Fluoride	100	101	102		0.972
SM 5310 B-2011	Organic Carbon	97.0	98.4		1.60	
	Organic Carbon	99.0	100		0.442	

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2367656, 2367659
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2367656, 2367659
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2367656, 2367659
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2367656, 2367659
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2367657, 2367660
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2367657, 2367660
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2367657, 2367660
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2367657, 2367660
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2367658, 2367661
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2367656, 2367659
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2367656, 2367659
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2367656, 2367659
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2367656, 2367659
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2367657, 2367660

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	11/04/2022			11/04/2022 15:51	Chandler E Cox	2367656, 2367659
EPA 180.1 Rev. 2.0	11/04/2022			11/04/2022 14:18	Khloe J Berg	2367656
	11/04/2022			11/04/2022 14:21	Khloe J Berg	2367659
EPA 300.0 Rev. 2.1	11/04/2022			11/11/2022 09:06	Anna M. Plaviak	2367656
	11/04/2022			11/11/2022 09:21	Anna M. Plaviak	2367659
EPA 350.1 Rev. 2.0	11/04/2022			11/16/2022 15:07	Ping Hua	2367657
	11/04/2022			11/16/2022 15:09	Ping Hua	2367660
EPA 351.2 Rev. 2.0	11/04/2022	11/14/2022 12:38	Alexandra J Mattheus	11/15/2022 16:38	Alexandra J Mattheus	2367657
	11/04/2022	11/14/2022 12:38	Alexandra J Mattheus	11/15/2022 16:40	Alexandra J Mattheus	2367660
EPA 353.2 Rev. 2.0	11/04/2022			11/09/2022 11:16	Beverly Y. Sanders	2367657
	11/04/2022			11/09/2022 11:17	Beverly Y. Sanders	2367660
EPA 365.1 Rev. 2.0	11/04/2022	11/10/2022 11:40	Simonne.V. Calhoun	11/14/2022 12:03	Simonne.V. Calhoun	2367657
	11/04/2022	11/10/2022 11:40	Simonne.V. Calhoun	11/14/2022 16:26	James L Waggeberby	2367660
EPA 365.1 Rev. 2.0 dissolved	11/04/2022			11/04/2022 13:27	Elise M. Gillis	2367658
	11/04/2022			11/04/2022 13:28	Elise M. Gillis	2367661
SM 2320 B-2011	11/04/2022			11/10/2022 12:23	Adam P Silver	2367656
	11/04/2022			11/10/2022 12:32	Adam P Silver	2367659
SM 2540 C-2015	11/04/2022			11/09/2022 16:35	Yijie Li	2367656, 2367659
SM 2540 D-2015	11/04/2022			11/09/2022 16:35	Yijie Li	2367656, 2367659
SM 4500-F- C-2011	11/04/2022			11/30/2022 08:26	Dale L. Simmons	2367656
	11/04/2022			11/30/2022 08:31	Dale L. Simmons	2367659
SM 5310 B-2011	11/04/2022			11/17/2022 17:43	Khloe J Berg	2367657
	11/04/2022			11/18/2022 14:07	Khloe J Berg	2367660