

Chemical Analysis Report

CEN-DIST-2021-09-28-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Lakes: Florida, Adelaide, Ann, Lotus**

Request ID: **RQ-2021-09-27-15**

Customer: **CEN-DIST**

Project ID: **SMP**

Send Reports to:

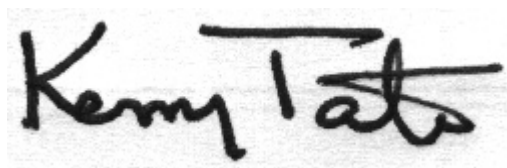
FL Dept. of Environmental Protection
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3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

For additional information please contact

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

Date Certified: 21-OCT-2021 11:27

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 first 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 Florida @ Center of Lake

Collection Date/Time: 09/27/2021 09:45

Field ID: G2CE0150

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2278659	EPA 180.1 Rev. 2.0	Turbidity	1.9	A	NTU	P404329	
	EPA 300.0 Rev. 2.1	Chloride	11	A	mg Cl/L	P404490	
		Sulfate	4.5	A	mg SO4/L	P404495	
	SM 2120 B-2011	Color (true)	87		PCU	P404282	
	SM 2320 B-2011	Total Alkalinity	48	A	mg CaCO3/L	P404535	
	SM 2540 C-2011	TDS	81		mg/L	P404765	
	SM 2540 D-2011	TSS	3	I	mg/L	P404757	
	SM 4500 F-C-2011	Fluoride	0.069	I	mg F/L	P404539	
2278661	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P404477	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P404394	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P404336	
	EPA 365.1 Rev. 2.0	Total-P	0.044	J	mg P/L	P404321	MS
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P404841	
2278663	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P404293	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Lake Adelaide @ Center

Collection Date/Time: 09/27/2021 10:15

Field ID: G2CE0151

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2278660	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P404329	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P404490	
		Sulfate	5.6		mg SO4/L	P404495	
	SM 2120 B-2011	Color (true)	75		PCU	P404282	
	SM 2320 B-2011	Total Alkalinity	41		mg CaCO3/L	P404535	
	SM 2540 C-2011	TDS	97		mg/L	P404765	
	SM 2540 D-2011	TSS	4	I	mg/L	P404757	
	SM 4500 F-C-2011	Fluoride	0.069	I	mg F/L	P404539	
2278662	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P404477	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.90		mg N/L	P404394	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P404336	
	EPA 365.1 Rev. 2.0	Total-P	0.048		mg P/L	P404321	MS
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P404841	
2278664	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P404293	

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: P404329

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404490

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404495

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404477

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404394

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404336

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404321

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P404293

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

Reference Method: SM 2120 B-2011
Batch ID: P404282

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P404535

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

Reference Method: SM 2540 C-2011
Batch ID: P404765

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P404757

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P404539

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P404841

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404490

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404495

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404477

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404394

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404336

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404321

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P404293

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.1		P	90 - 110

Reference Method: SM 2120 B-2011
Batch ID: P404282

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

Reference Method: SM 2320 B-2011
Batch ID: P404535

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P404539

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P404841

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404490

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277567	Chloride	103		P	90 - 110
2278659	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404495

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2277567	Sulfate	105		P	90 - 110
2278659	Sulfate	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278632	Ammonia-N	94.2	95.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278632	Kjeldahl Nitrogen	94.9	98.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404336

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278632	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278661	Total-P	111	114	F/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P404293

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278633	O-Phosphate-P	95.8	97.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P404539

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278659	Fluoride	101	101	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P404841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2278606	Organic Carbon	94.6	95.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P404329

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278659	Turbidity	8.88	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404490

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278659	Chloride	0.527	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P404495

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278659	Sulfate	0.542	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P404477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278632	Ammonia-N	0.760	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P404394

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278632	Kjeldahl Nitrogen	2.51	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P404336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278632	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P404321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278661	Total-P	2.01	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P404293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278633	O-Phosphate-P	1.45	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P404282

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278789	Color (true)	3.91	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P404535

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278659	Total Alkalinity	1.33	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P404765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278721	TDS	4.44	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P404539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278659	Fluoride	0.472	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P404841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2278606	Organic Carbon	0.499	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A108034

Included Lab Sample IDs: 2278659, 2278660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A108036

Included Lab Sample IDs: 2278663, 2278664

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.5	99.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A108050

Included Lab Sample IDs: 2278659, 2278660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A108052

Included Lab Sample IDs: 2278661, 2278662

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A108103

Included Lab Sample IDs: 2278661, 2278662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A108109

Included Lab Sample IDs: 2278661, 2278662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.5	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A108110

Included Lab Sample IDs: 2278661, 2278662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A108118

Included Lab Sample IDs: 2278659, 2278660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Chloride	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A108118

Included Lab Sample IDs: 2278659, 2278660

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

Reference Method: SM 2320 B-2011

Run ID: A108136

Included Lab Sample IDs: 2278659, 2278660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	95.5	P/P	90 - 110
Total Alkalinity	96.7	95.8	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A108136

Included Lab Sample IDs: 2278659, 2278660

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: SM 5310 B-2011

Run ID: A108260

Included Lab Sample IDs: 2278661, 2278662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.3	94.9	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		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					8.88	
EPA 300.0 Rev. 2.1	Chloride	101	103	103		0.527	
	Sulfate	104	106	105		0.542	
EPA 350.1 Rev. 2.0	Ammonia-N	95.2	94.2	95.0			0.760
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	94.9	98.3			2.51
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	102	102			0.0
EPA 365.1 Rev. 2.0	Total-P	107	111	114			2.01
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.1	95.8	97.2			1.45
SM 2120 B-2011	Color (true)	99.6				3.91	
SM 2320 B-2011	Total Alkalinity	100				1.33	
SM 2540 C-2011	TDS					4.44	
SM 4500 F-C-2011	Fluoride	100	101	101			0.472
SM 5310 B-2011	Organic Carbon	97.0	94.6	95.2			0.499

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2278659, 2278660
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2278659, 2278660
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2278659, 2278660
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2278661, 2278662
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2278661, 2278662
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2278661, 2278662
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2278661, 2278662
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2278663, 2278664
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2278659, 2278660
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2278659, 2278660
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2278659, 2278660
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2278659, 2278660
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2278659, 2278660
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2278661, 2278662

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	09/28/2021			09/28/2021 16:48	Khloe J Berg	2278659, 2278660
EPA 300.0 Rev. 2.1	09/28/2021			10/01/2021 14:49	Lipi Saha	2278659
	09/28/2021			10/01/2021 18:15	Lipi Saha	2278660
EPA 350.1 Rev. 2.0	09/28/2021			10/01/2021 13:47	Ping Hua	2278661
	09/28/2021			10/01/2021 13:48	Ping Hua	2278662
EPA 351.2 Rev. 2.0	09/28/2021	09/30/2021 12:55	Benjamin T. Nordmann	10/01/2021 12:47	Alexandra J Mattheus	2278661
	09/28/2021	09/30/2021 12:55	Benjamin T. Nordmann	10/01/2021 12:49	Alexandra J Mattheus	2278662
EPA 353.2 Rev. 2.0	09/28/2021			09/29/2021 10:19	Beverly Y. Sanders	2278661
	09/28/2021			09/29/2021 10:20	Beverly Y. Sanders	2278662
EPA 365.1 Rev. 2.0	09/28/2021	09/29/2021 16:23	Simonne.V. Calhoun	10/01/2021 12:25	Sarah A Nixon	2278661
	09/28/2021	09/29/2021 16:23	Simonne.V. Calhoun	10/01/2021 12:32	Sarah A Nixon	2278662
EPA 365.1 Rev. 2.0 dissolved	09/28/2021			09/28/2021 15:04	James L Waggeberby	2278663
	09/28/2021			09/28/2021 15:05	James L Waggeberby	2278664
SM 2120 B-2011	09/28/2021			09/28/2021 14:51	Benjamin T. Nordmann	2278659
	09/28/2021			09/28/2021 14:52	Benjamin T. Nordmann	2278660
SM 2320 B-2011	09/28/2021			09/30/2021 20:14	Dale L. Simmons	2278659
	09/28/2021			10/01/2021 00:23	Dale L. Simmons	2278660
SM 2540 C-2011	09/28/2021			09/30/2021 15:26	Yijie Li	2278659, 2278660
SM 2540 D-2011	09/28/2021			09/30/2021 15:26	Yijie Li	2278659, 2278660
SM 4500 F-C-2011	09/28/2021			09/30/2021 20:03	Dale L. Simmons	2278659
	09/28/2021			10/01/2021 00:23	Dale L. Simmons	2278660
SM 5310 B-2011	09/28/2021			10/06/2021 22:49	Khloe J Berg	2278661
	09/28/2021			10/06/2021 23:01	Khloe J Berg	2278662