Chemical Analysis Report

NW-DIST-2020-08-20-01

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

Event Description: **Eastern Lakes**
Request ID: **RQ-2020-08-17-43**
Customer: **NW-DIST**
Project ID: **SMP**

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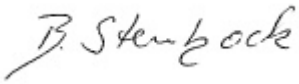
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 10-SEP-2020 17:08



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: Spring Lake Center **Collection Date/Time: 08/19/2020 12:40**

Field ID: G3NW0164 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191341	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P386344	
	EPA 300.0 Rev. 2.1	Chloride	2.9		mg Cl/L	P386378	
		Sulfate	0.83		mg SO4/L	P386381	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P386351	
	SM 2320 B-2011	Total Alkalinity	1.2	I	mg CaCO3/L	P386454	
	SM 2540 C-2011	TDS	15	U	mg/L	P386742	
	SM 2540 D-2011	TSS	2	U	mg/L	P386575	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P386458	
2191343	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P386431	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	I	mg N/L	P386400	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P386473	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P386396	
	SM 5310 B-2011	Organic Carbon	2.3		mg C/L	P386499	
2191345	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P386363	

Ref. Method and Comment:
SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Cassidy Lake Center **Collection Date/Time: 08/19/2020 11:34**

Field ID: G3NW0183 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2191342	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P386344	
	EPA 300.0 Rev. 2.1	Chloride	2.9		mg Cl/L	P386378	
		Sulfate	0.50		mg SO4/L	P386381	
	SM 2120 B-2011	Color (true)	8.9		PCU	P386351	
	SM 2320 B-2011	Total Alkalinity	2.3	I	mg CaCO3/L	P386454	
	SM 2540 C-2011	TDS	23	I	mg/L	P386742	
	SM 2540 D-2011	TSS	2	U	mg/L	P386575	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P386458	
2191344	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P386431	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38		mg N/L	P386401	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P386473	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P386396	
	SM 5310 B-2011	Organic Carbon	4.2		mg C/L	P386548	
2191346	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P386363	

Ref. Method and Comment:
SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
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: P386344

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386378

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386381

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386431

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386400

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386401

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386473

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386396

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386363

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P386351

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P386454

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

Reference Method: SM 2540 C-2011
Batch ID: P386742

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P386575

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P386458

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P386499

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

Reference Method: SM 5310 B-2011
Batch ID: P386548

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: P386378

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386381

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386431

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386400

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386401

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386473

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: P386396

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386363

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.6		P	90 - 110

Reference Method: SM 2120 B-2011
Batch ID: P386351

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.9		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P386454

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P386458

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P386499

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

Reference Method: SM 5310 B-2011
Batch ID: P386548

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386378

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191306	Chloride	99.2		P	90 - 110
2191366	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386381

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191306	Sulfate	98.6		P	90 - 110
2191366	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386431

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191344	Ammonia-N	102	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191298	Kjeldahl Nitrogen	99.5	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386401

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191368	Kjeldahl Nitrogen	101	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386473

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191343	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191297	Total-P	106	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386363

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191299	O-Phosphate-P	98.5	99.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P386458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191305	Fluoride	101	101	P/P	94 - 107

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P386499

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191343	Organic Carbon	98.6	99.6	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P386548

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2191730	Organic Carbon	99.8	99.7	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P386344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191306	Turbidity	3.65	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191306	Chloride	0.329	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191306	Sulfate	0.0518	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P386431

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191344	Ammonia-N	1.58	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191298	Kjeldahl Nitrogen	2.06	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P386401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191368	Kjeldahl Nitrogen	2.59	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P386473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191343	NO2NO3-N	0.491	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P386396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191297	Total-P	0.847	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P386363

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191299	O-Phosphate-P	1.01	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P386454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191305	Total Alkalinity	0.422	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P386742

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191305	TDS	2.25	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P386458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191305	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P386499

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191343	Organic Carbon	0.948	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P386548

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2191730	Organic Carbon	0.0811	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A100543
Included Lab Sample IDs: 2191341, 2191342

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A100567
Included Lab Sample IDs: 2191341, 2191342

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

Reference Method: SM 2120 B-2011
Run ID: A100568
Included Lab Sample IDs: 2191341, 2191342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	99.5	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A100570
Included Lab Sample IDs: 2191345, 2191346

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	100	P/P	90 - 110
O-Phosphate-P	99.5	99.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A100597
Included Lab Sample IDs: 2191343, 2191344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	97.7	P/P	90 - 110
Ammonia-N	98.9	99.7	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A100606
Included Lab Sample IDs: 2191341, 2191342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.9	98.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A100606
Included Lab Sample IDs: 2191341, 2191342

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A100612
Included Lab Sample IDs: 2191343, 2191344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.7	94.6	P/P	90 - 110
Kjeldahl Nitrogen	94.6	97.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A100618
Included Lab Sample IDs: 2191343, 2191344

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

Reference Method: SM 5310 B-2011
Run ID: A100629
Included Lab Sample IDs: 2191343

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.1	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A100634
Included Lab Sample IDs: 2191343, 2191344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	95.5	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A100654
Included Lab Sample IDs: 2191344

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	95.4	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
EPA 180.1 Rev. 2.0	Turbidity					3.65	
EPA 300.0 Rev. 2.1	Chloride	100	99.2	101		0.329	
	Sulfate	100	98.6	101		0.0518	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4	102	100			1.58
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.4	99.5	97.2			2.06
	Kjeldahl Nitrogen	93.0	101	98.1			2.59
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.491
EPA 365.1 Rev. 2.0	Total-P	104	106	107			0.847
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.6	98.5	99.5			1.01
SM 2120 B-2011	Color (true)	97.9					
SM 2320 B-2011	Total Alkalinity	101				0.422	
SM 2540 C-2011	TDS					2.25	
SM 4500 F-C-2011	Fluoride	99.0	101	101			0.0
SM 5310 B-2011	Organic Carbon	100	98.6	99.6			0.948
	Organic Carbon	100	99.8	99.7			0.0811

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2191341, 2191342
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2191341, 2191342
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2191341, 2191342
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2191343, 2191344
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2191343, 2191344
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2191343, 2191344
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2191343, 2191344
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2191345, 2191346
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2191341, 2191342
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2191341, 2191342
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2191341, 2191342
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2191341, 2191342
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2191341, 2191342
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2191343, 2191344

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	08/20/2020			08/20/2020 15:09	Yen Ta	2191341, 2191342
EPA 300.0 Rev. 2.1	08/20/2020			08/21/2020 04:20	Julia Storbeck	2191341
	08/20/2020			08/21/2020 04:32	Julia Storbeck	2191342
EPA 350.1 Rev. 2.0	08/20/2020			08/22/2020 14:28	Ping Hua	2191344
	08/20/2020			08/22/2020 14:56	Ping Hua	2191343
EPA 351.2 Rev. 2.0	08/20/2020	08/21/2020 09:05	David Boose	08/24/2020 10:28	Virginia P. Brown	2191343
	08/20/2020	08/21/2020 09:05	David Boose	08/24/2020 10:41	Virginia P. Brown	2191344
EPA 353.2 Rev. 2.0	08/20/2020			08/24/2020 11:16	Beverly Y. Sanders	2191343
	08/20/2020			08/24/2020 11:27	Beverly Y. Sanders	2191344
EPA 365.1 Rev. 2.0	08/20/2020	08/21/2020 12:26	Yen Ta	08/25/2020 12:44	Lipi Saha	2191343
	08/20/2020	08/21/2020 12:26	Yen Ta	08/25/2020 12:45	Lipi Saha	2191344
EPA 365.1 Rev. 2.0 dissolved	08/20/2020			08/20/2020 15:46	Blanca Fach	2191345
	08/20/2020			08/20/2020 15:51	Blanca Fach	2191346
SM 2120 B-2011	08/20/2020			08/20/2020 15:53	Benjamin T. Nordmann	2191341, 2191342
SM 2320 B-2011	08/20/2020			08/21/2020 20:05	Dale L. Simmons	2191341
	08/20/2020			08/21/2020 20:14	Dale L. Simmons	2191342
SM 2540 C-2011	08/20/2020			08/21/2020 19:30	Madeline Gruver	2191341, 2191342
SM 2540 D-2011	08/20/2020			08/21/2020 19:30	Madeline Gruver	2191341, 2191342
SM 4500 F-C-2011	08/20/2020			08/21/2020 20:05	Dale L. Simmons	2191341
	08/20/2020			08/21/2020 20:14	Dale L. Simmons	2191342
SM 5310 B-2011	08/20/2020			08/24/2020 19:14	Lauren Lees	2191343
	08/20/2020			08/25/2020 20:41	Lauren Lees	2191344