

Chemical Analysis Report

CEN-DIST-2020-10-09-01

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

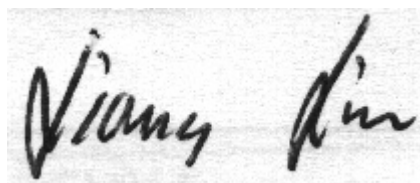
Event Description: **Twin Lakes/Effie**
Request ID: **RQ-2020-09-28-55**
Customer: **CEN-DIST**
Project ID: **SMP**

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 28-OCT-2020 14:16

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

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 Ingram East

Collection Date/Time: 10/08/2020 11:19

Field ID: G4CE0155

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200978	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P388483	
	EPA 300.0 Rev. 2.1	Chloride	7.3		mg Cl/L	P388736	
		Sulfate	1.7		mg SO4/L	P388739	
	SM 2120 B-2011	Color (true)	30		PCU	P388490	
	SM 2320 B-2011	Total Alkalinity	8.4		mg CaCO3/L	P388771	
	SM 2540 C-2011	TDS	40		mg/L	P388919	
	SM 2540 D-2011	TSS	3	I	mg/L	P388923	
	SM 4500 F-C-2011	Fluoride	0.036	I	mg F/L	P388775	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P388505	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P388581	
2200979	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P388558	
	EPA 365.1 Rev. 2.0	Total-P	0.009		mg P/L	P388531	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P388724	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P388487	
	dissolved						

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high 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.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: FB100820

Collection Date/Time: 10/08/2020 11:41

Field ID: FB100820

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2200981	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P388483	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P388736	
		Sulfate	0.20	U	mg SO4/L	P388739	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P388490	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P388771	
	SM 2540 C-2011	TDS	15	U	mg/L	P388918	
	SM 2540 D-2011	TSS	2	U	mg/L	P388922	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P388775	
2200982	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P388505	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P388582	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P388558	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P388531	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P388724	
2200983	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P388487	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high 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.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388483

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388736

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388739

Component	Result	Code	Units
Sulfate	0.20	U	mg SO ₄ /L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388505

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388581

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388582

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388558

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388531

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388487

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: P388490

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P388771

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

Reference Method: SM 2540 C-2011
Batch ID: P388918

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P388919

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P388922

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P388923

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P388775

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P388724

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: P388736

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388739

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388505

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388581

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388582

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388558

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	100		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388531

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388487

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

Reference Method: SM 2120 B-2011
Batch ID: P388490

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P388771

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P388775

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.8		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P388724

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388736

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200972	Chloride	105		P	90 - 110
2201023	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388739

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200972	Sulfate	98.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200979	Ammonia-N	99.7	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388582

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201025	Kjeldahl Nitrogen	112	107	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388558

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200941	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P388487

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200980	O-Phosphate-P	94.9	95.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P388775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2201022	Fluoride	96.4	97.1	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P388724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2200864	Organic Carbon	108		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P388483

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200905	Turbidity	4.99	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388736

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200972	Chloride	1.06	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388739

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200972	Sulfate	1.23	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P388505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200979	Ammonia-N	0.138	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388581

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200933	Kjeldahl Nitrogen	6.37	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388582

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201025	Kjeldahl Nitrogen	2.38	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P388558

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200941	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P388531

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200974	Total-P	0.695	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P388487

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200980	O-Phosphate-P	0.316	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
 Batch ID: P388490

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200940	Color (true)	2.63	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P388771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201022	Total Alkalinity	2.33	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
 Batch ID: P388918

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200862	TDS	2.59	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
 Batch ID: P388919

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200902	TDS	0.858	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P388775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2201022	Fluoride	0.467	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P388724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2200864	Organic Carbon	0.255	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: A101455

Included Lab Sample IDs: 2200978, 2200981

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A101457

Included Lab Sample IDs: 2200980, 2200983

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	99.8	P/P	90 - 110
O-Phosphate-P	99.8	100	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A101458

Included Lab Sample IDs: 2200978, 2200981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	101	P/P	90 - 115

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101462

Included Lab Sample IDs: 2200979, 2200982

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.2	P/P	90 - 110
Ammonia-N	99.2	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101481

Included Lab Sample IDs: 2200979, 2200982

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A101493

Included Lab Sample IDs: 2200978, 2200981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	100	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101510

Included Lab Sample IDs: 2200979

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101512

Included Lab Sample IDs: 2200982

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

Reference Method: SM 5310 B-2011

Run ID: A101541

Included Lab Sample IDs: 2200979, 2200982

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

Reference Method: SM 2320 B-2011

Run ID: A101554

Included Lab Sample IDs: 2200978, 2200981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	99.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A101554

Included Lab Sample IDs: 2200978, 2200981

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	95.8	97.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101559

Included Lab Sample IDs: 2200979, 2200982

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	94.5	94.5	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					4.99	
EPA 300.0 Rev. 2.1	Chloride	103	105	104		1.06	
	Sulfate	101	98.7			1.23	
EPA 350.1 Rev. 2.0	Ammonia-N	98.9	99.7	99.5			0.138
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	109					6.37
	Kjeldahl Nitrogen	106	112	107			2.38
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	100	100			0.499
EPA 365.1 Rev. 2.0	Total-P	109					0.695
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	94.9	95.2			0.316
SM 2120 B-2011	Color (true)	101				2.63	
SM 2320 B-2011	Total Alkalinity	102				2.33	
SM 2540 C-2011	TDS					2.59	
	TDS					0.858	
SM 4500 F-C-2011	Fluoride	94.8	96.4	97.1			0.467
SM 5310 B-2011	Organic Carbon	98.6	108				0.255

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2200978, 2200981
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2200978, 2200981
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2200978, 2200981
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2200979, 2200982
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2200979, 2200982
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2200979, 2200982
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2200979, 2200982
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2200980, 2200983
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2200978, 2200981
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2200978, 2200981
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2200978, 2200981
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2200978, 2200981
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2200978, 2200981
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2200979, 2200982

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	10/09/2020			10/09/2020 15:27	Yen Ta	2200978, 2200981
EPA 300.0 Rev. 2.1	10/09/2020			10/15/2020 03:27	Lipi Saha	2200978
	10/09/2020			10/15/2020 03:41	Lipi Saha	2200981
EPA 350.1 Rev. 2.0	10/09/2020			10/11/2020 12:04	Ping Hua	2200979
	10/09/2020			10/11/2020 12:26	Ping Hua	2200982
EPA 351.2 Rev. 2.0	10/09/2020	10/13/2020 13:23	David Boose	10/14/2020 10:37	Elliott Rodriguez	2200979
	10/09/2020	10/13/2020 13:25	David Boose	10/14/2020 12:52	Elliott Rodriguez	2200982
EPA 353.2 Rev. 2.0	10/09/2020			10/13/2020 09:29	Beverly Y. Sanders	2200979
	10/09/2020			10/13/2020 09:30	Beverly Y. Sanders	2200982
EPA 365.1 Rev. 2.0	10/09/2020	10/12/2020 12:20	Yen Ta	10/16/2020 11:23	Shengyu Wang	2200979
	10/09/2020	10/12/2020 12:20	Yen Ta	10/16/2020 11:24	Shengyu Wang	2200982
EPA 365.1 Rev. 2.0 dissolved	10/09/2020			10/09/2020 16:26	Blanca Fach	2200980
	10/09/2020			10/09/2020 16:33	Blanca Fach	2200983
SM 2120 B-2011	10/09/2020			10/09/2020 17:06	Benjamin T. Nordmann	2200978
	10/09/2020			10/09/2020 17:07	Benjamin T. Nordmann	2200981
SM 2320 B-2011	10/09/2020			10/15/2020 23:25	Lauren Lees	2200978
	10/09/2020			10/15/2020 23:34	Lauren Lees	2200981
SM 2540 C-2011	10/09/2020			10/13/2020 15:11	Yijie Li	2200978, 2200981
SM 2540 D-2011	10/09/2020			10/13/2020 15:11	Yijie Li	2200978, 2200981
SM 4500 F-C-2011	10/09/2020			10/15/2020 23:25	Lauren Lees	2200978
	10/09/2020			10/15/2020 23:34	Lauren Lees	2200981
SM 5310 B-2011	10/09/2020			10/14/2020 23:26	Madeline Gruver	2200979
	10/09/2020			10/14/2020 23:38	Madeline Gruver	2200982