

Chemical Analysis Report

CEN-DIST-2021-05-20-02

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

Event Description: **Lake Terrace/Lucerne (West)**
Request ID: **RQ-2021-03-29-69**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Kalina Warren

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Liang Lin, Environmental Administrator

Date Certified: 09-JUN-2021 13:48

A handwritten signature in black ink, appearing to read "Liang Lin", 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 Lucerne SW

Collection Date/Time: 05/19/2021 11:18

Field ID: G4CE0202

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2248784	EPA 180.1 Rev. 2.0	Turbidity	4.7		NTU	P398534	
	EPA 300.0 Rev. 2.1	Chloride	9.9		mg Cl/L	P398869	
		Sulfate	18		mg SO4/L	P398873	
	SM 2120 B-2011	Color (true)	8.5		PCU	P398547	
	SM 2320 B-2011	Total Alkalinity	119		mg CaCO3/L	P398632	
	SM 2540 C-2011	TDS	171	A	mg/L	P399049	
	SM 2540 D-2011	TSS	7	IA	mg/L	P398839	
	SM 4500 F-C-2011	Fluoride	0.12		mg F/L	P398636	
2248786	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P399060	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P398683	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P398577	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P398732	
	SM 5310 B-2011	Organic Carbon	7.7		mg C/L	P398807	
2248788	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P398552	

Ref. Method and Comment:

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.

Sample Location: Lake Terrace @ Center

Collection Date/Time: 05/19/2021 12:20

Field ID: G4CE0153

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2248785	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P398534	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P398869	
		Sulfate	26		mg SO4/L	P398873	
	SM 2120 B-2011	Color (true)	11		PCU	P398547	
	SM 2320 B-2011	Total Alkalinity	37		mg CaCO3/L	P398632	
	SM 2540 C-2011	TDS	139		mg/L	P399049	
	SM 2540 D-2011	TSS	6	I	mg/L	P398839	
	SM 4500 F-C-2011	Fluoride	0.053	I	mg F/L	P398636	
2248787	EPA 350.1 Rev. 2.0	Ammonia-N	0.19		mg N/L	P399060	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P398683	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P398578	
	EPA 365.1 Rev. 2.0	Total-P	0.046		mg P/L	P398732	
	SM 5310 B-2011	Organic Carbon	4.4		mg C/L	P398807	
2248789	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P398552	

Ref. Method and Comment:

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.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P398534

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398869

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398873

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399060

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398683

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398577

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398578

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P398732

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398552

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: P398547

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P398632

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

Reference Method: SM 2540 C-2011
Batch ID: P399049

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P398839

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P398636

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P398807

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: P398869

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398873

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399060

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398683

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398577

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398578

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: P398732

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398552

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: P398547

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P398632

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.2		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P398636

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

Reference Method: SM 5310 B-2011
Batch ID: P398807

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398869

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248422	Chloride	101		P	90 - 110
2248488	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248422	Sulfate	97.8		P	90 - 110
2248488	Sulfate	95.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248188	Ammonia-N	98.6	96.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248625	NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248787	NO2NO3-N	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P398732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248768	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P398552

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248750	O-Phosphate-P	97.0	97.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P398636

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248865	Fluoride	101	101	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P398807

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2248786	Organic Carbon	97.5	96.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P398534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248624	Turbidity	0.952	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248422	Chloride	0.270	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P398873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248422	Sulfate	0.345	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P399060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248188	Ammonia-N	1.72	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P398683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248748	Kjeldahl Nitrogen	1.72	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248625	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P398578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248787	NO2NO3-N	0.475	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P398732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248768	Total-P	0.0945	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P398552

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248750	O-Phosphate-P	0.349	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
 Batch ID: P398547

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248624	Color (true)	0.487	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P398632

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248865	Total Alkalinity	0.829	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
 Batch ID: P399049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248784	TDS	1.17	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P398636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248865	Fluoride	0.0	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
 Batch ID: P398807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2248786	Organic Carbon	0.776	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: A105566

Included Lab Sample IDs: 2248784, 2248785

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

Reference Method: SM 2120 B-2011

Run ID: A105570

Included Lab Sample IDs: 2248784, 2248785

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.3	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A105571

Included Lab Sample IDs: 2248788, 2248789

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.5	99.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A105591

Included Lab Sample IDs: 2248786, 2248787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110
NO2NO3-N	94.0	101	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A105605

Included Lab Sample IDs: 2248784, 2248785

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.7	98.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A105605

Included Lab Sample IDs: 2248784, 2248785

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	103	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A105658

Included Lab Sample IDs: 2248784, 2248785

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 365.1 Rev. 2.0

Run ID: A105667

Included Lab Sample IDs: 2248786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
-----------	---------	---------	------------	----------------

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A105667

Included Lab Sample IDs: 2248786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	102	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A105668

Included Lab Sample IDs: 2248787

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

Reference Method: SM 5310 B-2011

Run ID: A105673

Included Lab Sample IDs: 2248786, 2248787

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A105791

Included Lab Sample IDs: 2248786, 2248787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	96.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A105796

Included Lab Sample IDs: 2248786, 2248787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.4	98.8	P/P	90 - 110
Ammonia-N	98.9	98.7	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					0.952	
EPA 300.0 Rev. 2.1	Chloride	102	101	101		0.270	
	Sulfate	99.3	97.8	95.1		0.345	
EPA 350.1 Rev. 2.0	Ammonia-N	98.0	98.6	96.8			1.72
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102					1.72
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	99.0	99.0			0.0
	NO ₂ NO ₃ -N	102	103	102			0.475
EPA 365.1 Rev. 2.0	Total-P	100	104	104			0.0945
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.6	97.0	97.5			0.349
SM 2120 B-2011	Color (true)	98.8				0.487	
SM 2320 B-2011	Total Alkalinity	99.2				0.829	
SM 2540 C-2011	TDS					1.17	
SM 4500 F-C-2011	Fluoride	104	101	101			0.0
SM 5310 B-2011	Organic Carbon	99.2	97.5	96.5			0.776

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2248784, 2248785
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2248784, 2248785
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2248784, 2248785
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2248786, 2248787
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2248786, 2248787
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2248786, 2248787
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2248786, 2248787
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2248788, 2248789
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2248784, 2248785
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2248784, 2248785
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2248784, 2248785
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2248784, 2248785
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2248784, 2248785
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2248786, 2248787

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	05/20/2021			05/20/2021 16:01	Yen Ta	2248784, 2248785
EPA 300.0 Rev. 2.1	05/20/2021			05/27/2021 00:28	Lipi Saha	2248784
	05/20/2021			05/27/2021 00:40	Lipi Saha	2248785
EPA 350.1 Rev. 2.0	05/20/2021			06/01/2021 14:34	Roberta Tatti	2248787
	05/20/2021			06/01/2021 15:12	Roberta Tatti	2248786
EPA 351.2 Rev. 2.0	05/20/2021	05/24/2021 12:59	Benjamin T. Nordmann	05/27/2021 17:38	Virginia P. Brown	2248786
	05/20/2021	05/24/2021 12:59	Benjamin T. Nordmann	05/27/2021 17:40	Virginia P. Brown	2248787
EPA 353.2 Rev. 2.0	05/20/2021			05/21/2021 09:41	Beverly Y. Sanders	2248786
	05/20/2021			05/21/2021 09:48	Beverly Y. Sanders	2248787
EPA 365.1 Rev. 2.0	05/20/2021	05/25/2021 12:56	Yen Ta	05/26/2021 11:06	Shengyu Ding	2248786
	05/20/2021	05/25/2021 12:56	Yen Ta	05/26/2021 12:13	Shengyu Ding	2248787
EPA 365.1 Rev. 2.0 dissolved	05/20/2021			05/20/2021 16:25	Ping Hua	2248788
	05/20/2021			05/20/2021 16:26	Ping Hua	2248789
SM 2120 B-2011	05/20/2021			05/20/2021 16:08	Sarah A Nixon	2248784
	05/20/2021			05/20/2021 16:09	Sarah A Nixon	2248785
SM 2320 B-2011	05/20/2021			05/22/2021 11:07	Dale L. Simmons	2248784
	05/20/2021			05/22/2021 11:20	Dale L. Simmons	2248785
SM 2540 C-2011	05/20/2021			05/25/2021 15:06	Yijie Li	2248784, 2248785
SM 2540 D-2011	05/20/2021			05/25/2021 15:06	Yijie Li	2248784, 2248785
SM 4500 F-C-2011	05/20/2021			05/22/2021 11:07	Dale L. Simmons	2248784
	05/20/2021			05/22/2021 11:20	Dale L. Simmons	2248785
SM 5310 B-2011	05/20/2021			05/25/2021 02:50	Madeline Gruver	2248786
	05/20/2021			05/25/2021 04:25	Madeline Gruver	2248787