

Chemical Analysis Report

NE-DIST-2019-06-13-02

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

Event Description: **LSJR Lake**
Request ID: **RQ-2019-06-10-20**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

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: Colin Wright, Program Administrator

Date Certified: 27-JUN-2019 10:19

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular 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 Lillie Center

Collection Date/Time: 06/12/2019 10:30

Field ID: G2NE1133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2095238	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P365609	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P365888	
		Sulfate	20		mg SO4/L	P365890	
	SM 2120 B	Color (true)	25	A	PCU	P365605	
	SM 2320 B-97	Total Alkalinity	25		mg CaCO3/L	P366103	
	SM 2540 C-97	TDS	102		mg/L	P366003	
	SM 2540 D-97	TSS	2	U	mg/L	P365904	
	SM 4500 F-C-97	Fluoride	0.084	I	mg F/L	P366106	
2095240	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P366164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P365846	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P365819	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P365835	
	SM 5310 B-00	Organic Carbon	8.5		mg C/L	P365802	
2095242	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P365615	

Sample Location: Silver Lake Center

Collection Date/Time: 06/12/2019 11:20

Field ID: G2NE1132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2095239	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P365609	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P365888	
		Sulfate	3.3		mg SO4/L	P365890	
	SM 2120 B	Color (true)	670		PCU	P365605	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P366103	
	SM 2540 C-97	TDS	136		mg/L	P366003	
	SM 2540 D-97	TSS	2	U	mg/L	P365904	
	SM 4500 F-C-97	Fluoride	0.035	I	mg F/L	P366106	
2095241	EPA 350.1 Rev. 2.0	Ammonia-N	0.92		mg N/L	P366164	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.2		mg N/L	P365846	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P365820	
	EPA 365.1 Rev. 2.0	Total-P	0.039		mg P/L	P365835	
	SM 5310 B-00	Organic Carbon	43		mg C/L	P365802	
2095243	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P365615	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P365609

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365888

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365890

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P366164

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365846

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365819

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365820

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365835

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P365615

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P365605

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P366103

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

Reference Method: SM 2540 C-97
Batch ID: P366003

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P365904

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P366106

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P365802

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: P365888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365890

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P366164

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365846

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365819

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365820

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365835

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: P365615

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	95.6		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P365605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.2		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P366103

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P366106

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P365802

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095178	Chloride	98.3		P	90 - 110
2095389	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365890

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095178	Sulfate	98.1		P	90 - 110
2095389	Sulfate	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P366164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095240	Ammonia-N	104	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365846

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095240	Kjeldahl Nitrogen	96.4	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365819

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095154	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095241	NO2NO3-N	96.5	96.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095240	Total-P	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P365615

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095242	O-Phosphate-P	94.6	95.6	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P366106

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095248	Fluoride	98.1	97.5	P/P	89 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P365802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2095249	Organic Carbon	98.8	96.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P365609

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095248	Turbidity	2.20	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095178	Chloride	0.670	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P365890

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095178	Sulfate	1.05	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P366164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095240	Ammonia-N	1.62	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P365846

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095240	Kjeldahl Nitrogen	5.13	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365819

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095154	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P365820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095241	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P365835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095240	Total-P	1.01	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P365615

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095242	O-Phosphate-P	1.05	Spike	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P365605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095238	Color (true)	8.80	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P366103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095248	Total Alkalinity	0.0895	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P366003

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095248	TDS	1.53	Sample	P	0 - 10

Reference Method: SM 2540 D-97
 Batch ID: P365904

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095248	TSS	1.83	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P366106

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095248	Fluoride	0.479	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P365802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2095249	Organic Carbon	1.12	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
 Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A92083

Included Lab Sample IDs: 2095238, 2095239

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	98.8	P/P	90 - 115
Color (true)	99.4	101	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A92084

Included Lab Sample IDs: 2095238, 2095239

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A92086

Included Lab Sample IDs: 2095242, 2095243

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.4	96.4	P/P	90 - 110
O-Phosphate-P	96.6	96.3	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A92166

Included Lab Sample IDs: 2095240, 2095241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	95.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A92171

Included Lab Sample IDs: 2095238, 2095239

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A92173

Included Lab Sample IDs: 2095240, 2095241

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A92208

Included Lab Sample IDs: 2095240, 2095241

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A92235

Included Lab Sample IDs: 2095240, 2095241

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

Reference Method: SM 2320 B-97

Run ID: A92273

Included Lab Sample IDs: 2095238, 2095239

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

Reference Method: SM 4500 F-C-97

Run ID: A92273

Included Lab Sample IDs: 2095238, 2095239

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A92295

Included Lab Sample IDs: 2095240, 2095241

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	104	P/P	90 - 110
Ammonia-N	104	103	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					2.20	
EPA 300.0 Rev. 2.1	Chloride	99.2	98.3	100		0.670	
	Sulfate	99.0	98.1	99.8		1.05	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6	104	102			1.62
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.9	96.4	104			5.13
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	102	102			0.0
	NO ₂ NO ₃ -N	101	96.5	96.5			0.0
EPA 365.1 Rev. 2.0	Total-P	104	102	103			1.01
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	95.6	94.6	95.6			1.05
SM 2120 B	Color (true)	99.2				8.80	
SM 2320 B-97	Total Alkalinity	103				0.0895	
SM 2540 C-97	TDS					1.53	
SM 2540 D-97	TSS					1.83	
SM 4500 F-C-97	Fluoride	97.0	98.1	97.5			0.479
SM 5310 B-00	Organic Carbon	94.6	98.8	96.8			1.12

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2095238, 2095239
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2095238, 2095239
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2095238, 2095239
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2095240, 2095241
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2095240, 2095241
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2095240, 2095241
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2095240, 2095241
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2095242, 2095243
SM 2120 B / E31780	True Color measured at 450 nm	2095238, 2095239
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2095238, 2095239
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2095238, 2095239
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2095238, 2095239
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2095238, 2095239
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2095240, 2095241

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	06/13/2019			06/13/2019 15:49	Julia Storbeck	2095238, 2095239
EPA 300.0 Rev. 2.1	06/13/2019			06/18/2019 14:41	Lipi Saha	2095238
	06/13/2019			06/18/2019 14:53	Lipi Saha	2095239
EPA 350.1 Rev. 2.0	06/13/2019			06/21/2019 12:18	Ping Hua	2095240
	06/13/2019			06/21/2019 12:39	Ping Hua	2095241
EPA 351.2 Rev. 2.0	06/13/2019	06/18/2019 10:31	Sima Feizi	06/19/2019 10:33	Joseph Suarez	2095240
	06/13/2019	06/18/2019 10:31	Sima Feizi	06/19/2019 10:37	Joseph Suarez	2095241
EPA 353.2 Rev. 2.0	06/13/2019			06/18/2019 09:56	Beverly Y. Sanders	2095240
	06/13/2019			06/18/2019 10:03	Beverly Y. Sanders	2095241
EPA 365.1 Rev. 2.0	06/13/2019	06/18/2019 12:55	Sima Feizi	06/20/2019 13:36	Lipi Saha	2095240
	06/13/2019	06/18/2019 12:55	Sima Feizi	06/20/2019 13:37	Lipi Saha	2095241
EPA 365.1 Rev. 2.0 dissolved	06/13/2019			06/13/2019 15:35	Jhamieka S. Greenwood	2095242
	06/13/2019			06/13/2019 16:02	Jhamieka S. Greenwood	2095243
SM 2120 B	06/13/2019			06/13/2019 15:54	Mariam Hanna	2095238
	06/13/2019			06/13/2019 16:07	Mariam Hanna	2095239
SM 2320 B-97	06/13/2019			06/20/2019 18:14	Dale L. Simmons	2095238
	06/13/2019			06/20/2019 18:22	Dale L. Simmons	2095239
SM 2540 C-97	06/13/2019			06/14/2019 17:01	Rosalyn Ballman	2095238, 2095239
SM 2540 D-97	06/13/2019			06/14/2019 17:01	Rosalyn Ballman	2095238, 2095239
SM 4500 F-C-97	06/13/2019			06/20/2019 18:14	Dale L. Simmons	2095238
	06/13/2019			06/20/2019 18:22	Dale L. Simmons	2095239
SM 5310 B-00	06/13/2019			06/17/2019 05:44	Madeline Funaro	2095240
	06/13/2019			06/17/2019 05:57	Madeline Funaro	2095241