

Chemical Analysis Report

SO-DIST-2019-07-26-01

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

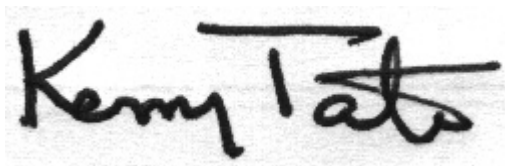
Event Description: **2019 SMP : Lee**
Request ID: **RQ-2019-07-22-19**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Nicole Reistad

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

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

Date Certified: 09-AUG-2019 12:11

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

NON-CONFORMANCE REPORT INCLUDED

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: Drainage Ditch@CR850

Collection Date/Time: 07/24/2019 10:20

Field ID: G1SD0061

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106237	EPA 180.1 Rev. 2.0	Turbidity	6.1		NTU	P368026	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P368187	
		Sulfate	40		mg SO4/L	P368189	
	SM 2120 B	Color (true)	110	Q	PCU	P368006	
	SM 2320 B-97	Total Alkalinity	180		mg CaCO3/L	P368375	
	SM 2540 C-97	TDS	344	A	mg/L	P368473	
	SM 2540 D-97	TSS	5	IA	mg/L	P368226	
	SM 4500 F-C-97	Fluoride	0.098	I	mg F/L	P368378	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.073		mg N/L	P368536	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P368154	
2106239	EPA 353.2 Rev. 2.0	NO2NO3-N	0.36		mg N/L	P368131	
	EPA 365.1 Rev. 2.0	Total-P	0.066		mg P/L	P368139	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P368107	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.041	Q	mg P/L	P368011	
	dissolved						

Ref. Method and Comment:

SM 2120 B: The sample expired upon receipt.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample. The sample expired upon receipt.

Sample Location: C-139Annex@DeerFenceRd

Collection Date/Time: 07/24/2019 11:50

Field ID: G1SD0076

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2106238	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P368026	
	EPA 300.0 Rev. 2.1	Chloride	44		mg Cl/L	P368187	
		Sulfate	13		mg SO4/L	P368189	
	SM 2120 B	Color (true)	160	A	PCU	P368006	
	SM 2320 B-97	Total Alkalinity	181		mg CaCO3/L	P368375	
	SM 2540 C-97	TDS	325		mg/L	P368473	
	SM 2540 D-97	TSS	3	I	mg/L	P368226	
	SM 4500 F-C-97	Fluoride	0.20		mg F/L	P368378	
2106240	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P368536	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P368154	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.038		mg N/L	P368131	
	EPA 365.1 Rev. 2.0	Total-P	0.17		mg P/L	P368139	
	SM 5310 B-00	Organic Carbon	24		mg C/L	P368107	
2106242	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.12		mg P/L	P368011	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Non-Conformance Report

NCR ID: 7817

Event(s)

SO-DIST-2019-07-26-01

Job(s)

TLH-2019-07-26-01

Sample(s)

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived one or more days late by FedEx, samples received within the acceptable temperature range.

Resolution: Biology and Chemistry supervisors were notified by email.
Samples will be qualified as appropriate.

Authorized by/Date: Joshua Ayres 8/7/2019

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368026

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368187

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368189

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368536

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368154

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368131

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368139

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368011

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

Reference Method: SM 2120 B
Batch ID: P368006

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P368375

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

Reference Method: SM 2540 C-97
Batch ID: P368473

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P368226

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P368378

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P368107

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: P368187

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368189

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368536

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368154

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368131

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368139

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368011

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

Reference Method: SM 2120 B
Batch ID: P368006

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	104		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P368375

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P368378

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P368107

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106075	Chloride	96.7		P	90 - 110
2106164	Chloride	98.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368189

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106075	Sulfate	101		P	90 - 110
2106164	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368536

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106212	Ammonia-N	105	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368154

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106228	Kjeldahl Nitrogen	107	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368131

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106165	NO2NO3-N	97.0	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106254	Total-P	101	97.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P368378

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106631	Fluoride	98.4	98.4	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P368107

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2106255	Organic Carbon	110	96.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P368026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106267	Turbidity	0.939	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106164	Chloride	0.869	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P368189

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106164	Sulfate	1.46	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P368536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106212	Ammonia-N	0.525	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P368154

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106228	Kjeldahl Nitrogen	6.32	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P368131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106165	NO2NO3-N	0.501	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P368139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106254	Total-P	3.32	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P368011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106242	O-Phosphate-P	0.142	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P368006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106238	Color (true)	0.931	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P368375

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106631	Total Alkalinity	0.0102	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P368473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106237	TDS	1.16	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P368378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106631	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P368107

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2106255	Organic Carbon	6.62	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: A93061

Included Lab Sample IDs: 2106237, 2106238

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	102	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A93062

Included Lab Sample IDs: 2106241, 2106242

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	96.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A93065

Included Lab Sample IDs: 2106237, 2106238

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

Reference Method: SM 5310 B-00

Run ID: A93112

Included Lab Sample IDs: 2106239, 2106240

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93127

Included Lab Sample IDs: 2106239, 2106240

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: A93147

Included Lab Sample IDs: 2106237, 2106238

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.2	98.7	P/P	90 - 110
Chloride	98.7	99.2	P/P	90 - 110
Sulfate	102	103	P/P	90 - 110
Sulfate	103	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93156

Included Lab Sample IDs: 2106239, 2106240

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.4	95.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93183

Included Lab Sample IDs: 2106239, 2106240

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

Reference Method: SM 2320 B-97

Run ID: A93228

Included Lab Sample IDs: 2106237, 2106238

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A93228

Included Lab Sample IDs: 2106237, 2106238

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A93303

Included Lab Sample IDs: 2106239, 2106240

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	104	107	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					0.939	
EPA 300.0 Rev. 2.1	Chloride	98.8	98.2	96.7		0.869	
	Sulfate	102	103	101		1.46	
EPA 350.1 Rev. 2.0	Ammonia-N	101	105	106			0.525
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.2	107	98.0			6.32
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	97.0	97.6			0.501
EPA 365.1 Rev. 2.0	Total-P	99.4	101	97.2			3.32
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.2					0.142
SM 2120 B	Color (true)	104				0.931	
SM 2320 B-97	Total Alkalinity	103				0.0102	
SM 2540 C-97	TDS					1.16	
SM 4500 F-C-97	Fluoride	98.2	98.4	98.4			0.0
SM 5310 B-00	Organic Carbon	102	110	96.6			6.62

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2106237, 2106238
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2106237, 2106238
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2106237, 2106238
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2106239, 2106240
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2106239, 2106240
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2106239, 2106240
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2106239, 2106240
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2106241, 2106242
SM 2120 B / E31780	True Color measured at 450 nm	2106237, 2106238
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2106237, 2106238
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2106237, 2106238
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2106237, 2106238
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2106237, 2106238
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2106239, 2106240

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	07/26/2019			07/26/2019 10:14	Adrian Shelby	2106237
	07/26/2019			07/26/2019 10:16	Adrian Shelby	2106238
EPA 300.0 Rev. 2.1	07/26/2019			07/31/2019 02:38	Jhamieka S. Greenwood	2106237
	07/26/2019			07/31/2019 03:14	Jhamieka S. Greenwood	2106238
EPA 350.1 Rev. 2.0	07/26/2019			08/06/2019 19:06	Virginia P. Brown	2106239
	07/26/2019			08/06/2019 19:08	Virginia P. Brown	2106240
EPA 351.2 Rev. 2.0	07/26/2019	07/30/2019 11:45	Adrian Shelby	07/31/2019 09:57	Joseph Suarez	2106239
	07/26/2019	07/30/2019 11:45	Adrian Shelby	07/31/2019 09:59	Joseph Suarez	2106240
EPA 353.2 Rev. 2.0	07/26/2019			07/30/2019 10:52	Beverly Y. Sanders	2106239
	07/26/2019			07/30/2019 10:53	Beverly Y. Sanders	2106240
EPA 365.1 Rev. 2.0	07/26/2019	07/30/2019 12:01	Vijayalakshmi Reddy	08/01/2019 08:09	Lipi Saha	2106239
	07/26/2019	07/30/2019 12:01	Vijayalakshmi Reddy	08/01/2019 08:11	Lipi Saha	2106240
EPA 365.1 Rev. 2.0 dissolved	07/26/2019			07/26/2019 11:18	Jhamieka S. Greenwood	2106242
	07/26/2019			07/26/2019 11:20	Jhamieka S. Greenwood	2106241
SM 2120 B	07/26/2019			07/26/2019 11:08	Madeline Funaro	2106237
	07/26/2019			07/26/2019 11:11	Madeline Funaro	2106238
SM 2320 B-97	07/26/2019			08/02/2019 03:23	Dale L. Simmons	2106237
	07/26/2019			08/02/2019 03:37	Dale L. Simmons	2106238
SM 2540 C-97	07/26/2019			07/30/2019 14:45	Sima Feizi	2106237, 2106238
SM 2540 D-97	07/26/2019			07/30/2019 14:45	Sima Feizi	2106237, 2106238
SM 4500 F-C-97	07/26/2019			08/02/2019 03:23	Dale L. Simmons	2106237
	07/26/2019			08/02/2019 03:37	Dale L. Simmons	2106238
SM 5310 B-00	07/26/2019			07/29/2019 18:06	Madeline Funaro	2106239
	07/26/2019			07/29/2019 18:22	Madeline Funaro	2106240