

Chemical Analysis Report

CEN-DIST-2019-12-05-03

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

Event Description: **Sawgrass / 3 Forks**
Request ID: **RQ-2019-04-15-34**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 20-DEC-2019 14:15

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.

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: Florence Lake @ Center

Collection Date/Time: 12/04/2019 09:54

Field ID: G3CE0012

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141177	EPA 180.1 Rev. 2.0	Turbidity	11	A	NTU	P375572	
	EPA 300.0 Rev. 2.1	Chloride	380		mg Cl/L	P375656	
		Sulfate	130		mg SO4/L	P375659	
	SM 2120 B	Color (true)	160		PCU	P375370	
	SM 2320 B-97	Total Alkalinity	100		mg CaCO3/L	P375484	
	SM 2540 C-97	TDS	974		mg/L	P375805	
	SM 2540 D-97	TSS	20		mg/L	P375904	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P375487	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P375781	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P375761	
2141179	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P375462	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P375549	
	SM 5310 B-00	Organic Carbon	26		mg C/L	P375517	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.013		mg P/L	P375287	
	dissolved						

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample; matrix spike recoveries for the second QC sample are unavailable because of high analyte concentration in the QC sample.

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

Sample Location: Lake Jane @ Center

Collection Date/Time: 12/04/2019 11:10

Field ID: G4CE0152

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141178	EPA 180.1 Rev. 2.0	Turbidity	8.1		NTU	P375572	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P375656	
		Sulfate	14		mg SO4/L	P375659	
	SM 2120 B	Color (true)	29		PCU	P375370	
	SM 2320 B-97	Total Alkalinity	114		mg CaCO3/L	P375484	
	SM 2540 C-97	TDS	160		mg/L	P375805	
	SM 2540 D-97	TSS	12		mg/L	P375904	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P375487	
2141180	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P375781	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P375544	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P375462	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P375549	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P375517	
2141182	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P375287	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample; matrix spike recoveries for the second QC sample are unavailable because of high analyte concentration in the QC sample.

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P375572

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375656

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375659

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375781

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375544

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375761

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375462

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: P375549

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375287

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: P375370

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P375484

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

Reference Method: SM 2540 C-97
Batch ID: P375805

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P375904

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P375487

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P375517

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: P375656

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375659

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375781

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375544

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375761

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: P375462

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO ₂ NO ₃ -N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375549

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375287

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

Reference Method: SM 2120 B
Batch ID: P375370

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P375484

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

Reference Method: SM 4500 F-C-97
Batch ID: P375487

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P375517

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375656

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2140965	Chloride	104		P	90 - 110
2141073	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375659

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2140965	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375781

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141086	Ammonia-N	97.3	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375544

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141136	Kjeldahl Nitrogen	100	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2142642	Kjeldahl Nitrogen	94.5	94.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375462

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141136	NO2NO3-N	98.0	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375549

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141046	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375287

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141182	O-Phosphate-P	98.0	98.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P375487

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2140867	Fluoride	94.9	93.5	P/P	89 - 106

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P375517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141180	Organic Carbon	98.4	98.9	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P375572

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141177	Turbidity	4.48	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2140965	Chloride	0.481	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141086	Ammonia-N	4.28	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375544

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141136	Kjeldahl Nitrogen	3.49	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2142642	Kjeldahl Nitrogen	0.0924	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375462

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141136	NO2NO3-N	0.270	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375549

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141046	Total-P	0.240	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375287

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141182	O-Phosphate-P	0.204	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
 Batch ID: P375370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2140983	Color (true)	0.875	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P375484

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2140867	Total Alkalinity	0.356	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P375805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141135	TDS	1.32	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P375487

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2140867	Fluoride	0.946	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P375517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141180	Organic Carbon	0.336	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96132

Included Lab Sample IDs: 2141181, 2141182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.1	98.4	P/P	90 - 110
O-Phosphate-P	98.8	98.1	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A96169

Included Lab Sample IDs: 2141177, 2141178

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	103	P/P	90 - 115
Color (true)	103	104	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96201

Included Lab Sample IDs: 2141179, 2141180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96205

Included Lab Sample IDs: 2141177, 2141178

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

Reference Method: SM 2320 B-97

Run ID: A96207

Included Lab Sample IDs: 2141177, 2141178

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

Reference Method: SM 4500 F-C-97

Run ID: A96207

Included Lab Sample IDs: 2141177, 2141178

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

Reference Method: SM 5310 B-00

Run ID: A96224

Included Lab Sample IDs: 2141179, 2141180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	101	P/P	90 - 110
Organic Carbon	99.0	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
 Run ID: A96245
 Included Lab Sample IDs: 2141177, 2141178

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

Reference Method: EPA 351.2 Rev. 2.0
 Run ID: A96273
 Included Lab Sample IDs: 2141180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Run ID: A96287
 Included Lab Sample IDs: 2141179, 2141180

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

Reference Method: EPA 350.1 Rev. 2.0
 Run ID: A96313
 Included Lab Sample IDs: 2141179, 2141180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Run ID: A96370
 Included Lab Sample IDs: 2141179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	101	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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					4.48	
EPA 300.0 Rev. 2.1	Chloride	104	104	103		0.481	
	Sulfate	101	101				
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	97.3	102			4.28
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	100	105			3.49
	Kjeldahl Nitrogen	98.9	94.5	94.4			0.0924
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	98.0	98.5			0.270
EPA 365.1 Rev. 2.0	Total-P	101	102	102			0.240
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	104	98.0	98.2			0.204
SM 2120 B	Color (true)	102				0.875	
SM 2320 B-97	Total Alkalinity	103				0.356	
SM 2540 C-97	TDS					1.32	
SM 4500 F-C-97	Fluoride	94.2	94.9	93.5			0.946
SM 5310 B-00	Organic Carbon	99.0	98.4	98.9			0.336

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2141177, 2141178
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2141177, 2141178
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2141177, 2141178
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2141179, 2141180
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2141179, 2141180
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2141179, 2141180
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2141179, 2141180
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2141181, 2141182
SM 2120 B / E31780	True Color measured at 450 nm	2141177, 2141178
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2141177, 2141178
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2141177, 2141178
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2141177, 2141178
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2141177, 2141178
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2141179, 2141180

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	12/05/2019			12/05/2019 16:38	Yen Ta	2141177, 2141178
EPA 300.0 Rev. 2.1	12/05/2019			12/12/2019 01:11	Lipi Saha	2141177
	12/05/2019			12/12/2019 01:48	Lipi Saha	2141178
EPA 350.1 Rev. 2.0	12/05/2019			12/12/2019 13:24	Ping Hua	2141179
	12/05/2019			12/12/2019 13:25	Ping Hua	2141180
EPA 351.2 Rev. 2.0	12/05/2019	12/10/2019 12:53	Sima Feizi	12/11/2019 18:06	Jhamieka S. Greenwood	2141180
	12/05/2019	12/13/2019 13:00	Sima Feizi	12/16/2019 14:32	Jhamieka S. Greenwood	2141179
EPA 353.2 Rev. 2.0	12/05/2019			12/09/2019 10:35	Beverly Y. Sanders	2141179
	12/05/2019			12/09/2019 10:36	Beverly Y. Sanders	2141180
EPA 365.1 Rev. 2.0	12/05/2019	12/10/2019 14:00	Yen Ta	12/12/2019 12:56	Benjamin T. Nordmann	2141179
	12/05/2019	12/10/2019 14:00	Yen Ta	12/12/2019 12:57	Benjamin T. Nordmann	2141180
EPA 365.1 Rev. 2.0 dissolved	12/05/2019			12/05/2019 14:12	Samantha Davila	2141182
	12/05/2019			12/05/2019 15:00	Samantha Davila	2141181
SM 2120 B	12/05/2019			12/05/2019 17:46	Madeline Funaro	2141178
	12/05/2019			12/05/2019 18:13	Madeline Funaro	2141177
SM 2320 B-97	12/05/2019			12/07/2019 08:57	Dale L. Simmons	2141178
	12/05/2019			12/07/2019 09:21	Dale L. Simmons	2141177
SM 2540 C-97	12/05/2019			12/09/2019 15:22	Yijie Li	2141177, 2141178
SM 2540 D-97	12/05/2019			12/09/2019 15:22	Yijie Li	2141177, 2141178
SM 4500 F-C-97	12/05/2019			12/07/2019 08:57	Dale L. Simmons	2141178
	12/05/2019			12/07/2019 09:21	Dale L. Simmons	2141177
SM 5310 B-00	12/05/2019			12/10/2019 01:26	Madeline Funaro	2141180
	12/05/2019			12/10/2019 03:15	Madeline Funaro	2141179