

Chemical Analysis Report

SW-DIST-2019-01-03-01

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

Event Description: **Flint Creek - Knights Griffin and 301**
Request ID: **RQ-2018-12-17-42**
Customer: **SW-DIST**
Project ID: **TMDL**

Send Reports to:
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Certified by: Colin Wright, Program Administrator

Date Certified: 16-JAN-2019 11:17

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 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: Flint Creek @ SR 301, TP39

Collection Date/Time: 01/02/2019 12:34

Field ID: G2SW0004

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2051275	EPA 180.1 Rev. 2.0	Turbidity	4.9		NTU	P356793	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P356869	
		Sulfate	9.1		mg SO4/L	P356873	
	SM 2120 B	Color (true)	120		PCU	P356787	
	SM 2320 B-97	Total Alkalinity	46		mg CaCO3/L	P356933	
	SM 2540 C-97	TDS	131		mg/L	P357149	
	SM 2540 D-97	TSS	6	I	mg/L	P357154	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P356938	
2051277	EPA 350.1 Rev. 2.0	Ammonia-N	0.092		mg N/L	P356898	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P356838	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.048		mg N/L	P356941	
	EPA 365.1 Rev. 2.0	Total-P	0.42		mg P/L	P356825	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P356860	
2051279	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.30		mg P/L	P356806	

Ref. Method and Comment:

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

Sample Location: Flint Creek @ Knights Griffin Rd

Collection Date/Time: 01/02/2019 13:43

Field ID: G2SW0066

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2051276	EPA 180.1 Rev. 2.0	Turbidity	7.8		NTU	P356793	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P356869	
		Sulfate	8.8		mg SO4/L	P356873	
	SM 2120 B	Color (true)	120	A	PCU	P356788	
	SM 2320 B-97	Total Alkalinity	46		mg CaCO3/L	P356933	
	SM 2540 C-97	TDS	128	A	mg/L	P357149	
	SM 2540 D-97	TSS	12		mg/L	P357154	
	SM 4500 F-C-97	Fluoride	0.24		mg F/L	P356938	
2051278	EPA 350.1 Rev. 2.0	Ammonia-N	0.059		mg N/L	P356898	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P356838	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.042		mg N/L	P356941	
	EPA 365.1 Rev. 2.0	Total-P	0.41		mg P/L	P356825	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P356860	
2051280	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.25		mg P/L	P356806	

Ref. Method and Comment:

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: P356793

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P356869

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P356873

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P356898

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P356838

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P356941

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P356825

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P356806

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

Reference Method: SM 2120 B
Batch ID: P356787

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B
Batch ID: P356788

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P356933

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

Reference Method: SM 2540 C-97
Batch ID: P357149

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P357154

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P356938

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P356860

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: P356869

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P356873

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P356898

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P356838

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: P356941

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P356825

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: P356806

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

Reference Method: SM 2120 B
Batch ID: P356787

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P356788

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: P356933

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P356938

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.1		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P356860

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P356869

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2050990	Chloride	96.4		P	90 - 110
2051275	Chloride	97.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P356873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2050990	Sulfate	96.6		P	90 - 110
2051275	Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P356898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2051299	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P356838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2051158	Kjeldahl Nitrogen	107	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P356941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2051295	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P356825

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2051294	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P356806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2051451	O-Phosphate-P	94.7	97.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P356938

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2051828	Fluoride	93.4	95.7	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P356860

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2051277	Organic Carbon	97.6	98.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P356793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051288	Turbidity	1.50	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P356869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2050990	Chloride	0.973	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P356873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2050990	Sulfate	0.668	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P356898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051299	Ammonia-N	1.39	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P356838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051158	Kjeldahl Nitrogen	3.01	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P356941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051295	NO2NO3-N	0.913	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P356825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051294	Total-P	0.0191	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P356806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051451	O-Phosphate-P	2.71	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
 Batch ID: P356787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051290	Color (true)	1.49	Sample	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P356788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051276	Color (true)	0.293	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P356933

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051828	Total Alkalinity	0.0128	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P357149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051276	TDS	7.81	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P356938

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051828	Fluoride	1.96	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
 Batch ID: P356860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2051277	Organic Carbon	0.487	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: A88619

Included Lab Sample IDs: 2051275, 2051276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	102	P/P	90 - 115
Color (true)	99.6	103	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A88621

Included Lab Sample IDs: 2051275, 2051276

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A88626

Included Lab Sample IDs: 2051275, 2051276

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A88631

Included Lab Sample IDs: 2051279, 2051280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	99.0	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A88666

Included Lab Sample IDs: 2051277, 2051278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A88673

Included Lab Sample IDs: 2051277, 2051278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	107	P/P	90 - 110
Kjeldahl Nitrogen	107	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A88677

Included Lab Sample IDs: 2051277, 2051278

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A88681

Included Lab Sample IDs: 2051277, 2051278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.2	P/P	90 - 110
Ammonia-N	99.2	99.8	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A88689

Included Lab Sample IDs: 2051275, 2051276

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

Reference Method: SM 4500 F-C-97

Run ID: A88689

Included Lab Sample IDs: 2051275, 2051276

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.7	95.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A88694

Included Lab Sample IDs: 2051277, 2051278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	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					1.50	
EPA 300.0 Rev. 2.1	Chloride	98.2	96.4	97.5		0.973	
	Sulfate	97.2	96.6	98.3		0.668	
EPA 350.1 Rev. 2.0	Ammonia-N	98.2	101	103			1.39
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	107	103			3.01
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	98.5	102	101			0.913
EPA 365.1 Rev. 2.0	Total-P	100	105	105			0.0191
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.2	94.7	97.3			2.71
SM 2120 B	Color (true)	100				1.49	
	Color (true)	102				0.293	
SM 2320 B-97	Total Alkalinity	101				0.0128	
SM 2540 C-97	TDS					7.81	
SM 4500 F-C-97	Fluoride	95.1	93.4	95.7			1.96
SM 5310 B-00	Organic Carbon	98.6	97.6	98.5			0.487

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2051275, 2051276
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2051275, 2051276
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2051275, 2051276
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2051277, 2051278
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2051277, 2051278
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2051277, 2051278
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2051277, 2051278
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2051279, 2051280
SM 2120 B / E31780	True Color measured at 450 nm	2051275, 2051276
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2051275, 2051276
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2051275, 2051276
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2051275, 2051276
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2051275, 2051276
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2051277, 2051278

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	01/03/2019			01/03/2019 17:08	Megan Treadwell	2051275, 2051276
EPA 300.0 Rev. 2.1	01/03/2019			01/04/2019 20:43	Lipi Saha	2051275
	01/03/2019			01/05/2019 00:20	Lipi Saha	2051276
EPA 350.1 Rev. 2.0	01/03/2019			01/04/2019 10:54	Ping Hua	2051277
	01/03/2019			01/04/2019 11:05	Ping Hua	2051278
EPA 351.2 Rev. 2.0	01/03/2019	01/04/2019 12:30	Adrian Shelby	01/07/2019 10:38	Joseph Suarez	2051277
	01/03/2019	01/04/2019 12:30	Adrian Shelby	01/07/2019 10:42	Joseph Suarez	2051278
EPA 353.2 Rev. 2.0	01/03/2019			01/07/2019 10:46	Beverly Y. Sanders	2051277
	01/03/2019			01/07/2019 10:48	Beverly Y. Sanders	2051278
EPA 365.1 Rev. 2.0	01/03/2019	01/04/2019 12:30	Sima Feizi	01/07/2019 11:40	Beverly Y. Sanders	2051277
	01/03/2019	01/04/2019 12:30	Sima Feizi	01/07/2019 11:41	Beverly Y. Sanders	2051278
EPA 365.1 Rev. 2.0 dissolved	01/03/2019			01/03/2019 15:45	Jhamieka S. Greenwood	2051279
	01/03/2019			01/03/2019 15:47	Jhamieka S. Greenwood	2051280
SM 2120 B	01/03/2019			01/03/2019 14:54	Chelsea Hernandez	2051275
	01/03/2019			01/03/2019 15:06	Chelsea Hernandez	2051276
SM 2320 B-97	01/03/2019			01/08/2019 09:11	Dale L. Simmons	2051275
	01/03/2019			01/08/2019 09:22	Dale L. Simmons	2051276
SM 2540 C-97	01/03/2019			01/03/2019 16:45	Yijie Li	2051275, 2051276
SM 2540 D-97	01/03/2019			01/03/2019 16:45	Yijie Li	2051275, 2051276
SM 4500 F-C-97	01/03/2019			01/08/2019 09:11	Dale L. Simmons	2051275
	01/03/2019			01/08/2019 09:22	Dale L. Simmons	2051276
SM 5310 B-00	01/03/2019			01/04/2019 14:35	Megan Treadwell	2051277
	01/03/2019			01/04/2019 15:24	Megan Treadwell	2051278