Chemical Analysis Report

SE-DIST-2020-06-04-01

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

Event Description: **SMP- Sweetwater/Padgett Branches**
Request ID: **RQ-2020-06-01-46**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Drew Liddick

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: 22-JUN-2020 14:00

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: Sweetwater Branch @ 441 **Collection Date/Time: 06/03/2020 12:30**

Field ID: G3SE0025 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2174793	EPA 180.1 Rev. 2.0	Turbidity	4.2	A	NTU	P382819	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P383134	
		Sulfate	8.9		mg SO4/L	P383137	
	SM 2120 B-2011	Color (true)	86		PCU	P382824	
	SM 2320 B-2011	Total Alkalinity	35	A	mg CaCO3/L	P382908	
	SM 2540 C-2011	TDS	157		mg/L	P383270	
	SM 2540 D-2011	TSS	3	I	mg/L	P383237	
	SM 4500 F-C-2011	Fluoride	0.12		mg F/L	P382911	
2174795	EPA 350.1 Rev. 2.0	Ammonia-N	0.26		mg N/L	P382883	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P382889	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P382900	
	EPA 365.1 Rev. 2.0	Total-P	0.50		mg P/L	P382937	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P382890	
2174797	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.43		mg P/L	P382821	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Padgett Branch @ 441 **Collection Date/Time: 06/03/2020 12:50**

Field ID: G3SE0026 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2174794	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P382819	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P383134	
		Sulfate	12		mg SO4/L	P383137	
	SM 2120 B-2011	Color (true)	220		PCU	P382824	
	SM 2320 B-2011	Total Alkalinity	38		mg CaCO3/L	P382908	
	SM 2540 C-2011	TDS	170	A	mg/L	P383270	
	SM 2540 D-2011	TSS	3	I A	mg/L	P383237	
	SM 4500 F-C-2011	Fluoride	0.10		mg F/L	P382911	
2174796	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P382883	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P382889	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P382900	
	EPA 365.1 Rev. 2.0	Total-P	0.45		mg P/L	P382937	
	SM 5310 B-2011	Organic Carbon	28		mg C/L	P382890	
2174798	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.38		mg P/L	P382821	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P382819

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383134

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383137

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382883

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P382889

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382900

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382937

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382821

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

Reference Method: SM 2120 B-2011
Batch ID: P382824

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P382908

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-2011
Batch ID: P383270

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P383237

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P382911

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P382890

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: P383134

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383137

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382883

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: P382889

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382900

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382937

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382821

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

Reference Method: SM 2120 B-2011
Batch ID: P382824

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

Reference Method: SM 2320 B-2011
Batch ID: P382908

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.7		P	93 - 104

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P382911

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.7		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P382890

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: P383134

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174739	Chloride	104		P	90 - 110
2174811	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383137

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174739	Sulfate	103		P	90 - 110
2174811	Sulfate	105		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174820	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382900

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174806	NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174741	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382821

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174653	O-Phosphate-P	91.9	92.4	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P382911

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174793	Fluoride	99.3	99.3	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P382890

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2174784	Organic Carbon	98.4	100	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P382819

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174793	Turbidity	1.89	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383134

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174739	Chloride	1.03	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383137

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174739	Sulfate	0.125	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P382883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174820	Ammonia-N	0.326	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P382889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174796	Kjeldahl Nitrogen	0.380	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P382900

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174806	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P382937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174741	Total-P	0.186	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P382821

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174653	O-Phosphate-P	0.485	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B-2011
Batch ID: P382824

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174812	Color (true)	0.746	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P382908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174793	Total Alkalinity	0.312	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P383270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174794	TDS	1.76	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P382911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174793	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P382890

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2174784	Organic Carbon	0.936	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A99168
Included Lab Sample IDs: 2174793, 2174794

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A99169
Included Lab Sample IDs: 2174797, 2174798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.2	95.7	P/P	90 - 110

Reference Method: SM 2120 B-2011
Run ID: A99170
Included Lab Sample IDs: 2174793, 2174794

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A99193
Included Lab Sample IDs: 2174795, 2174796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	102	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A99196
Included Lab Sample IDs: 2174795, 2174796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	99.7	P/P	90 - 110
Organic Carbon	99.0	99.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A99201
Included Lab Sample IDs: 2174795, 2174796

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A99203
Included Lab Sample IDs: 2174795, 2174796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.6	98.8	P/P	90 - 110
Kjeldahl Nitrogen	98.8	97.1	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A99205
Included Lab Sample IDs: 2174793, 2174794

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.0	99.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A99205
Included Lab Sample IDs: 2174793, 2174794

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A99236
Included Lab Sample IDs: 2174795, 2174796

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A99295
Included Lab Sample IDs: 2174793, 2174794

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.7	99.8	P/P	90 - 110
Sulfate	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		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					1.89	
EPA 300.0 Rev. 2.1	Chloride	100	104	105		1.03	
	Sulfate	103	103	105		0.125	
EPA 350.1 Rev. 2.0	Ammonia-N	101	101	100			0.326
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103					0.380
EPA 353.2 Rev. 2.0	NO2NO3-N	98.0	99.0	99.0			0.0
EPA 365.1 Rev. 2.0	Total-P	105	104	104			0.186
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.6	91.9	92.4			0.485
SM 2120 B-2011	Color (true)	102				0.746	
SM 2320 B-2011	Total Alkalinity	98.7				0.312	
SM 2540 C-2011	TDS					1.76	
SM 4500 F-C-2011	Fluoride	97.7	99.3	99.3			0.0
SM 5310 B-2011	Organic Carbon	98.6	98.4	100			0.936

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2174793, 2174794
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2174793, 2174794
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2174793, 2174794
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2174795, 2174796
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2174795, 2174796
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2174795, 2174796
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2174795, 2174796
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2174797, 2174798
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2174793, 2174794
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2174793, 2174794
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2174793, 2174794
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2174793, 2174794
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2174793, 2174794
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2174795, 2174796

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	06/04/2020			06/04/2020 15:19	Yen Ta	2174793, 2174794
EPA 300.0 Rev. 2.1	06/04/2020			06/11/2020 05:25	Elliott Rodriguez	2174793
	06/04/2020			06/11/2020 05:38	Elliott Rodriguez	2174794
EPA 350.1 Rev. 2.0	06/04/2020			06/07/2020 12:13	Ping Hua	2174796
	06/04/2020			06/07/2020 12:15	Ping Hua	2174795
EPA 351.2 Rev. 2.0	06/04/2020	06/05/2020 09:20	Elliott Rodriguez	06/08/2020 10:42	Jhamieka S. Greenwood	2174796
	06/04/2020	06/05/2020 09:20	Elliott Rodriguez	06/08/2020 10:53	Jhamieka S. Greenwood	2174795
EPA 353.2 Rev. 2.0	06/04/2020			06/08/2020 09:28	Beverly Y. Sanders	2174795
	06/04/2020			06/08/2020 09:30	Beverly Y. Sanders	2174796
EPA 365.1 Rev. 2.0	06/04/2020	06/08/2020 17:04	Yen Ta	06/10/2020 09:09	Lipi Saha	2174795
	06/04/2020	06/08/2020 17:04	Yen Ta	06/10/2020 09:10	Lipi Saha	2174796
EPA 365.1 Rev. 2.0 dissolved	06/04/2020			06/04/2020 16:30	Carlos Miranda	2174797
	06/04/2020			06/04/2020 16:31	Carlos Miranda	2174798
SM 2120 B-2011	06/04/2020			06/04/2020 16:22	Blanca Fach	2174793
	06/04/2020			06/04/2020 16:32	Blanca Fach	2174794
SM 2320 B-2011	06/04/2020			06/05/2020 22:24	Dale L. Simmons	2174793
	06/04/2020			06/05/2020 22:44	Dale L. Simmons	2174794
SM 2540 C-2011	06/04/2020			06/09/2020 12:54	Yijie Li	2174793, 2174794
SM 2540 D-2011	06/04/2020			06/09/2020 12:54	Yijie Li	2174793, 2174794
SM 4500 F-C-2011	06/04/2020			06/05/2020 22:15	Dale L. Simmons	2174793
	06/04/2020			06/05/2020 22:44	Dale L. Simmons	2174794
SM 5310 B-2011	06/04/2020			06/05/2020 14:55	David Boose	2174795
	06/04/2020			06/05/2020 19:23	David Boose	2174796