

Chemical Analysis Report

CEN-DIST-2020-01-10-01

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

Event Description: **Bird / Faulk**
Request ID: **RQ-2020-01-06-40**
Customer: **CEN-DIST**
Project ID: **SMP**

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Date Certified: 28-JAN-2020 18:57



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: Faulk Canal @ 50m upstream of Fiske Blvd

Collection Date/Time: 01/09/2020 10:15

Field ID: G3CE0016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2148524	EPA 180.1 Rev. 2.0	Turbidity	4.5	A	NTU	P376938	
	EPA 300.0 Rev. 2.1	Chloride	210		mg Cl/L	P377141	
		Sulfate	55		mg SO4/L	P377142	
	SM 2120 B-2011	Color (true)	84		PCU	P376941	
	SM 2320 B-2011	Total Alkalinity	82		mg CaCO3/L	P377393	
	SM 2540 C-2011	TDS	585		mg/L	P377412	
	SM 2540 D-2011	TSS	4	I	mg/L	P377203	
	SM 4500 F-C-2011	Fluoride	0.065	I	mg F/L	P377395	
2148526	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P377168	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P377274	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.045		mg N/L	P377216	
	EPA 365.1 Rev. 2.0	Total-P	0.051		mg P/L	P377291	
	SM 5310 B-2011	Organic Carbon	20		mg C/L	P377258	
2148528	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P377279	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Bird Lake Ditches @ 75m east of FL 407

Collection Date/Time: 01/09/2020 10:47

Field ID: G3CE0014

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2148525	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P376938	
	EPA 300.0 Rev. 2.1	Chloride	88		mg Cl/L	P377141	
		Sulfate	46		mg SO4/L	P377142	
	SM 2120 B-2011	Color (true)	17	A	PCU	P376941	
	SM 2320 B-2011	Total Alkalinity	283		mg CaCO3/L	P377393	
	SM 2540 C-2011	TDS	480	A	mg/L	P377412	
	SM 2540 D-2011	TSS	2	UA	mg/L	P377203	
	SM 4500 F-C-2011	Fluoride	0.051	I	mg F/L	P377395	
2148527	EPA 350.1 Rev. 2.0	Ammonia-N	0.064		mg N/L	P377168	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P377274	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P377216	
	EPA 365.1 Rev. 2.0	Total-P	0.060		mg P/L	P377291	
	SM 5310 B-2011	Organic Carbon	7.1		mg C/L	P377258	
2148529	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.018		mg P/L	P377279	

Ref. Method and Comment:

SM 2540 D-2011: 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: P376938

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P377141

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P377142

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P377168

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P377274

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P377216

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P377291

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P377279

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

Reference Method: SM 2120 B-2011
Batch ID: P376941

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P377393

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

Reference Method: SM 2540 C-2011
Batch ID: P377412

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P377203

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P377395

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P377258

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: P377141

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: P377142

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P377168

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P377274

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: P377216

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P377291

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P377279

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

Reference Method: SM 2120 B-2011
Batch ID: P376941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.9		P	90 - 110

Reference Method: SM 2320 B-2011
Batch ID: P377393

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	105		P	98 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P377395

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.7		P	92 - 103

Reference Method: SM 5310 B-2011
Batch ID: P377258

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P377141

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148510	Chloride	99.9		P	90 - 110
2148578	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P377142

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148510	Sulfate	99.9		P	90 - 110
2148578	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P377168

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148511	Ammonia-N	108	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P377274

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148552	Kjeldahl Nitrogen	114	112	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P377216

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148526	NO2NO3-N	97.4	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P377291

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148305	Total-P	98.2	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P377279

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148529	O-Phosphate-P	96.7	97.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P377395

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148673	Fluoride	96.9	96.3	P/P	89 - 106

Reference Method: SM 5310 B-2011
Batch ID: P377258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2148675	Organic Carbon	97.7	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P376938

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148524	Turbidity	5.83	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P377141

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148510	Chloride	0.454	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P377142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148510	Sulfate	0.541	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P377168

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148511	Ammonia-N	0.926	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P377274

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148552	Kjeldahl Nitrogen	0.966	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P377216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148526	NO2NO3-N	0.416	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P377291

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148305	Total-P	0.504	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P377279

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148529	O-Phosphate-P	0.869	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
 Batch ID: P376941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148525	Color (true)	1.06	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P377393

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148673	Total Alkalinity	0.594	Sample	P	0 - 2.8

Reference Method: SM 2540 C-2011
 Batch ID: P377412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148525	TDS	2.92	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P377395

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148673	Fluoride	0.477	Spike	P	0 - 2.5

Reference Method: SM 5310 B-2011
 Batch ID: P377258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2148675	Organic Carbon	0.356	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: A96815

Included Lab Sample IDs: 2148524, 2148525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	100	P/P	95 - 105

Reference Method: SM 2120 B-2011

Run ID: A96816

Included Lab Sample IDs: 2148524, 2148525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96853

Included Lab Sample IDs: 2148524, 2148525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96895

Included Lab Sample IDs: 2148526, 2148527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A96897

Included Lab Sample IDs: 2148526, 2148527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	100	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A96933

Included Lab Sample IDs: 2148526, 2148527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96938

Included Lab Sample IDs: 2148528, 2148529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.0	97.7	P/P	90 - 110
O-Phosphate-P	98.8	98.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96984

Included Lab Sample IDs: 2148526, 2148527

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	101	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A96987

Included Lab Sample IDs: 2148524, 2148525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	105	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A96987

Included Lab Sample IDs: 2148524, 2148525

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A97048

Included Lab Sample IDs: 2148527

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A97056

Included Lab Sample IDs: 2148526

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	108	108	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					5.83	
EPA 300.0 Rev. 2.1	Chloride	99.2	99.9	101		0.454	
	Sulfate	99.5	99.9	100		0.541	
EPA 350.1 Rev. 2.0	Ammonia-N	102	108	106			0.926
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	114	112			0.966
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	97.4	97.8			0.416
EPA 365.1 Rev. 2.0	Total-P	103	98.2	97.3			0.504
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	96.7	97.7			0.869
SM 2120 B-2011	Color (true)	98.9				1.06	
SM 2320 B-2011	Total Alkalinity	105				0.594	
SM 2540 C-2011	TDS					2.92	
SM 4500 F-C-2011	Fluoride	96.7	96.9	96.3			0.477
SM 5310 B-2011	Organic Carbon	97.8	97.7	98.2			0.356

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2148524, 2148525
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2148524, 2148525
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2148524, 2148525
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2148526, 2148527
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2148526, 2148527
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2148526, 2148527
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2148526, 2148527
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2148528, 2148529
SM 2120 B-2011 / E31780	True Color measured at 450 nm	2148524, 2148525
SM 2320 B-2011 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2148524, 2148525
SM 2540 C-2011 / E31780	Total Dissolved Solids in aqueous matrices	2148524, 2148525
SM 2540 D-2011 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2148524, 2148525
SM 4500 F-C-2011 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2148524, 2148525
SM 5310 B-2011 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2148526, 2148527

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	01/10/2020			01/10/2020 16:48	Yen Ta	2148524, 2148525
EPA 300.0 Rev. 2.1	01/10/2020			01/14/2020 16:29	Lipi Saha	2148524
	01/10/2020			01/14/2020 16:41	Lipi Saha	2148525
EPA 350.1 Rev. 2.0	01/10/2020			01/14/2020 13:57	Ping Hua	2148526
	01/10/2020			01/14/2020 13:58	Ping Hua	2148527
EPA 351.2 Rev. 2.0	01/10/2020	01/16/2020 13:40	Jhamieka S. Greenwood	01/17/2020 18:12	Virginia P. Brown	2148526
	01/10/2020	01/16/2020 13:40	Jhamieka S. Greenwood	01/17/2020 18:14	Virginia P. Brown	2148527
EPA 353.2 Rev. 2.0	01/10/2020			01/15/2020 09:31	Beverly Y. Sanders	2148526
	01/10/2020			01/15/2020 11:01	Beverly Y. Sanders	2148527
EPA 365.1 Rev. 2.0	01/10/2020	01/16/2020 15:07	Yen Ta	01/21/2020 15:12	Benjamin T. Nordmann	2148527
	01/10/2020	01/16/2020 15:07	Yen Ta	01/22/2020 14:22	Benjamin T. Nordmann	2148526
EPA 365.1 Rev. 2.0 dissolved	01/10/2020			01/10/2020 15:01	Carlos Miranda	2148529
	01/10/2020			01/10/2020 15:08	Carlos Miranda	2148528
SM 2120 B-2011	01/10/2020			01/10/2020 16:45	Madeline Funaro	2148524
	01/10/2020			01/10/2020 16:47	Madeline Funaro	2148525
SM 2320 B-2011	01/10/2020			01/15/2020 22:52	Dale L. Simmons	2148524
	01/10/2020			01/15/2020 23:07	Dale L. Simmons	2148525
SM 2540 C-2011	01/10/2020			01/14/2020 17:25	Yijie Li	2148524, 2148525
SM 2540 D-2011	01/10/2020			01/14/2020 17:25	Yijie Li	2148524, 2148525
SM 4500 F-C-2011	01/10/2020			01/15/2020 22:52	Dale L. Simmons	2148524
	01/10/2020			01/15/2020 23:07	Dale L. Simmons	2148525
SM 5310 B-2011	01/10/2020			01/15/2020 19:40	Madeline Funaro	2148526
	01/10/2020			01/15/2020 19:52	Madeline Funaro	2148527