

Chemical Analysis Report

SE-DIST-2020-06-12-01

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

Event Description: **SMP- 3205B,3203C**
Request ID: **RQ-2020-06-08-44**
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: Liang Lin, Environmental Administrator

Date Certified: 25-JUN-2020 09:58

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored 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 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: Taylor Creek @ 70

Collection Date/Time: 06/11/2020 11:15

Field ID: G1SE0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2176221	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P383157	
	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P383380	
		Sulfate	52		mg SO4/L	P383384	
	SM 2120 B-2011	Color (true)	190		PCU	P383160	
	SM 2320 B-2011	Total Alkalinity	97		mg CaCO3/L	P383249	
	SM 2540 C-2011	TDS	276		mg/L	P383570	
	SM 2540 D-2011	TSS	4	I	mg/L	P383521	
	SM 4500 F-C-2011	Fluoride	0.090	I	mg F/L	P383252	
2176223	EPA 350.1 Rev. 2.0	Ammonia-N	0.26		mg N/L	P383182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P383396	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29		mg N/L	P383208	
	EPA 365.1 Rev. 2.0	Total-P	0.30		mg P/L	P383346	
	SM 5310 B-2011	Organic Carbon	26		mg C/L	P383312	
2176225	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.23		mg P/L	P383166	

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: L-62 Upstream of S-154C

Collection Date/Time: 06/11/2020 12:15

Field ID: G1SE0028

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2176222	EPA 180.1 Rev. 2.0	Turbidity	5.6	A	NTU	P383158	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P383380	
		Sulfate	50		mg SO4/L	P383384	
	SM 2120 B-2011	Color (true)	650		PCU	P383160	
	SM 2320 B-2011	Total Alkalinity	49		mg CaCO3/L	P383249	
	SM 2540 C-2011	TDS	460	A	mg/L	P383570	
	SM 2540 D-2011	TSS	4	IA	mg/L	P383521	
	SM 4500 F-C-2011	Fluoride	0.14		mg F/L	P383252	
2176224	EPA 350.1 Rev. 2.0	Ammonia-N	0.24		mg N/L	P383182	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.1		mg N/L	P383396	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P383208	
	EPA 365.1 Rev. 2.0	Total-P	0.64		mg P/L	P383346	
	SM 5310 B-2011	Organic Carbon	44		mg C/L	P383312	
2176226	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.41		mg P/L	P383166	

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: P383157

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P383158

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383380

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383384

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383182

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383396

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P383208

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383346

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383166

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P383160

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P383249

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

Reference Method: SM 2540 C-2011
Batch ID: P383570

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P383521

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P383252

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P383312

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: P383380

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383384

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383182

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.1		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383396

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P383208

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: P383346

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383166

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

Reference Method: SM 2120 B-2011
Batch ID: P383160

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P383249

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	93 - 104

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P383252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P383312

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: P383380

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2175991	Chloride	104		P	90 - 110
2176110	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383384

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2175991	Sulfate	103		P	90 - 110
2176110	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383182

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2176240	Ammonia-N	100	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2176862	Kjeldahl Nitrogen	98.6	97.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P383208

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2176223	NO2NO3-N	96.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383346

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2176174	Total-P	108	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2176147	O-Phosphate-P	93.9	94.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P383252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2176182	Fluoride	97.9	95.5	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P383312

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2176223	Organic Carbon	103		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P383157

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176153	Turbidity	1.69	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P383158

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176222	Turbidity	0.900	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383380

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2175991	Chloride	1.07	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383384

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2175991	Sulfate	0.916	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176240	Ammonia-N	1.76	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176862	Kjeldahl Nitrogen	0.601	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P383208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176223	NO2NO3-N	0.414	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383346

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176174	Total-P	0.443	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383166

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176147	O-Phosphate-P	0.848	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P383160

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176152	Color (true)	1.06	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P383249

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176182	Total Alkalinity	2.17	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P383570

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176222	TDS	1.30	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P383252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176182	Fluoride	1.95	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P383312

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2176223	Organic Carbon	0.442	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: A99305

Included Lab Sample IDs: 2176221, 2176222

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

Reference Method: SM 2120 B-2011

Run ID: A99307

Included Lab Sample IDs: 2176221, 2176222

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 365.1 Rev. 2.0 dissolved

Run ID: A99308

Included Lab Sample IDs: 2176225, 2176226

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	99.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A99311

Included Lab Sample IDs: 2176223, 2176224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A99318

Included Lab Sample IDs: 2176223, 2176224

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

Reference Method: SM 2320 B-2011

Run ID: A99334

Included Lab Sample IDs: 2176221, 2176222

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	98.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A99334

Included Lab Sample IDs: 2176221, 2176222

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

Reference Method: SM 5310 B-2011

Run ID: A99365

Included Lab Sample IDs: 2176223, 2176224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
-----------	---------	---------	------------	----------------

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A99365

Included Lab Sample IDs: 2176223, 2176224

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A99401

Included Lab Sample IDs: 2176221, 2176222

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.9	98.6	P/P	90 - 110
Sulfate	100	99.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A99420

Included Lab Sample IDs: 2176223, 2176224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	97.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A99436

Included Lab Sample IDs: 2176223, 2176224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	105	104	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					1.69	
	Turbidity					0.900	
EPA 300.0 Rev. 2.1	Chloride	101	104	103		1.07	
	Sulfate	101	103	102		0.916	
EPA 350.1 Rev. 2.0	Ammonia-N	99.1	100	103			1.76
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	98.6	97.9			0.601
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	100	96.0				0.414
EPA 365.1 Rev. 2.0	Total-P	107	108	109			0.443
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	93.9	94.7			0.848
SM 2120 B-2011	Color (true)	103				1.06	
SM 2320 B-2011	Total Alkalinity	102				2.17	
SM 2540 C-2011	TDS					1.30	
SM 4500 F-C-2011	Fluoride	100	97.9	95.5			1.95
SM 5310 B-2011	Organic Carbon	102	103				0.442

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2176221, 2176222
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2176221, 2176222
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2176221, 2176222
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2176223, 2176224
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2176223, 2176224
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2176223, 2176224
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2176223, 2176224
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2176225, 2176226
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2176221, 2176222
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2176221, 2176222
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2176221, 2176222
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2176221, 2176222
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2176221, 2176222
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2176223, 2176224

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	06/12/2020			06/12/2020 15:44	Yen Ta	2176221, 2176222
EPA 300.0 Rev. 2.1	06/12/2020			06/17/2020 04:41	Elliott Rodriguez	2176221
	06/12/2020			06/17/2020 04:54	Elliott Rodriguez	2176222
EPA 350.1 Rev. 2.0	06/12/2020			06/14/2020 13:24	Ping Hua	2176223
	06/12/2020			06/14/2020 13:25	Ping Hua	2176224
EPA 351.2 Rev. 2.0	06/12/2020	06/18/2020 09:50	Sima Feizi	06/19/2020 10:01	Jhamieka S. Greenwood	2176223
	06/12/2020	06/18/2020 09:50	Sima Feizi	06/19/2020 10:03	Jhamieka S. Greenwood	2176224
EPA 353.2 Rev. 2.0	06/12/2020			06/15/2020 08:57	Beverly Y. Sanders	2176223
	06/12/2020			06/15/2020 09:08	Beverly Y. Sanders	2176224
EPA 365.1 Rev. 2.0	06/12/2020	06/17/2020 12:24	Yen Ta	06/19/2020 10:01	Lipi Saha	2176223
	06/12/2020	06/17/2020 12:24	Yen Ta	06/19/2020 10:02	Lipi Saha	2176224
EPA 365.1 Rev. 2.0 dissolved	06/12/2020			06/12/2020 21:28	Julia Storbeck	2176225, 2176226
SM 2120 B-2011	06/12/2020			06/12/2020 16:50	Benjamin T. Nordmann	2176221
	06/12/2020			06/12/2020 16:52	Benjamin T. Nordmann	2176222
SM 2320 B-2011	06/12/2020			06/16/2020 06:05	Dale L. Simmons	2176221
	06/12/2020			06/16/2020 06:17	Dale L. Simmons	2176222
SM 2540 C-2011	06/12/2020			06/16/2020 14:02	Yijie Li	2176221, 2176222
SM 2540 D-2011	06/12/2020			06/16/2020 14:22	Yijie Li	2176221, 2176222
SM 4500 F-C-2011	06/12/2020			06/16/2020 06:05	Dale L. Simmons	2176221
	06/12/2020			06/16/2020 06:17	Dale L. Simmons	2176222
SM 5310 B-2011	06/12/2020			06/16/2020 19:12	David Boose	2176223
	06/12/2020			06/16/2020 20:25	David Boose	2176224