Chemical Analysis Report

SO-DIST-2020-12-16-02

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

Event Description: **2020 SMP : Jacks Branch, Fort Simmons Branch**
Request ID: **RQ-2020-12-14-48**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
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This Report replaces the previous Report Serial Number: 0126736

Report Comment: Color (true) result for the sample with field ID G3SD0177 was re-reported because of a potential analytical error.

Revision certified by: Colin Wright, Program Administrator

Date Certified: 12-JAN-2021 13:07

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: Fort Simmons Branch **Collection Date/Time: 12/15/2020 13:15**

Field ID: G3SD0177 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2213838	EPA 180.1 Rev. 2.0	Turbidity	5.3		NTU	P391302	
	EPA 300.0 Rev. 2.1	Chloride	39		mg Cl/L	P391845	
		Sulfate	34		mg SO4/L	P391848	
	SM 2120 B-2011	Color (true)	63	Q	PCU	P392191	
	SM 2320 B-2011	Total Alkalinity	224		mg CaCO3/L	P391424	
	SM 2540 C-2011	TDS	347		mg/L	P391666	
	SM 2540 D-2011	TSS	5	I	mg/L	P391640	
	SM 4500 F-C-2011	Fluoride	0.37		mg F/L	P391427	
2213840	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P391562	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.94		mg N/L	P391708	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P391335	
	EPA 365.1 Rev. 2.0	Total-P	0.072		mg P/L	P391446	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P391418	
2213842	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.042		mg P/L	P391298	

Ref. Method and Comment:
SM 2120 B-2011: Sample reanalyzed out of holding time because of analytical difficulties.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Jacks Branch Above Kirby-Thompson Rd **Collection Date/Time: 12/15/2020 09:50**

Field ID: G3SD0176 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2213839	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P391302	
	EPA 300.0 Rev. 2.1	Chloride	49	A	mg Cl/L	P391845	
		Sulfate	13	A	mg SO4/L	P391848	
	SM 2120 B-2011	Color (true)	86		PCU	P391342	
	SM 2320 B-2011	Total Alkalinity	138		mg CaCO3/L	P391424	
	SM 2540 C-2011	TDS	264	A	mg/L	P391666	
	SM 2540 D-2011	TSS	2	I A	mg/L	P391640	
	SM 4500 F-C-2011	Fluoride	0.13		mg F/L	P391427	
2213841	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P391562	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.91		mg N/L	P391708	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P391335	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P391446	
	SM 5310 B-2011	Organic Carbon	18		mg C/L	P391418	
2213843	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.023		mg P/L	P391298	

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: P391302

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P391845

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P391848

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391562

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391708

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391335

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P391446

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391298

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

Reference Method: SM 2120 B-2011
Batch ID: P391342

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P392191

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P391424

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

Reference Method: SM 2540 C-2011
Batch ID: P391666

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P391640

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P391427

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P391418

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: P391845

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P391848

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391562

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391708

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391335

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P391446

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391298

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

Reference Method: SM 2120 B-2011
Batch ID: P391342

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

Reference Method: SM 2120 B-2011
Batch ID: P392191

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.0		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P391424

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P391427

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P391418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P391845

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213839	Chloride	102		P	90 - 110
2214346	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P391848

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213839	Sulfate	104		P	90 - 110
2214346	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213939	Ammonia-N	97.8	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213841	Kjeldahl Nitrogen	97.4	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391335

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213758	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P391446

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213840	Total-P	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213815	O-Phosphate-P	97.2	97.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P391427

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2214235	Fluoride	100	99.4	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P391418

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2213859	Organic Carbon	102		P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P391302

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213813	Turbidity	1.32	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P391845

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213839	Chloride	0.618	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P391848

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213839	Sulfate	0.349	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213939	Ammonia-N	0.964	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213841	Kjeldahl Nitrogen	2.30	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213758	NO2NO3-N	0.466	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P391446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213840	Total-P	0.902	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391298

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213815	O-Phosphate-P	0.513	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B-2011
Batch ID: P391342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213798	Color (true)	2.49	Sample	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P392191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2217185	Color (true)	0.566	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P391424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214235	Total Alkalinity	3.30	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P391666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213839	TDS	7.18	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P391427

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2214235	Fluoride	0.499	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P391418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2213859	Organic Carbon	1.17	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: A102626
Included Lab Sample IDs: 2213842, 2213843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.8	98.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A102627
Included Lab Sample IDs: 2213838, 2213839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	104	104	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A102638
Included Lab Sample IDs: 2213840, 2213841

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

Reference Method: SM 2120 B-2011
Run ID: A102639
Included Lab Sample IDs: 2213839

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

Reference Method: SM 5310 B-2011
Run ID: A102665
Included Lab Sample IDs: 2213840, 2213841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	97.4	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A102668
Included Lab Sample IDs: 2213838, 2213839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	105	97.2	P/P	90 - 110
Total Alkalinity	99.7	105	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A102668
Included Lab Sample IDs: 2213838, 2213839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	102	P/P	90 - 110
Fluoride	102	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A102700
Included Lab Sample IDs: 2213840

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A102700
Included Lab Sample IDs: 2213840

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.6	99.5	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A102703
Included Lab Sample IDs: 2213840, 2213841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	99.5	P/P	90 - 110
Ammonia-N	99.5	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A102705
Included Lab Sample IDs: 2213841

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A102804
Included Lab Sample IDs: 2213840, 2213841

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.9	93.1	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A102826
Included Lab Sample IDs: 2213838, 2213839

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Sulfate	103	103	P/P	90 - 110

Reference Method: SM 2120 B-2011
Run ID: A102980
Included Lab Sample IDs: 2213838

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115

* 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					1.32	
EPA 300.0 Rev. 2.1	Chloride	102	102	103		0.618	
	Sulfate	104	104	103		0.349	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	97.8	98.8			0.964
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.8	97.4	101			2.30
EPA 353.2 Rev. 2.0	NO2NO3-N	102	101	100			0.466
EPA 365.1 Rev. 2.0	Total-P	102	102	101			0.902
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	97.2	97.7			0.513
SM 2120 B-2011	Color (true)	101				2.49	
	Color (true)	99.0				0.566	
SM 2320 B-2011	Total Alkalinity	101				3.30	
SM 2540 C-2011	TDS					7.18	
SM 4500 F-C-2011	Fluoride	99.9	99.4	100			0.499
SM 5310 B-2011	Organic Carbon	97.2	102				1.17

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2213838, 2213839
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2213838, 2213839
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2213838, 2213839
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2213840, 2213841
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2213840, 2213841
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2213840, 2213841
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2213840, 2213841
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2213842, 2213843
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2213838, 2213839
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2213838, 2213839
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2213838, 2213839
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2213838, 2213839
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2213838, 2213839
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2213840, 2213841

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	12/16/2020			12/16/2020 15:23	Yen Ta	2213838, 2213839
EPA 300.0 Rev. 2.1	12/16/2020			12/30/2020 00:34	Lipi Saha	2213839
	12/16/2020			12/30/2020 01:23	Lipi Saha	2213838
EPA 350.1 Rev. 2.0	12/16/2020			12/21/2020 16:49	Ping Hua	2213840
	12/16/2020			12/21/2020 16:57	Ping Hua	2213841
EPA 351.2 Rev. 2.0	12/16/2020	12/23/2020 14:55	David Boose	12/28/2020 17:11	Julia Storbeck	2213841
	12/16/2020	12/23/2020 14:55	David Boose	12/28/2020 17:19	Julia Storbeck	2213840
EPA 353.2 Rev. 2.0	12/16/2020			12/17/2020 10:46	Beverly Y. Sanders	2213840
	12/16/2020			12/17/2020 10:47	Beverly Y. Sanders	2213841
EPA 365.1 Rev. 2.0	12/16/2020	12/18/2020 13:00	Yen Ta	12/21/2020 13:28	Benjamin T. Nordmann	2213840
	12/16/2020	12/18/2020 13:00	Yen Ta	12/21/2020 16:30	Shengyu Wang	2213841
EPA 365.1 Rev. 2.0 dissolved	12/16/2020			12/16/2020 15:33	Virginia P. Brown	2213842
	12/16/2020			12/16/2020 15:34	Virginia P. Brown	2213843
SM 2120 B-2011	12/16/2020			01/07/2021 16:29	Benjamin T. Nordmann	2213838
	12/16/2020			12/16/2020 17:12	Benjamin T. Nordmann	2213839
SM 2320 B-2011	12/16/2020			12/17/2020 20:48	Dale L. Simmons	2213838
	12/16/2020			12/17/2020 21:36	Dale L. Simmons	2213839
SM 2540 C-2011	12/16/2020			12/18/2020 15:11	Yijie Li	2213838, 2213839
SM 2540 D-2011	12/16/2020			12/18/2020 15:11	Yijie Li	2213838, 2213839
SM 4500 F-C-2011	12/16/2020			12/17/2020 20:48	Dale L. Simmons	2213838
	12/16/2020			12/17/2020 21:36	Dale L. Simmons	2213839
SM 5310 B-2011	12/16/2020			12/18/2020 01:17	Touraj Touran	2213840
	12/16/2020			12/18/2020 01:31	Touraj Touran	2213841