Chemical Analysis Report

SW-DIST-2021-06-29-01

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

Event Description: **LVIs**
Request ID: **RQ-2021-05-31-61**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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Temple Terrace, FL 33637-0926
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Certified by: Colin Wright, Program Administrator

Date Certified: 21-JUL-2021 12:58

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: Bystre Lake **Collection Date/Time: 06/28/2021 10:50**

Field ID: G4SW0020 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257584	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P400354	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P400626	
		Sulfate	0.20	U	mg SO4/L	P400627	
	SM 2120 B-2011	Color (true)	19		PCU	P400351	
	SM 2320 B-2011	Total Alkalinity	64		mg CaCO3/L	P400707	
	SM 2540 C-2011	TDS	97		mg/L	P400763	
	SM 2540 D-2011	TSS	48		mg/L	P400671	
	SM 4500 F-C-2011	Fluoride	0.16		mg F/L	P400710	
2257586	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P400691	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.7		mg N/L	P400587	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P400368	
	EPA 365.1 Rev. 2.0	Total-P	0.34		mg P/L	P400501	
	SM 5310 B-2011	Organic Carbon	14		mg C/L	P400567	
2257588	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P400348	

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: Tank Lake **Collection Date/Time: 06/28/2021 13:00**

Field ID: G4SW0019 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2257585	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P400354	
	EPA 300.0 Rev. 2.1	Chloride	4.3		mg Cl/L	P400626	
		Sulfate	0.20	U	mg SO4/L	P400627	
	SM 2120 B-2011	Color (true)	16		PCU	P400351	
	SM 2320 B-2011	Total Alkalinity	16		mg CaCO3/L	P400707	
	SM 2540 C-2011	TDS	45		mg/L	P400763	
	SM 2540 D-2011	TSS	2	I	mg/L	P400671	
	SM 4500 F-C-2011	Fluoride	0.045	I	mg F/L	P400710	
2257587	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P400691	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.66		mg N/L	P400587	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P400369	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P400501	
	SM 5310 B-2011	Organic Carbon	6.7		mg C/L	P400567	
2257589	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P400348	

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: P400354

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400626

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400368

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400501

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400348

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: P400351

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P400707

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

Reference Method: SM 2540 C-2011
Batch ID: P400763

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P400671

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P400567

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: P400626

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400368

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

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: P400501

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: P400348

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

Reference Method: SM 2120 B-2011
Batch ID: P400351

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.3		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P400707

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.9		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P400567

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.3		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400626

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257434	Chloride	101		P	90 - 110
2257572	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257434	Sulfate	101		P	90 - 110
2257572	Sulfate	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257540	Ammonia-N	98.6	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257595	Kjeldahl Nitrogen	108	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257512	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257587	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400501

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257570	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257574	O-Phosphate-P	96.6	97.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257941	Fluoride	95.0	97.3	P/P	92 - 107

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P400567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257543	Organic Carbon	95.9	96.2	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P400354

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257511	Turbidity	6.76	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400626

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257572	Chloride	0.510	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P400627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257572	Sulfate	0.616	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257540	Ammonia-N	0.859	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400587

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257595	Kjeldahl Nitrogen	2.70	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257512	NO2NO3-N	0.980	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P400369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257587	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257570	Total-P	1.21	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P400348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257574	O-Phosphate-P	0.500	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P400351

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257542	Color (true)	0.107	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P400707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257941	Total Alkalinity	0.884	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P400763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257572	TDS	8.22	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P400710

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257941	Fluoride	0.457	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P400567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257543	Organic Carbon	0.252	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: A106351
Included Lab Sample IDs: 2257588, 2257589

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	99.2	P/P	90 - 110
O-Phosphate-P	99.6	99.4	P/P	90 - 110

Reference Method: SM 2120 B-2011
Run ID: A106352
Included Lab Sample IDs: 2257584, 2257585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	101	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A106353
Included Lab Sample IDs: 2257584, 2257585

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A106362
Included Lab Sample IDs: 2257586, 2257587

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A106449
Included Lab Sample IDs: 2257586

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

Reference Method: SM 5310 B-2011
Run ID: A106454
Included Lab Sample IDs: 2257586, 2257587

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.3	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A106459
Included Lab Sample IDs: 2257587

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A106481
Included Lab Sample IDs: 2257584, 2257585

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A106481
Included Lab Sample IDs: 2257584, 2257585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Sulfate	99.5	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A106491
Included Lab Sample IDs: 2257586, 2257587

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.4	94.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A106506
Included Lab Sample IDs: 2257586, 2257587

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	98.4	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A106513
Included Lab Sample IDs: 2257584, 2257585

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

Reference Method: SM 4500 F-C-2011
Run ID: A106513
Included Lab Sample IDs: 2257584, 2257585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	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					6.76	
EPA 300.0 Rev. 2.1	Chloride	101	100	101		0.510	
	Sulfate	101	98.9	101		0.616	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	98.6	100			0.859
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	108	103			2.70
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.980
	NO2NO3-N	100	102	102			0.0
EPA 365.1 Rev. 2.0	Total-P	103	103	102			1.21
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	96.6	97.2			0.500
SM 2120 B-2011	Color (true)	99.3				0.107	
SM 2320 B-2011	Total Alkalinity	103				0.884	
SM 2540 C-2011	TDS					8.22	
SM 4500 F-C-2011	Fluoride	99.9	95.0	97.3			0.457
SM 5310 B-2011	Organic Carbon	95.3	95.9	96.2			0.252

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2257584, 2257585
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2257584, 2257585
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2257584, 2257585
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2257586, 2257587
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2257586, 2257587
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2257586, 2257587
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2257586, 2257587
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2257588, 2257589
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2257584, 2257585
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2257584, 2257585
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2257584, 2257585
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2257584, 2257585
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2257584, 2257585
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2257586, 2257587

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	06/29/2021			06/29/2021 15:42	Sarah A Nixon	2257584, 2257585
EPA 300.0 Rev. 2.1	06/29/2021			07/07/2021 09:48	Lipi Saha	2257584
	06/29/2021			07/07/2021 10:00	Lipi Saha	2257585
EPA 350.1 Rev. 2.0	06/29/2021			07/08/2021 12:00	Roberta Tatti	2257586
	06/29/2021			07/08/2021 12:01	Roberta Tatti	2257587
EPA 351.2 Rev. 2.0	06/29/2021	07/06/2021 14:20	Benjamin T. Nordmann	07/07/2021 13:40	Letuzia M De Oliveira	2257586
	06/29/2021	07/06/2021 14:20	Benjamin T. Nordmann	07/07/2021 13:42	Letuzia M De Oliveira	2257587
EPA 353.2 Rev. 2.0	06/29/2021			06/30/2021 09:13	Beverly Y. Sanders	2257587
	06/29/2021			06/30/2021 09:44	Beverly Y. Sanders	2257586
EPA 365.1 Rev. 2.0	06/29/2021	07/02/2021 14:09	Madeline Gruver	07/06/2021 08:28	Shengyu Ding	2257586
	06/29/2021	07/02/2021 14:09	Madeline Gruver	07/06/2021 13:07	Shengyu Ding	2257587
EPA 365.1 Rev. 2.0 dissolved	06/29/2021			06/29/2021 15:11	Ping Hua	2257588
	06/29/2021			06/29/2021 15:16	Ping Hua	2257589
SM 2120 B-2011	06/29/2021			06/29/2021 16:30	Sarah A Nixon	2257584
	06/29/2021			06/29/2021 16:31	Sarah A Nixon	2257585
SM 2320 B-2011	06/29/2021			07/08/2021 22:29	Dale L. Simmons	2257584
	06/29/2021			07/08/2021 22:41	Dale L. Simmons	2257585
SM 2540 C-2011	06/29/2021			07/01/2021 15:22	Yijie Li	2257584, 2257585
SM 2540 D-2011	06/29/2021			07/01/2021 15:22	Yijie Li	2257584, 2257585
SM 4500 F-C-2011	06/29/2021			07/08/2021 22:29	Dale L. Simmons	2257584
	06/29/2021			07/08/2021 22:41	Dale L. Simmons	2257585
SM 5310 B-2011	06/29/2021			07/03/2021 00:30	Madeline Gruver	2257586
	06/29/2021			07/03/2021 00:45	Madeline Gruver	2257587