Chemical Analysis Report

TLH-ROC-2020-11-03-01

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

Event Description: **Run 2**
Request ID: **RQ-2020-11-02-51**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 25-NOV-2020 17:41

B. Steinbock

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: Sandy Creek Upstream Boat Ramp **Collection Date/Time: 11/03/2020 12:10**

Field ID: G3TLHR0037 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206164	EPA 180.1 Rev. 2.0	Turbidity	4.9		NTU	P389754	
	EPA 300.0 Rev. 2.1	Chloride	230		mg Cl/L	P389956	
		Sulfate	33		mg SO4/L	P389958	
	SM 2120 B-2011	Color (true)	130		PCU	P389756	
	SM 2320 B-2011	Total Alkalinity	2.4	I	mg CaCO3/L	P389920	
	SM 2540 C-2011	TDS	472	A	mg/L	P390169	
	SM 2540 D-2011	TSS	2	UA	mg/L	P390146	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P390098	
2206165	EPA 350.1 Rev. 2.0	Ammonia-N	0.066		mg N/L	P389892	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38		mg N/L	P389837	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.064		mg N/L	P389859	
	EPA 365.1 Rev. 2.0	Total-P	0.008		mg P/L	P389800	
	SM 5310 B-2011	Organic Carbon	9.8		mg C/L	P389907	
2206166	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389764	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Chloride: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Sandy Creek **Collection Date/Time: 11/03/2020 13:40**

Field ID: G3TLHR0001 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2206161	EPA 180.1 Rev. 2.0	Turbidity	4.5	A	NTU	P389754	
	EPA 300.0 Rev. 2.1	Chloride	4.3		mg Cl/L	P389956	
		Sulfate	0.74		mg SO4/L	P389958	
	SM 2120 B-2011	Color (true)	140		PCU	P389756	
	SM 2320 B-2011	Total Alkalinity	0.69	I	mg CaCO3/L	P389920	
	SM 2540 C-2011	TDS	30		mg/L	P390169	
	SM 2540 D-2011	TSS	2	I	mg/L	P390146	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P390098	
2206162	EPA 350.1 Rev. 2.0	Ammonia-N	0.082		mg N/L	P389896	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38		mg N/L	P389837	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.043		mg N/L	P389859	
	EPA 365.1 Rev. 2.0	Total-P	0.007		mg P/L	P389800	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P389907	
2206163	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389764	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Chloride: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
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: P389754

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389956

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389958

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389892

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389896

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389837

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389859

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389800

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389764

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: P389756

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P389920

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

Reference Method: SM 2540 C-2011
Batch ID: P390169

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P390146

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P390098

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P389907

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: P389956

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389958

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389892

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389896

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: P389837

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389859

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389800

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: P389764

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

Reference Method: SM 2120 B-2011
Batch ID: P389756

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P389920

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P390098

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.9		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P389907

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	101		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389956

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205350	Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205350	Sulfate	96.0		P	90 - 110
2206213	Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206252	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389896

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2205767	Ammonia-N	103	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389837

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206162	Kjeldahl Nitrogen	106	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389859

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206062	NO2NO3-N	94.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206156	Total-P	106	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389764

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206163	O-Phosphate-P	97.0	97.8	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P390098

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206795	Fluoride	97.6	98.3	P/P	94 - 107

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P389907

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2206165	Organic Carbon	103	103	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206161	Turbidity	4.25	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389956

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205350	Chloride	0.739	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205350	Sulfate	0.680	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206252	Ammonia-N	0.941	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389896

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205767	Ammonia-N	0.313	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389837

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206162	Kjeldahl Nitrogen	0.483	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206062	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206156	Total-P	3.71	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389764

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206163	O-Phosphate-P	0.821	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P389756

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206155	Color (true)	9.71	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P389920

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2205881	Total Alkalinity	1.85	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P390169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206164	TDS	7.85	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P390098

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206795	Fluoride	0.520	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P389907

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2206165	Organic Carbon	0.0990	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: A101959
Included Lab Sample IDs: 2206161, 2206164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	97.0	97.0	P/P	95 - 105

Reference Method: SM 2120 B-2011
Run ID: A101960
Included Lab Sample IDs: 2206161, 2206164

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A101961
Included Lab Sample IDs: 2206163, 2206166

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A102010
Included Lab Sample IDs: 2206162, 2206165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A102027
Included Lab Sample IDs: 2206162, 2206165

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A102028
Included Lab Sample IDs: 2206162, 2206165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	106	P/P	90 - 110
Kjeldahl Nitrogen	104	103	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A102035
Included Lab Sample IDs: 2206162, 2206165

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A102049
Included Lab Sample IDs: 2206161, 2206164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.6	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A102065
Included Lab Sample IDs: 2206161, 2206164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.8	99.5	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A102068
Included Lab Sample IDs: 2206162, 2206165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	97.5	P/P	90 - 110
Total-P	99.5	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A102147
Included Lab Sample IDs: 2206161, 2206164

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.0	98.1	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					4.25	
EPA 300.0 Rev. 2.1	Chloride	100	99.1			0.739	
	Sulfate	101	96.0	99.1		0.680	
EPA 350.1 Rev. 2.0	Ammonia-N	101	102	104			0.941
	Ammonia-N	102	103	103			0.313
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	106	106			0.483
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	94.5				0.0
EPA 365.1 Rev. 2.0	Total-P	102	106	102			3.71
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.2	97.0	97.8			0.821
SM 2120 B-2011	Color (true)	103				9.71	
SM 2320 B-2011	Total Alkalinity	100				1.85	
SM 2540 C-2011	TDS					7.85	
SM 4500 F-C-2011	Fluoride	95.9	97.6	98.3			0.520
SM 5310 B-2011	Organic Carbon	101	103	103			0.0990

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2206161, 2206164
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2206161, 2206164
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2206161, 2206164
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2206162, 2206165
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2206162, 2206165
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2206162, 2206165
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2206162, 2206165
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2206163, 2206166
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2206161, 2206164
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2206161, 2206164
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2206161, 2206164
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2206161, 2206164
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2206161, 2206164
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2206162, 2206165

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	11/03/2020			11/04/2020 15:13	Yen Ta	2206161, 2206164
EPA 300.0 Rev. 2.1	11/03/2020			11/10/2020 04:17	Lipi Saha	2206161
	11/03/2020			11/10/2020 04:30	Lipi Saha	2206164
EPA 350.1 Rev. 2.0	11/03/2020			11/07/2020 11:23	Ping Hua	2206165
	11/03/2020			11/07/2020 14:21	Ping Hua	2206162
EPA 351.2 Rev. 2.0	11/03/2020	11/05/2020 14:28	David Boose	11/07/2020 15:19	Elliott Rodriguez	2206162
	11/03/2020	11/05/2020 14:28	David Boose	11/07/2020 15:34	Elliott Rodriguez	2206165
EPA 353.2 Rev. 2.0	11/03/2020			11/06/2020 09:55	Beverly Y. Sanders	2206162
	11/03/2020			11/06/2020 09:56	Beverly Y. Sanders	2206165
EPA 365.1 Rev. 2.0	11/03/2020	11/05/2020 12:58	Yen Ta	11/10/2020 10:45	Shengyu Wang	2206162
	11/03/2020	11/05/2020 12:58	Yen Ta	11/10/2020 10:52	Shengyu Wang	2206165
EPA 365.1 Rev. 2.0 dissolved	11/03/2020			11/04/2020 17:23	Ping Hua	2206163
	11/03/2020			11/04/2020 17:39	Ping Hua	2206166
SM 2120 B-2011	11/03/2020			11/04/2020 16:19	Benjamin T. Nordmann	2206161
	11/03/2020			11/04/2020 16:20	Benjamin T. Nordmann	2206164
SM 2320 B-2011	11/03/2020			11/06/2020 22:35	Dale L. Simmons	2206161
	11/03/2020			11/06/2020 22:45	Dale L. Simmons	2206164
SM 2540 C-2011	11/03/2020			11/09/2020 13:51	Yijie Li	2206161, 2206164
SM 2540 D-2011	11/03/2020			11/09/2020 13:51	Yijie Li	2206161, 2206164
SM 4500 F-C-2011	11/03/2020			11/13/2020 16:07	Dale L. Simmons	2206161
	11/03/2020			11/13/2020 16:13	Dale L. Simmons	2206164
SM 5310 B-2011	11/03/2020			11/06/2020 14:46	Touraj Touran	2206165
	11/03/2020			11/06/2020 16:14	Touraj Touran	2206162