Chemical Analysis Report

NW-DIST-2018-05-23-01

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

Event Description: **BIOASSESSMENT**
Request ID: **RQ-2018-05-21-46**
Customer: **NW-DIST**
Project ID: **SMP**

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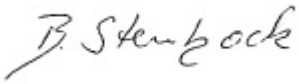

Case Narrative

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 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: Bruce Creek upstream of HWY 81 **Collection Date/Time: 05/22/2018 11:30**

Field ID: G3NW0160 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1994891	EPA 180.1 Rev. 2.0	Turbidity	13	A	NTU	P345832	
	EPA 300.0 Rev. 2.1	Chloride	3.4		mg Cl/L	P346220	
		Sulfate	1.9		mg SO4/L	P346224	
	SM 2120 B	Color (true)	100	A	PCU	P345849	
	SM 2320 B-97	Total Alkalinity	12		mg CaCO3/L	P346083	
	SM 2540 C-97	TDS	80		mg/L	P346320	
	SM 2540 D-97	TSS	12		mg/L	P346366	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P346087	
1994893	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P346260	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P346035	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.027		mg N/L	P345902	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P345895	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P346313	
1994895	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.006	I	mg P/L	P345826	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Layfayette Creek upstream of HWY 331 **Collection Date/Time: 05/22/2018 13:30**

Field ID: G3NW0117 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1994892	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P345832	
	EPA 300.0 Rev. 2.1	Chloride	4.3		mg Cl/L	P346220	
		Sulfate	2.9		mg SO4/L	P346224	
	SM 2120 B	Color (true)	30		PCU	P345849	
	SM 2320 B-97	Total Alkalinity	2.3	I	mg CaCO3/L	P346083	
	SM 2540 C-97	TDS	21	I	mg/L	P346320	
	SM 2540 D-97	TSS	3	I	mg/L	P346366	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P346087	
1994894	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P346261	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24		mg N/L	P346035	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P345902	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P345895	
	SM 5310 B-00	Organic Carbon	2.1		mg C/L	P346313	
1994896	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P345826	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P345832

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346220

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346224

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346260

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346261

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346035

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345902

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P345895

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P345826

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2120 B
Batch ID: P345849

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P346083

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

Reference Method: SM 2540 C-97
Batch ID: P346320

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P346366

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P346087

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P346313

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: P346220

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346260

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346260

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346261

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: P346035

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345902

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: P345895

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: P345826

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

Reference Method: SM 2320 B-97
Batch ID: P346083

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P346087

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.0		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P346313

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.7		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346220

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994739	Chloride	95.2		P	90 - 110
1994825	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994739	Sulfate	97.4		P	90 - 110
1994825	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994826	Ammonia-N	104	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346261

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994894	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994930	Kjeldahl Nitrogen	91.9	93.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345902

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994884	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P345895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1995101	Total-P	101	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P345826

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994830	O-Phosphate-P	95.7	95.1	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P346087

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994835	Fluoride	101	101	P/P	91 - 105

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P346313

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1994884	Organic Carbon	95.1	95.5	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P345832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994891	Turbidity	4.65	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994739	Chloride	0.431	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994826	Ammonia-N	2.35	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P346261

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994894	Ammonia-N	0.819	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994930	Kjeldahl Nitrogen	0.922	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345902

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994884	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P345895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1995101	Total-P	3.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P345826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994830	O-Phosphate-P	0.629	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P345849

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994891	Color (true)	0.231	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P346083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994835	Total Alkalinity	0.226	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P346320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994926	TDS	3.95	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P346087

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994835	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P346313

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1994884	Organic Carbon	0.350	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Calibration Verification

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A84113
Included Lab Sample IDs: 1994895, 1994896

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.5	99.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A84114
Included Lab Sample IDs: 1994891, 1994892

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	100	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A84124
Included Lab Sample IDs: 1994891, 1994892

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A84142
Included Lab Sample IDs: 1994893, 1994894

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

Reference Method: SM 2320 B-97
Run ID: A84181
Included Lab Sample IDs: 1994891, 1994892

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.6	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A84181
Included Lab Sample IDs: 1994891, 1994892

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.7	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A84201
Included Lab Sample IDs: 1994893, 1994894

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A84230
Included Lab Sample IDs: 1994891, 1994892

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	103	P/P	90 - 110
Chloride	105	104	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A84230
Included Lab Sample IDs: 1994891, 1994892

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A84277
Included Lab Sample IDs: 1994893, 1994894

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.2	91.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A84301
Included Lab Sample IDs: 1994893, 1994894

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	100	P/P	90 - 110
Ammonia-N	103	102	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A84324
Included Lab Sample IDs: 1994893, 1994894

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	96.6	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					4.65	
EPA 300.0 Rev. 2.1	Chloride	101	95.2	100		0.431	
	Sulfate	99.6	97.4	98.4			
EPA 350.1 Rev. 2.0	Ammonia-N	102	104	106			2.35
	Ammonia-N	102	101	100			0.819
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	91.9	93.3			0.922
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102			0.0
EPA 365.1 Rev. 2.0	Total-P	103	101	105			3.31
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	95.7	95.1			0.629
SM 2120 B	Color (true)					0.231	
SM 2320 B-97	Total Alkalinity	104				0.226	
SM 2540 C-97	TDS					3.95	
SM 4500 F-C-97	Fluoride	94.0	101	101			0.0
SM 5310 B-00	Organic Carbon	95.7	95.1	95.5			0.350

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1994891, 1994892
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1994891, 1994892
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1994891, 1994892
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1994893, 1994894
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1994893, 1994894
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1994893, 1994894
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1994893, 1994894
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1994895, 1994896
SM 2120 B / E31780	True Color measured at 450 nm	1994891, 1994892
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1994891, 1994892
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1994891, 1994892
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	1994891, 1994892
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1994891, 1994892
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1994893, 1994894

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	05/23/2018			05/23/2018 17:13	William L. Brown IV	1994891, 1994892
EPA 300.0 Rev. 2.1	05/23/2018			05/31/2018 23:51	Lipi Saha	1994891
	05/23/2018			06/01/2018 00:27	Lipi Saha	1994892
EPA 350.1 Rev. 2.0	05/23/2018			06/01/2018 12:21	Ping Hua	1994893
	05/23/2018			06/01/2018 12:33	Ping Hua	1994894
EPA 351.2 Rev. 2.0	05/23/2018	05/29/2018 16:00	Adrian Shelby	05/31/2018 15:26	Joseph Suarez	1994893
	05/23/2018	05/29/2018 16:00	Adrian Shelby	05/31/2018 15:28	Joseph Suarez	1994894
EPA 353.2 Rev. 2.0	05/23/2018			05/24/2018 13:48	Lauren Bottorf	1994893
	05/23/2018			05/24/2018 13:49	Lauren Bottorf	1994894
EPA 365.1 Rev. 2.0	05/23/2018	05/24/2018 13:10	Sima Feizi	05/29/2018 12:38	Lipi Saha	1994893
	05/23/2018	05/24/2018 13:10	Sima Feizi	05/29/2018 12:39	Lipi Saha	1994894
EPA 365.1 Rev. 2.0 dissolved	05/23/2018			05/23/2018 16:36	Megan Treadwell	1994895
	05/23/2018			05/23/2018 16:37	Megan Treadwell	1994896
SM 2120 B	05/23/2018			05/23/2018 16:17	Tanya Welborn	1994891
	05/23/2018			05/23/2018 16:18	Tanya Welborn	1994892
SM 2320 B-97	05/23/2018			05/25/2018 20:54	Dale L. Simmons	1994891
	05/23/2018			05/25/2018 21:06	Dale L. Simmons	1994892
SM 2540 C-97	05/23/2018			05/25/2018 16:24	Yijie Li	1994891, 1994892
SM 2540 D-97	05/23/2018			05/25/2018 16:24	Yijie Li	1994891, 1994892
SM 4500 F-C-97	05/23/2018			05/25/2018 20:54	Dale L. Simmons	1994891
	05/23/2018			05/25/2018 21:06	Dale L. Simmons	1994892
SM 5310 B-00	05/23/2018			06/02/2018 04:57	Megan Treadwell	1994893
	05/23/2018			06/02/2018 05:12	Megan Treadwell	1994894