

Chemical Analysis Report

CEN-DIST-2018-02-07-01

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

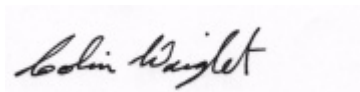
Event Description: **Spring Garden Creek**
Request ID: **RQ-2018-02-05-69**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Mike Linger

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 28-FEB-2018 16:22

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular 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 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: Shaw Lake @ Center of North Lobe

Collection Date/Time: 02/06/2018 11:55

Field ID: G2CE0127

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965162	EPA 180.1 Rev. 2.0	Turbidity	0.60		NTU	P339491	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P339950	
		Sulfate	6.7		mg SO4/L	P339954	
	SM 2120 B	Color (true)	550		PCU	P339497	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340205	
	SM 2540 C-97	TDS	140		mg/L	P339839	
	SM 2540 D-97	TSS	2	I	mg/L	P339803	
	SM 4500 F-C-97	Fluoride	0.041	I	mg F/L	P340209	
1965164	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P339961	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P339556	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.045		mg N/L	P339854	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P339659	
	SM 5310 B-00	Organic Carbon	48		mg C/L	P340090	
1965166	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339540	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Little Haw Creek @ 25m DS of SR40

Collection Date/Time: 02/06/2018 13:04

Field ID: G2CE0128

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1965163	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P339491	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P339950	
		Sulfate	1.4		mg SO4/L	P339954	
	SM 2120 B	Color (true)	410		PCU	P339497	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P340205	
	SM 2540 C-97	TDS	96		mg/L	P339839	
	SM 2540 D-97	TSS	2	U	mg/L	P339803	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P340209	
1965165	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P339961	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P339556	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P339854	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P339659	
	SM 5310 B-00	Organic Carbon	39		mg C/L	P340090	
1965167	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P339540	

Ref. Method and Comment:

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

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P339491

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339950

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339954

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339961

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P3395565

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339854

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339659

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339540

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

Reference Method: SM 2120 B
Batch ID: P339497

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P340205

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P339839

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P339803

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P340209

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P340090

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: P339950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	93.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339954

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339961

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P3395565

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: P339854

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P339854

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P339659

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P339540

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.8		P	90 - 110

Reference Method: SM 2320 B-97
 Batch ID: P340205

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.8		P	95 - 108

Reference Method: SM 4500 F-C-97
 Batch ID: P340209

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.1		P	92 - 103

Reference Method: SM 5310 B-00
 Batch ID: P340090

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: P339950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964823	Chloride	103		P	90 - 110
1965134	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P339954

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964823	Sulfate	106		P	90 - 110
1965134	Sulfate	106		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P339961

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965141	Ammonia-N	99.9	98.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P3395565

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965173	Kjeldahl Nitrogen	89.9	88.1	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P339854

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965164	NO2NO3-N	98.2	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P339659

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965186	Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P339540

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965142	O-Phosphate-P	99.7	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
 Batch ID: P340209

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1965947	Fluoride	96.1	96.7	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P340090

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1964906	Organic Carbon	102	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P339491

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965118	Turbidity	1.82	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964823	Chloride	0.604	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P339954

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964823	Sulfate	0.194	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P339961

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965141	Ammonia-N	1.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P3395565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965173	Kjeldahl Nitrogen	1.27	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P339854

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965164	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P339659

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965186	Total-P	1.71	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P339540

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965142	O-Phosphate-P	1.30	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P339497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965137	Color (true)	8.42	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P340205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965947	Total Alkalinity	4.16	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P339839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964934	TDS	5.30	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P340209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1965947	Fluoride	0.470	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P340090

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1964906	Organic Carbon	0.0608	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

Reference Method: SM 2120 B
Run ID: A81904
Included Lab Sample IDs: 1965162, 1965163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.8	99.4	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A81905
Included Lab Sample IDs: 1965162, 1965163

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A81920
Included Lab Sample IDs: 1965166, 1965167

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A81968

Included Lab Sample IDs: 1965164, 1965165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A81985

Included Lab Sample IDs: 1965164, 1965165

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A82003

Included Lab Sample IDs: 1965162, 1965163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	101	P/P	90 - 110
Chloride	103	103	P/P	90 - 110
Sulfate	103	106	P/P	90 - 110
Sulfate	106	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A82028

Included Lab Sample IDs: 1965164, 1965165

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A82064

Included Lab Sample IDs: 1965164, 1965165

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

Reference Method: SM 5310 B-00

Run ID: A82117

Included Lab Sample IDs: 1965164, 1965165

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	98.2	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A82137

Included Lab Sample IDs: 1965162, 1965163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.9	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A82137

Included Lab Sample IDs: 1965162, 1965163

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	99.5	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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				1.82	
EPA 300.0 Rev. 2.1	Chloride	93.7	103 104		0.604	
	Sulfate	106	106 106		0.194	
EPA 350.1 Rev. 2.0	Ammonia-N	98.5	99.9 98.5			1.12
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.8	89.9 88.1			1.27
EPA 353.2 Rev. 2.0	NO2NO3-N	105	98.2 98.2			0.0
EPA 365.1 Rev. 2.0	Total-P	105	103 101			1.71
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.8	99.7 101			1.30
SM 2120 B	Color (true)				8.42	
SM 2320 B-97	Total Alkalinity	98.8			4.16	
SM 2540 C-97	TDS				5.30	
SM 4500 F-C-97	Fluoride	95.1	96.1 96.7			0.470
SM 5310 B-00	Organic Carbon	101	102 102			0.0608

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1965162, 1965163
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1965162, 1965163
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1965162, 1965163
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1965164, 1965165
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1965164, 1965165
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1965164, 1965165
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1965164, 1965165
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1965166, 1965167
SM 2120 B / E31780	True Color measured at 450 nm	1965162, 1965163
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1965162, 1965163
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1965162, 1965163
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1965162, 1965163
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1965162, 1965163
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1965164, 1965165

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	02/07/2018			02/07/2018 16:34	DeAsia Armster	1965162, 1965163
EPA 300.0 Rev. 2.1	02/07/2018			02/14/2018	Julia Storbeck	1965162, 1965163
EPA 350.1 Rev. 2.0	02/07/2018			02/14/2018	Ping Hua	1965164, 1965165
EPA 351.2 Rev. 2.0	02/07/2018	02/08/2018	Adrian Shelby	02/09/2018	Joseph Suarez	1965164, 1965165
EPA 353.2 Rev. 2.0	02/07/2018			02/13/2018	Lauren Bottorf	1965164, 1965165
EPA 365.1 Rev. 2.0	02/07/2018	02/09/2018	Sima Feizi	02/12/2018	Beverly Y. Sanders	1965164, 1965165
EPA 365.1 Rev. 2.0 dissolved	02/07/2018			02/07/2018 15:29	Megan Treadwell	1965166
	02/07/2018			02/07/2018 15:30	Megan Treadwell	1965167
SM 2120 B	02/07/2018			02/07/2018 16:31	Tanya Welborn	1965162
	02/07/2018			02/07/2018 16:32	Tanya Welborn	1965163
SM 2320 B-97	02/07/2018			02/17/2018	Dale L. Simmons	1965162, 1965163
SM 2540 C-97	02/07/2018			02/09/2018	Yijie Li	1965162, 1965163
SM 2540 D-97	02/07/2018			02/09/2018	Yijie Li	1965162, 1965163
SM 4500 F-C-97	02/07/2018			02/17/2018	Dale L. Simmons	1965162, 1965163
SM 5310 B-00	02/07/2018			02/15/2018	Megan Treadwell	1965164, 1965165