

Chemical Analysis Report

WQAP-2017-06-14-05

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

Event Description: **SMP 2016 Freshwater Kit A**
Request ID: **RQ-2017-05-08-45**
Customer: **WQAP**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
2600 Blair Stone Rd
MS #3560
Tallahassee, FL 32399-2400
Attn: Michael Eckles

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 06-JUL-2017 15:18

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored 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: Saul Creek

Collection Date/Time: 06/14/2017 11:50

Field ID: G2TLHR00014-2017-02

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1906401	EPA 180.1 Rev. 2.0	Turbidity	9.5	A	NTU	P326895	
	EPA 300.0 Rev. 2.1	Chloride	8.0		mg Cl/L	P327213	
	SM 2120 B	Color (true)	45	A	PCU	P326903	
	SM 2320 B-97	Total Alkalinity	39		mg CaCO3/L	P327364	
	SM 2540 C-97	TDS	83		mg/L	P327134	
	SM 2540 D-97	TSS	8	I	mg/L	P327463	
	SM 4500 F-C-97	Fluoride	0.066	I	mg F/L	P327062	RPD
1906404	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P326985	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38		mg N/L	P327010	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.37		mg N/L	P326960	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P326954	
	SM 5310 B-00	Organic Carbon	4.2		mg C/L	P327021	
1906407	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P326931	

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: Brothers River

Collection Date/Time: 06/14/2017 12:15

Field ID: G2TLHR00013-2017-02

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1906402	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P326895	
	EPA 300.0 Rev. 2.1	Chloride	5.8		mg Cl/L	P327213	
	SM 2120 B	Color (true)	45		PCU	P326903	
	SM 2320 B-97	Total Alkalinity	41		mg CaCO3/L	P327364	
	SM 2540 C-97	TDS	79		mg/L	P327134	
	SM 2540 D-97	TSS	6	I	mg/L	P327463	
	SM 4500 F-C-97	Fluoride	0.066	I	mg F/L	P327062	RPD
1906405	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P326985	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34		mg N/L	P327010	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.38		mg N/L	P326960	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P326954	
	SM 5310 B-00	Organic Carbon	4.1		mg C/L	P327021	
1906408	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P326931	

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: Fort Gasden Creek

Collection Date/Time: 06/14/2017 13:00

Field ID: G2TLHR00012-2017-02

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1906403	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P326895	
	EPA 300.0 Rev. 2.1	Chloride	4.2		mg Cl/L	P327213	
	SM 2120 B	Color (true)	150		PCU	P326903	
	SM 2320 B-97	Total Alkalinity	1.0	I	mg CaCO3/L	P327364	
	SM 2540 C-97	TDS	43		mg/L	P327134	

Field ID: G2TLHR00012-2017-02

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1906403	SM 2540 D-97	TSS	4	I	mg/L	P327463	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P327062	RPD
1906406	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P326985	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P327010	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P326960	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P326954	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P327021	
1906409	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326931	

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: P326895

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P327213

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P326985

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P327010

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P326960

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P326954

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326931

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

Reference Method: SM 2120 B
Batch ID: P326903

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P327364

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

Reference Method: SM 2540 C-97
Batch ID: P327134

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P327463

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P327062

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P327021

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: P327213

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326985

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326985

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: P327010

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: P326960

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326954

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: P326931

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: P327364

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P327062

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.4		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P327021

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	92.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327213

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327213

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906143	Chloride	99.2		P	90 - 110
1906231	Chloride	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906232	Ammonia-N	100	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327010

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906404	Kjeldahl Nitrogen	97.1	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326960

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906282	NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326954

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906405	Total-P	98.7	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326931

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906407	O-Phosphate-P	95.3	95.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P327062

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905970	Fluoride	94.5	97.9	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P327021

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1906017	Organic Carbon	91.2	91.4	P/P	85 - 115

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P326895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906401	Turbidity	1.27	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906143	Chloride	0.157	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906232	Ammonia-N	0.787	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906404	Kjeldahl Nitrogen	0.781	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906282	NO2NO3-N	0.837	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326954

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906405	Total-P	1.26	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326931

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906407	O-Phosphate-P	0.481	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P326903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906401	Color (true)	1.95	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P327364

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905970	Total Alkalinity	0.178	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P327134

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906173	TDS	3.80	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P327062

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905970	Fluoride	3.04	Spike	F	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P327021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1906017	Organic Carbon	0.191	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: EPA 180.1 Rev. 2.0
Run ID: A77118
Included Lab Sample IDs: 1906401, 1906402, 1906403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A77120
Included Lab Sample IDs: 1906401, 1906402, 1906403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	107	P/P	85 - 115
Color (true)	95.1	97.8	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A77126
Included Lab Sample IDs: 1906407, 1906408, 1906409

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A77126

Included Lab Sample IDs: 1906407, 1906408, 1906409

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A77132

Included Lab Sample IDs: 1906404, 1906405, 1906406

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A77147

Included Lab Sample IDs: 1906404, 1906405, 1906406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.8	P/P	90 - 110
Ammonia-N	99.8	99.7	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A77157

Included Lab Sample IDs: 1906404, 1906405, 1906406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	93.8	94.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A77172

Included Lab Sample IDs: 1906401, 1906402, 1906403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.2	96.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77178

Included Lab Sample IDs: 1906404, 1906405, 1906406

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77182

Included Lab Sample IDs: 1906404, 1906405, 1906406

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	99.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77183

Included Lab Sample IDs: 1906401, 1906402, 1906403

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A77288

Included Lab Sample IDs: 1906401, 1906402, 1906403

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	105	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				1.27	
EPA 300.0 Rev. 2.1	Chloride	101	99.2 104		0.157	
EPA 350.1 Rev. 2.0	Ammonia-N	102	100 99.4			0.787
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	97.1 98.1			0.781
EPA 353.2 Rev. 2.0	NO2NO3-N	106	102			0.837
EPA 365.1 Rev. 2.0	Total-P	102	98.7 100			1.26
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.8	95.3 95.8			0.481
SM 2120 B	Color (true)				1.95	
SM 2320 B-97	Total Alkalinity	104			0.178	
SM 2540 C-97	TDS				3.80	
SM 4500 F-C-97	Fluoride	99.4	94.5 97.9			3.04
SM 5310 B-00	Organic Carbon	92.4	91.2 91.4			0.191

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1906401, 1906402, 1906403
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1906401, 1906402, 1906403
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1906404, 1906405, 1906406
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1906404, 1906405, 1906406
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1906404, 1906405, 1906406
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1906404, 1906405, 1906406
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1906407, 1906408, 1906409
SM 2120 B / E31780	True Color measured at 450 nm	1906401, 1906402, 1906403
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1906401, 1906402, 1906403
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1906401, 1906402, 1906403
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1906401, 1906402, 1906403
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1906401, 1906402, 1906403
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1906404, 1906405, 1906406

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	06/14/2017			06/15/2017 15:04	Sima Feizi	1906401, 1906402, 1906403
EPA 300.0 Rev. 2.1	06/14/2017			06/20/2017	Julia Storbeck	1906401, 1906402, 1906403
EPA 350.1 Rev. 2.0	06/14/2017			06/16/2017	Sofia Elnemr	1906404, 1906405, 1906406
EPA 351.2 Rev. 2.0	06/14/2017	06/19/2017	Adrian Shelby	06/19/2017	Joseph Suarez	1906404, 1906405, 1906406
EPA 353.2 Rev. 2.0	06/14/2017			06/16/2017	Beverly Y. Sanders	1906404, 1906405, 1906406
EPA 365.1 Rev. 2.0	06/14/2017	06/16/2017	Vijayalakshmi Reddy	06/19/2017	Lipi Saha	1906404, 1906405, 1906406
EPA 365.1 Rev. 2.0 dissolved	06/14/2017			06/15/2017 14:31	Anthony C. Onicha	1906407
	06/14/2017			06/15/2017 15:00	Anthony C. Onicha	1906408
	06/14/2017			06/15/2017 15:01	Anthony C. Onicha	1906409
SM 2120 B	06/14/2017			06/15/2017 15:18	Tanya Welborn	1906401
	06/14/2017			06/15/2017 15:19	Tanya Welborn	1906402
	06/14/2017			06/15/2017 15:54	Tanya Welborn	1906403
SM 2320 B-97	06/14/2017			06/22/2017	Dale L. Simmons	1906401, 1906402, 1906403
SM 2540 C-97	06/14/2017			06/16/2017	Yijie Li	1906401, 1906402, 1906403
SM 2540 D-97	06/14/2017			06/16/2017	Yijie Li	1906401, 1906402, 1906403
SM 4500 F-C-97	06/14/2017			06/17/2017	Elisa J Lutz	1906401, 1906402, 1906403
SM 5310 B-00	06/14/2017			06/16/2017	Ping Hua	1906404, 1906405, 1906406