

Chemical Analysis Report

NE-DIST-2017-11-14-01

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

Event Description: **Ocklawaha**
Request ID: **RQ-2017-11-13-17**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
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Certified by: Colin Wright, Program Administrator

Date Certified: 04-DEC-2017 17:26

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light-colored 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: Ocklawaha R Channel 100M. NE. CM # 100

Collection Date/Time: 11/13/2017 11:10

Field ID: G1NE008811132017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945774	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P336003	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P335874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P335479	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P335448	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P335610	
1945779	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.019		mg P/L	P335244	
1945784	EPA 300.0 Rev. 2.1	Sulfate	32		mg SO4/L	P335300	

Sample Location: Rodman Res. 100M. W. of CM # 39

Collection Date/Time: 11/13/2017 10:45

Field ID: G1NE008411132017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945775	EPA 350.1 Rev. 2.0	Ammonia-N	0.045		mg N/L	P336003	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.94		mg N/L	P335874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.10		mg N/L	P335479	
	EPA 365.1 Rev. 2.0	Total-P	0.051		mg P/L	P335448	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P335610	
1945780	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.036		mg P/L	P335243	
1945785	EPA 300.0 Rev. 2.1	Sulfate	33		mg SO4/L	P335300	

Sample Location: Rodman Res 0.75 nw Rodman Dam

Collection Date/Time: 11/13/2017 09:40

Field ID: G1NE012511132017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945776	EPA 350.1 Rev. 2.0	Ammonia-N	0.098		mg N/L	P336092	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P335874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.092		mg N/L	P335479	
	EPA 365.1 Rev. 2.0	Total-P	0.070		mg P/L	P335448	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P335610	
1945781	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P335243	
1945786	EPA 300.0 Rev. 2.1	Sulfate	25		mg SO4/L	P335300	

Sample Location: Inundated Ocklawaha R. Channel E. of Cable Crossing

Collection Date/Time: 11/13/2017 10:20

Field ID: G1NE009411132017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945777	EPA 350.1 Rev. 2.0	Ammonia-N	0.080		mg N/L	P336092	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.96		mg N/L	P335874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P335479	
	EPA 365.1 Rev. 2.0	Total-P	0.065		mg P/L	P335448	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P335610	
1945782	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.050		mg P/L	P335243	

Field ID: G1NE009411132017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945787	EPA 300.0 Rev. 2.1	Sulfate	37		mg SO4/L	P335300	

Sample Location: Deep Cr @ SR 315

Collection Date/Time: 11/13/2017 10:00

Field ID: g1ne013411132017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1945778	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P336092	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P335874	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011		mg N/L	P335480	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P335668	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P335610	
1945783	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P335243	
1945788	EPA 300.0 Rev. 2.1	Sulfate	7.3		mg SO4/L	P335300	

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335300

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336003

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336092

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335874

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335479

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335480

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335448

Component	Result	Code	Units
Total-P	0.003	I	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335668

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335243

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335244

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

Reference Method: SM 5310 B-00
Batch ID: P335610

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: P335300

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336003

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336092

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335874

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335874

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: P335479

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335480

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: P335448

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335668

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335243

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335244

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.4		P	90 - 110

Reference Method: SM 5310 B-00
Batch ID: P335610

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335300

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: P335300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945742	Sulfate	97.3		P	90 - 110
1945795	Sulfate	99.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336003

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945743	Ammonia-N	96.8	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336092

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945778	Ammonia-N	99.9	109	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945776	Kjeldahl Nitrogen	99.2	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335479

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945340	NO2NO3-N	100		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945778	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335448

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945778	Total-P	99.8	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335668

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945778	Total-P	103	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335243

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945744	O-Phosphate-P	99.4	98.6	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335244

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945779	O-Phosphate-P	94.9	96.8	P/P	90 - 110

Reference Method: SM 5310 B-00
Batch ID: P335610

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1945758	Organic Carbon	100	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P335300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945795	Sulfate	0.0847	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336003

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945743	Ammonia-N	1.00	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P336092

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945778	Ammonia-N	6.00	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P335874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945776	Kjeldahl Nitrogen	2.22	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335479

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945340	NO2NO3-N	0.184	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P335480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945778	NO2NO3-N	1.39	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335448

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945778	Total-P	2.40	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P335668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945778	Total-P	2.93	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335243

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945744	O-Phosphate-P	0.648	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P335244

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945779	O-Phosphate-P	1.65	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P335610

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1945758	Organic Carbon	0.842	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 300.0 Rev. 2.1
Run ID: A80230
Included Lab Sample IDs: 1945784, 1945785, 1945786, 1945787, 1945788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	98.6	99.9	P/P	90 - 110
Sulfate	99.9	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A80251

Included Lab Sample IDs: 1945779, 1945780, 1945781, 1945782, 1945783

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	103	103	P/P	90 - 110
O-Phosphate-P	97.0	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A80324

Included Lab Sample IDs: 1945774, 1945775, 1945776, 1945777, 1945778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	103	P/P	90 - 110
NO2NO3-N	103	104	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A80378

Included Lab Sample IDs: 1945774, 1945775, 1945776, 1945777, 1945778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.2	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80380

Included Lab Sample IDs: 1945776, 1945777

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80391

Included Lab Sample IDs: 1945774, 1945775

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	98.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A80474

Included Lab Sample IDs: 1945778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80561

Included Lab Sample IDs: 1945774, 1945775

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A80585

Included Lab Sample IDs: 1945774, 1945775, 1945776, 1945777, 1945778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	96.2	P/P	90 - 110
Kjeldahl Nitrogen	98.3	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A80596

Included Lab Sample IDs: 1945776, 1945777, 1945778

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	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	LCS	Precision SMP	MS
EPA 300.0 Rev. 2.1	Sulfate	97.6	99.4 97.3		0.0847	
EPA 350.1 Rev. 2.0	Ammonia-N	94.9	96.8 97.8			1.00
	Ammonia-N	94.0	99.9 109			6.00
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	99.2 104			2.22
EPA 353.2 Rev. 2.0	NO2NO3-N	106	100			0.184
	NO2NO3-N	106	102 103			1.39
EPA 365.1 Rev. 2.0	Total-P	98.3	99.8 97.3			2.40
	Total-P	101	103 99.4			2.93
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.3	99.4 98.6			0.648
	O-Phosphate-P	98.4	94.9 96.8			1.65
SM 5310 B-00	Organic Carbon	98.4	100 102			0.842

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1945784, 1945785, 1945786, 1945787, 1945788
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1945774, 1945775, 1945776, 1945777, 1945778
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1945774, 1945775, 1945776, 1945777, 1945778
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1945774, 1945775, 1945776, 1945777, 1945778
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1945774, 1945775, 1945776, 1945777, 1945778
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1945779, 1945780, 1945781, 1945782, 1945783
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1945774, 1945775, 1945776, 1945777, 1945778

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 300.0 Rev. 2.1	11/14/2017			11/14/2017	Julia Storbeck	1945784, 1945785, 1945786, 1945787, 1945788
EPA 350.1 Rev. 2.0	11/14/2017			11/28/2017	Sofia Elnemr	1945774, 1945775
	11/14/2017			11/29/2017	Sofia Elnemr	1945776, 1945777, 1945778
EPA 351.2 Rev. 2.0	11/14/2017	11/27/2017	Adrian Shelby	11/28/2017	Joseph Suarez	1945774, 1945775, 1945776, 1945777, 1945778
EPA 353.2 Rev. 2.0	11/14/2017			11/16/2017	Beverly Y. Sanders	1945774, 1945775, 1945776, 1945777, 1945778
EPA 365.1 Rev. 2.0	11/14/2017	11/16/2017	Sima Feizi	11/17/2017	Lipi Saha	1945776, 1945777
	11/14/2017	11/16/2017	Sima Feizi	11/20/2017	Lipi Saha	1945774, 1945775
	11/14/2017	11/21/2017	Adrian Shelby	11/22/2017	Lipi Saha	1945778
EPA 365.1 Rev. 2.0 dissolved	11/14/2017			11/14/2017 13:54	Megan Treadwell	1945780
	11/14/2017			11/14/2017 13:55	Megan Treadwell	1945781
	11/14/2017			11/14/2017 14:00	Megan Treadwell	1945782
	11/14/2017			11/14/2017 14:01	Megan Treadwell	1945783
	11/14/2017			11/14/2017 14:05	Megan Treadwell	1945779
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