

Chemical Analysis Report

SO-DIST-2016-09-28-01

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

Event Description: **SMP: Everglades Lakes**
Request ID: **RQ-2016-09-26-16**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901
Attn: Ben Paswater

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 25-OCT-2016 10:38

A handwritten signature in black ink, appearing to read "Liang Lin", is written over a light gray, textured 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: 3289 X Long Lake North

Collection Date/Time: 09/27/2016 13:20

Field ID: G5SD0050

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1835048	EPA 180.1 Rev. 2.0	Turbidity	7.9		NTU	P312077	
	EPA 300.0 Rev. 2.1	Chloride	6.1E+03		mg Cl/L	P312593	
		Sulfate	750		mg SO4/L	P312833	
	SM 2120 B	Color (true)	72		PCU	P312039	
	SM 2320 B-97	Total Alkalinity	142	A	mg CaCO3/L	P312271	
	SM 2540 C-97	TDS	9.83E+03		mg/L	P312418	
	SM 2540 D-97	TSS	91		mg/L	P312369	
	SM 4500 F-C-97	Fluoride	0.38		mg F/L	P312275	
1835050	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P312311	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.6		mg N/L	P312497	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P312550	
	EPA 365.1 Rev. 2.0	Total-P	0.041		mg P/L	P312530	MS
	SM 5310 B-00	Organic Carbon	36		mg C/L	P312874	
1835052	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P312075	

Sample Location: 3289 X West Lake at Center

Collection Date/Time: 09/27/2016 12:45

Field ID: G5SD0044

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1835049	EPA 180.1 Rev. 2.0	Turbidity	7.6		NTU	P312077	
	EPA 300.0 Rev. 2.1	Chloride	8.0E+03		mg Cl/L	P312593	
		Sulfate	930		mg SO4/L	P312833	
	SM 2120 B	Color (true)	33	A	PCU	P312039	
	SM 2320 B-97	Total Alkalinity	151		mg CaCO3/L	P312271	
	SM 2540 C-97	TDS	1.27E+04		mg/L	P312418	
	SM 2540 D-97	TSS	13	A	mg/L	P312370	
	SM 4500 F-C-97	Fluoride	0.50		mg F/L	P312275	
1835051	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P312311	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.8		mg N/L	P312497	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P312550	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P312530	MS
	SM 5310 B-00	Organic Carbon	34		mg C/L	P312874	
1835053	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P312075	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P312077

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: P312593

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P312833

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312311

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P312497

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312550

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P312530

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312075

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

Reference Method: SM 2120 B
Batch ID: P312039

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P312271

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: P312418

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P312369

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P312370

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P312275

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P312874

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: P312593

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P312833

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312311

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P312497

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: P312497

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312550

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P312530

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312075

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

Reference Method: SM 2320 B-97
Batch ID: P312271

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

Reference Method: SM 4500 F-C-97
Batch ID: P312275

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P312874

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P312593

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1836244	Chloride	96.6	99.2	P/P	90 - 110
1836245	Chloride	99.8		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P312833

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1837221	Sulfate	94.4		P	90 - 110
1837267	Sulfate	95.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312311

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1833921	Ammonia-N	97.2	94.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P312497

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1834769	Kjeldahl Nitrogen	97.2	96.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1834764	NO2NO3-N	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P312530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1834768	Total-P	93.5	87.5	P/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312075

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1835052	O-Phosphate-P	97.7	98.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P312275

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1835048	Fluoride	96.7	98.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P312874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1834768	Organic Carbon	87.6	89.6	P/P	85 - 115

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P312077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835003	Turbidity	1.74	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P312593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1836244	Chloride	1.55	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P312833

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1837267	Sulfate	0.337	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P312311

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1833921	Ammonia-N	1.92	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P312497

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1834769	Kjeldahl Nitrogen	0.583	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P312550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1834764	NO2NO3-N	1.83	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P312530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1834768	Total-P	6.60	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P312075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835052	O-Phosphate-P	0.563	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P312039

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835049	Color (true)	1.92	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P312271

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835048	Total Alkalinity	0.0309	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P312418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835204	TDS	9.74	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P312369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835174	TSS	6.45	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P312370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835049	TSS	8.96	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P312275

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1835048	Fluoride	0.946	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P312874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1834768	Organic Carbon	2.07	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: SM 2120 B

Run ID: A71887

Included Lab Sample IDs: 1835048, 1835049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	104	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A71901

Included Lab Sample IDs: 1835052, 1835053

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	99.9	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A71903

Included Lab Sample IDs: 1835048, 1835049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: SM 2320 B-97

Run ID: A71961

Included Lab Sample IDs: 1835048, 1835049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A71961

Included Lab Sample IDs: 1835048, 1835049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.5	P/P	90 - 110
Fluoride	99.0	98.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A71970

Included Lab Sample IDs: 1835050, 1835051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.6	91.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71988

Included Lab Sample IDs: 1835048, 1835049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.7	97.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A72035

Included Lab Sample IDs: 1835050, 1835051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A72035
Included Lab Sample IDs: 1835050, 1835051

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A72071
Included Lab Sample IDs: 1835050, 1835051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.7	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A72125
Included Lab Sample IDs: 1835050, 1835051

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A72131
Included Lab Sample IDs: 1835048, 1835049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	99.0	97.8	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A72148
Included Lab Sample IDs: 1835050, 1835051

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.4	93.0	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				1.74	
EPA 300.0 Rev. 2.1	Chloride	97.3	96.6 99.2 99.8			1.55
	Sulfate	96.2	95.5 94.4		0.337	
EPA 350.1 Rev. 2.0	Ammonia-N	99.3	97.2 94.3			1.92
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	97.2 96.5			0.583
EPA 353.2 Rev. 2.0	NO2NO3-N	104	104 102			1.83
EPA 365.1 Rev. 2.0	Total-P	100	93.5 87.5			6.60
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	97.7 98.3			0.563
SM 2120 B	Color (true)				1.92	
SM 2320 B-97	Total Alkalinity	104			0.0309	
SM 2540 C-97	TDS				9.74	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
SM 2540 D-97	TSS					6.45	
	TSS					8.96	
SM 4500 F-C-97	Fluoride	97.5	96.7	98.0			0.946
SM 5310 B-00	Organic Carbon	95.5	87.6	89.6			2.07

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1835048, 1835049
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1835048, 1835049
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1835048, 1835049
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1835050, 1835051
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1835050, 1835051
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1835050, 1835051
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1835050, 1835051
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1835052, 1835053
SM 2120 B / E31780	True Color measured at 450 nm	1835048, 1835049
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1835048, 1835049
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1835048, 1835049
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1835048, 1835049
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1835048, 1835049
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1835050, 1835051

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	09/28/2016			09/28/2016 16:47	Sima Feizi	1835048, 1835049
EPA 300.0 Rev. 2.1	09/28/2016			10/05/2016	Ping Hua	1835048, 1835049
	09/28/2016			10/11/2016	Ping Hua	1835048, 1835049
EPA 350.1 Rev. 2.0	09/28/2016			09/30/2016	Sofia Elnemr	1835050, 1835051
EPA 351.2 Rev. 2.0	09/28/2016	10/05/2016	Adrian Shelby	10/06/2016	Joseph Suarez	1835050, 1835051
EPA 353.2 Rev. 2.0	09/28/2016			10/05/2016	Beverly Y. Sanders	1835050, 1835051
EPA 365.1 Rev. 2.0	09/28/2016	10/05/2016	Vijayalakshmi Reddy	10/10/2016	Lipi Saha	1835050, 1835051
EPA 365.1 Rev. 2.0 dissolved	09/28/2016			09/28/2016 16:53	Julia Storbeck	1835052
	09/28/2016			09/28/2016 17:55	Julia Storbeck	1835053
SM 2120 B	09/28/2016			09/28/2016 21:05	Julie Michelle Frank	1835048
	09/28/2016			09/28/2016 21:06	Julie Michelle Frank	1835049
SM 2320 B-97	09/28/2016			09/30/2016	Dale L. Simmons	1835048, 1835049
SM 2540 C-97	09/28/2016			09/30/2016	Yijie Li	1835048, 1835049
SM 2540 D-97	09/28/2016			09/30/2016	Yijie Li	1835048, 1835049
SM 4500 F-C-97	09/28/2016			09/30/2016	Dale L. Simmons	1835048, 1835049
SM 5310 B-00	09/28/2016			10/11/2016	Julie Michelle Frank	1835050, 1835051