

Chemical Analysis Report

SE-DIST-2016-06-08-03

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

Event Description: **SMP-With TREND**
Request ID: **RQ-2016-06-06-45**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 30-JUN-2016 11:34



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: L-5 @ G-206 Holeyland

Collection Date/Time: 06/07/2016 13:15

Field ID: G5SE0002

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1806711	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P305862	
	EPA 300.0 Rev. 2.1	Chloride	92		mg Cl/L	P306260	
		Sulfate	35		mg SO4/L	P306264	
	SM 2120 B	Color (true)	110		PCU	P305879	
	SM 2320 B-97	Total Alkalinity	187		mg CaCO3/L	P306030	
	SM 2540 C-97	TDS	478		mg/L	P306521	
	SM 2540 D-97	TSS	2	U	mg/L	P306447	
	SM 4500 F-C-97	Fluoride	0.44		mg F/L	P306035	
1806713	EPA 350.1 Rev. 2.0	Ammonia-N	0.051		mg N/L	P306130	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.0		mg N/L	P306055	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P305997	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P306157	
	SM 5310 B-00	Organic Carbon	33		mg C/L	P306324	
1806715	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P305816	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Sample Location: L-5 @ G-205 Holeyland

Collection Date/Time: 06/07/2016 13:30

Field ID: G205

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1806712	EPA 180.1 Rev. 2.0	Turbidity	1.0	A	NTU	P305863	
	EPA 300.0 Rev. 2.1	Chloride	90		mg Cl/L	P306260	
		Sulfate	36		mg SO4/L	P306264	
	SM 2120 B	Color (true)	110	A	PCU	P305880	
	SM 2320 B-97	Total Alkalinity	186		mg CaCO3/L	P306030	
	SM 2540 C-97	TDS	489	A	mg/L	P306521	
	SM 2540 D-97	TSS	3	I	mg/L	P306447	
	SM 4500 F-C-97	Fluoride	0.43		mg F/L	P306035	
1806714	EPA 350.1 Rev. 2.0	Ammonia-N	0.056		mg N/L	P306130	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P306055	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.020		mg N/L	P305997	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P306157	
	SM 5310 B-00	Organic Carbon	32		mg C/L	P306324	
1806716	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P305816	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P305862

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P305863

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P306260

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P306264

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306130

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P306055

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P305997

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P306157

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305816

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

Reference Method: SM 2120 B
Batch ID: P305879

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P305880

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P306030

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

Reference Method: SM 2540 C-97
Batch ID: P306521

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P306447

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P306035

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P306324

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: P306260

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P306264

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306130

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: P306130

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: P306055

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: P305997

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: P306157

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305816

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

Reference Method: SM 2320 B-97
Batch ID: P306030

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P306035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P306324

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	108		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P306260

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: P306260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806688	Chloride	98.0		P	90 - 110
1806794	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P306264

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806688	Sulfate	97.8		P	90 - 110
1806794	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306130

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806698	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P306055

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806762	Kjeldahl Nitrogen	106	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P305997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806701	NO2NO3-N	97.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P306157

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806713	Total-P	103	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305816

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806709	O-Phosphate-P	100	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P306035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806873	Fluoride	101	100	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P306324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1806701	Organic Carbon	108	111	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P305862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806682	Turbidity	1.13	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P305863

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806712	Turbidity	6.70	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P306260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806688	Chloride	0.352	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P306264

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806688	Sulfate	2.37	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P306130

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806698	Ammonia-N	0.655	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P306055

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806762	Kjeldahl Nitrogen	4.13	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P305997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806701	NO2NO3-N	1.83	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P306157

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806713	Total-P	3.91	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P305816

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806709	O-Phosphate-P	1.29	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P305879

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806689	Color (true)	0.474	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P305880

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806712	Color (true)	1.52	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P306030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806873	Total Alkalinity	0.188	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P306521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806712	TDS	0.409	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P306035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806873	Fluoride	0.464	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P306324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1806701	Organic Carbon	1.62	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: A69921

Included Lab Sample IDs: 1806715, 1806716

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A69934

Included Lab Sample IDs: 1806711, 1806712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105
Turbidity	99.5	100	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A69940

Included Lab Sample IDs: 1806711, 1806712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.5	P/P	90 - 115
Color (true)	99.5	101	P/P	90 - 115

Reference Method: SM 2320 B-97

Run ID: A69989

Included Lab Sample IDs: 1806711, 1806712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.6	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A69989

Included Lab Sample IDs: 1806711, 1806712

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A70003

Included Lab Sample IDs: 1806713, 1806714

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: A70014

Included Lab Sample IDs: 1806713, 1806714

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	97.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A70016

Included Lab Sample IDs: 1806713, 1806714

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A70016
Included Lab Sample IDs: 1806713, 1806714

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A70045
Included Lab Sample IDs: 1806711, 1806712

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	96.4	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A70061
Included Lab Sample IDs: 1806713, 1806714

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

Reference Method: SM 5310 B-00
Run ID: A70079
Included Lab Sample IDs: 1806713, 1806714

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	103	102	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					1.13	
	Turbidity					6.70	
EPA 300.0 Rev. 2.1	Chloride	99.3	98.0	99.5		0.352	
	Sulfate	96.9	97.8	98.4		2.37	
EPA 350.1 Rev. 2.0	Ammonia-N	102	102	102			0.655
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	106	101			4.13
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	97.0	99.0			1.83
EPA 365.1 Rev. 2.0	Total-P	106	103	99.0			3.91
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	100	101			1.29
SM 2120 B	Color (true)					0.474	
	Color (true)					1.52	
SM 2320 B-97	Total Alkalinity	102				0.188	
SM 2540 C-97	TDS					0.409	
SM 4500 F-C-97	Fluoride	98.1	101	100			0.464
SM 5310 B-00	Organic Carbon	108	108	111			1.62

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1806711, 1806712
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1806711, 1806712
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1806711, 1806712
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1806713, 1806714
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1806713, 1806714
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1806713, 1806714
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1806713, 1806714
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1806715, 1806716
SM 2120 B / E31780	True Color measured at 450 nm	1806711, 1806712
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1806711, 1806712
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1806711, 1806712
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1806711, 1806712
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1806711, 1806712
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1806713, 1806714

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	06/08/2016			06/08/2016 17:59	Rochelle Y Jackson	1806711, 1806712
EPA 300.0 Rev. 2.1	06/08/2016			06/15/2016	Elisa J Lutz	1806711, 1806712
EPA 350.1 Rev. 2.0	06/08/2016			06/13/2016	Diana M. Turner	1806713, 1806714
EPA 351.2 Rev. 2.0	06/08/2016	06/13/2016	Sofia Elnemr	06/14/2016	Christopher Armour	1806713, 1806714
EPA 353.2 Rev. 2.0	06/08/2016			06/10/2016	Beverly Y. Sanders	1806713, 1806714
EPA 365.1 Rev. 2.0	06/08/2016	06/14/2016	Vijayalakshmi Reddy	06/15/2016	Lipi Saha	1806713, 1806714
EPA 365.1 Rev. 2.0 dissolved	06/08/2016			06/08/2016 14:53	Julia Storbeck	1806715
	06/08/2016			06/08/2016 14:54	Julia Storbeck	1806716
SM 2120 B	06/08/2016			06/08/2016 17:23	Chrisoulla Rakowski	1806711
	06/08/2016			06/08/2016 17:27	Chrisoulla Rakowski	1806712
SM 2320 B-97	06/08/2016			06/11/2016	Dale L. Simmons	1806711, 1806712
SM 2540 C-97	06/08/2016			06/10/2016	Yijie Li	1806711, 1806712
SM 2540 D-97	06/08/2016			06/10/2016	Yijie Li	1806711, 1806712
SM 4500 F-C-97	06/08/2016			06/11/2016	Dale L. Simmons	1806711, 1806712
SM 5310 B-00	06/08/2016			06/16/2016	Sofia Elnemr	1806713, 1806714