

Chemical Analysis Report

NE-DIST-2016-03-22-02

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

Event Description: **HAWTHORNE LAKES**

Request ID: **RQ-2016-03-21-06**

Customer: **NE-DIST**

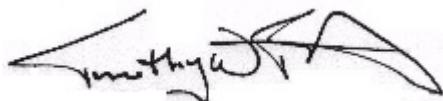
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way
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Certified by: Timothy Fitzpatrick, Program Administrator

Date Certified: 11-APR-2016 13:45

A handwritten signature in black ink, appearing to read 'Timothy W. Fitzpatrick', with a stylized flourish at the end.

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: 20020054LITTLE ORANGE LAKE CTR

Collection Date/Time: 03/21/2016 11:55

Field ID: 20020054LITTLE ORANGE LAKE CTR

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1782132	EPA 180.1 Rev. 2.0	Turbidity	0.70		NTU	P300844	
	EPA 300.0 Rev. 2.1	Chloride	7.8		mg Cl/L	P300933	
		Sulfate	1.2		mg SO4/L	P300935	
	SM 2120 B	Color (true)	390		PCU	P300800	
	SM 2320 B-97	Total Alkalinity	3.1		mg CaCO3/L	P301028	
	SM 2540 C-97	TDS	78		mg/L	P301224	
	SM 2540 D-97	TSS	3	I	mg/L	P301152	
	SM 4500 F-C-97	Fluoride	0.075	I	mg F/L	P301032	
1782134	EPA 350.1 Rev. 2.0	Ammonia-N	0.047		mg N/L	P301331	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P301272	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P301005	
	EPA 365.1 Rev. 2.0	Total-P	0.24		mg P/L	P301256	
	SM 5310 B-00	Organic Carbon	35		mg C/L	P301141	
1782136	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.19		mg P/L	P300814	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Chloride: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

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

Sample Location: G3NE0003 Holdens Pond Center

Collection Date/Time: 03/21/2016 12:20

Field ID: G3NE0003 Holdens Pond Center

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1782133	EPA 180.1 Rev. 2.0	Turbidity	0.65		NTU	P300844	
	EPA 300.0 Rev. 2.1	Chloride	8.2		mg Cl/L	P300933	
		Sulfate	0.51		mg SO4/L	P300935	
	SM 2120 B	Color (true)	320		PCU	P300800	
	SM 2320 B-97	Total Alkalinity	3.1		mg CaCO3/L	P301028	
	SM 2540 C-97	TDS	59		mg/L	P301224	
	SM 2540 D-97	TSS	2	I	mg/L	P301152	
	SM 4500 F-C-97	Fluoride	0.077	I	mg F/L	P301032	
1782135	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P301331	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P301272	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P301005	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P301256	
	SM 5310 B-00	Organic Carbon	33		mg C/L	P301142	
1782137	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.074		mg P/L	P300814	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Chloride: Matrix spike recovery data is unavailable due to high analyte concentration in the QC sample.

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P300844

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P300933

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P300935

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P301331

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301272

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301005

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P301256

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P300814

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

Reference Method: SM 2120 B
Batch ID: P300800

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P301028

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P301224

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P301152

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P301032

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P301141

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Reference Method: SM 5310 B-00
Batch ID: P301142

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: P300933

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P300935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P301331

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: P301331

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301272

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301005

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: P301256

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: P300814

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

Reference Method: SM 2320 B-97
Batch ID: P301028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P301032

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.0		P	94 - 108

Reference Method: SM 5310 B-00
Batch ID: P301141

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	101		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P301142

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P300933

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782004	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P300935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782004	Sulfate	97.7		P	90 - 110
1782114	Sulfate	97.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P301331

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782166	Ammonia-N	98.6	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301272

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782096	Kjeldahl Nitrogen	81.2	76.8	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301005

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782210	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P301256

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782115	Total-P	100	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P300814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782102	O-Phosphate-P	96.4	99.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P301032

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782005	Fluoride	95.8	97.5	P/P	94 - 107

Reference Method: SM 5310 B-00
Batch ID: P301141

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782040	Organic Carbon	98.7		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P301142

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1782135	Organic Carbon	102		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P300844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782114	Turbidity	0.791	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P300933

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782004	Chloride	0.334	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P300935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782004	Sulfate	1.75	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P301331

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782166	Ammonia-N	0.0101	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P301272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782096	Kjeldahl Nitrogen	2.73	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P301005

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782210	NO2NO3-N	0.913	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P301256

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782115	Total-P	1.01	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P300814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782102	O-Phosphate-P	2.96	Spike	P	0 - 20

Reference Method: SM 2120 B

Batch ID: P300800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782091	Color (true)	2.63	Sample	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P301028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782005	Total Alkalinity	0.385	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97

Batch ID: P301224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782092	TDS	4.01	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97

Batch ID: P301032

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782005	Fluoride	1.49	Spike	P	0 - 3.7

Reference Method: SM 5310 B-00

Batch ID: P301141

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782040	Organic Carbon	2.28	Spike	P	0 - 20

Reference Method: SM 5310 B-00

Batch ID: P301142

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1782135	Organic Carbon	0.267	Spike	P	0 - 20

Quality Assurance Report Precision

* 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: A68373

Included Lab Sample IDs: 1782132, 1782133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	93.4	96.1	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A68375

Included Lab Sample IDs: 1782136, 1782137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.1	98.0	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A68388

Included Lab Sample IDs: 1782132, 1782133

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A68401

Included Lab Sample IDs: 1782132, 1782133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.1	100	P/P	90 - 110
Sulfate	96.5	98.7	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A68424

Included Lab Sample IDs: 1782134, 1782135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A68432

Included Lab Sample IDs: 1782132, 1782133

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A68432

Included Lab Sample IDs: 1782132, 1782133

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

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A68477

Included Lab Sample IDs: 1782134, 1782135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	99.2	P/P	90 - 110
Organic Carbon	98.6	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A68548

Included Lab Sample IDs: 1782134, 1782135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	99.3	P/P	90 - 110
Ammonia-N	99.3	99.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A68570

Included Lab Sample IDs: 1782134, 1782135

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: A68672

Included Lab Sample IDs: 1782134, 1782135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	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				0.791	
EPA 300.0 Rev. 2.1	Chloride	101	102		0.334	
	Sulfate	98.9	97.7 97.6		1.75	
EPA 350.1 Rev. 2.0	Ammonia-N	97.8	98.6 98.6			0.0101
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.8	81.2 76.8			2.73
EPA 353.2 Rev. 2.0	NO2NO3-N	104	101 102			0.913
EPA 365.1 Rev. 2.0	Total-P	105	100 99.3			1.01
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	96.4 99.3			2.96
SM 2120 B	Color (true)				2.63	
SM 2320 B-97	Total Alkalinity	103			0.385	
SM 2540 C-97	TDS				4.01	
SM 4500 F-C-97	Fluoride	98.0	95.8 97.5			1.49
SM 5310 B-00	Organic Carbon	101	98.7			2.28
	Organic Carbon	100	102			0.267

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1782132, 1782133
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1782132, 1782133
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1782132, 1782133
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1782134, 1782135
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1782134, 1782135
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1782134, 1782135
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1782134, 1782135
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1782136, 1782137
SM 2120 B / E31780	True Color measured at 450 nm	1782132, 1782133
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1782132, 1782133
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1782132, 1782133
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1782132, 1782133
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1782132, 1782133
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1782134, 1782135

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	03/22/2016			03/22/2016 15:57	Blanca Fach	1782132, 1782133
EPA 300.0 Rev. 2.1	03/22/2016			03/23/2016	Julia Storbeck	1782132, 1782133
EPA 350.1 Rev. 2.0	03/22/2016			03/30/2016	Diana M. Turner	1782134, 1782135
EPA 351.2 Rev. 2.0	03/22/2016	03/30/2016	Sofia Elnemr	03/31/2016	Christopher Armour	1782134, 1782135
EPA 353.2 Rev. 2.0	03/22/2016			03/24/2016	Peter D. Kaus	1782134, 1782135
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	03/22/2016			03/22/2016 14:47	Ping Hua	1782137
SM 2120 B	03/22/2016			03/22/2016 14:25	Rochelle Y Jackson	1782132
	03/22/2016			03/22/2016 14:27	Rochelle Y Jackson	1782133
SM 2320 B-97	03/22/2016			03/24/2016	Dale L. Simmons	1782132, 1782133
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