

Chemical Analysis Report

CEN-DIST-2016-05-12-01

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

Event Description: **Lady Lake**
Request ID: **RQ-2016-05-09-57**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Mike Linger

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 03-JUN-2016 10:13

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: G4CE0096

Collection Date/Time: 05/11/2016 11:35

Field ID: G4CE0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1798169	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P304187	
	EPA 300.0 Rev. 2.1	Chloride	9.7		mg Cl/L	P304781	
		Sulfate	7.5		mg SO4/L	P304784	
	SM 2120 B	Color (true)	12		PCU	P304256	
	SM 2320 B-97	Total Alkalinity	0.86	I	mg CaCO3/L	P304847	
	SM 2540 C-97	TDS	42		mg/L	P304880	
	SM 2540 D-97	TSS	2	U	mg/L	P304862	
	SM 4500 F-C-97	Fluoride	0.051	I	mg F/L	P305055	
1798171	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P304550	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P304905	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304653	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P304976	
	SM 5310 B-00	Organic Carbon	7.6		mg C/L	P304981	
1798173	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P304183	

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: G4CE0097

Collection Date/Time: 05/11/2016 11:50

Field ID: G4CE0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1798170	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P304187	
	EPA 300.0 Rev. 2.1	Chloride	9.7		mg Cl/L	P304781	
		Sulfate	7.5		mg SO4/L	P304784	
	SM 2120 B	Color (true)	13		PCU	P304256	
	SM 2320 B-97	Total Alkalinity	0.95	I	mg CaCO3/L	P304847	
	SM 2540 C-97	TDS	47		mg/L	P304880	
	SM 2540 D-97	TSS	3	I	mg/L	P304862	
	SM 4500 F-C-97	Fluoride	0.051	I	mg F/L	P305055	
1798172	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P304550	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P304905	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304654	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P304976	
	SM 5310 B-00	Organic Carbon	7.6		mg C/L	P304981	
1798174	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P304183	

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: P304187

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: P304781

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304784

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304550

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304905

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304653

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304654

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304976

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304183

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

Reference Method: SM 2120 B
Batch ID: P304256

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P304847

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

Reference Method: SM 2540 C-97
Batch ID: P304880

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P304862

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P305055

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P304981

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: P304781

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304784

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304550

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304905

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: P304905

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: P304653

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P304654

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P304976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.1		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P304183

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.6		P	90 - 110

Reference Method: SM 2320 B-97
 Batch ID: P304847

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 105

Reference Method: SM 4500 F-C-97
 Batch ID: P305055

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.5		P	92 - 103

Reference Method: SM 5310 B-00
 Batch ID: P304981

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: P304781

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: P304781

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798220	Chloride	98.9		P	90 - 110
1798252	Chloride	99.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304784

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798220	Sulfate	96.3		P	90 - 110
1798252	Sulfate	95.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798134	Ammonia-N	97.8	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304905

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798171	Kjeldahl Nitrogen	105	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304653

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798059	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304654

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798172	NO2NO3-N	101	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798171	Total-P	99.3	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798272	O-Phosphate-P	99.5	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P305055

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1799332	Fluoride	98.7	99.3	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P304981

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1798047	Organic Carbon	97.0	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P304187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798073	Turbidity	7.34	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798220	Chloride	0.131	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304784

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798220	Sulfate	1.95	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798134	Ammonia-N	1.98	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304905

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798171	Kjeldahl Nitrogen	0.457	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798059	NO2NO3-N	0.755	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798172	NO2NO3-N	1.96	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798171	Total-P	6.57	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P304183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798272	O-Phosphate-P	1.99	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P304256

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798074	Color (true)	0.821	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P304847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799332	Total Alkalinity	0.569	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P304880

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798132	TDS	0.623	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P305055

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1799332	Fluoride	0.473	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P304981

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1798047	Organic Carbon	1.19	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: EPA 300.0 Rev. 2.1
Run ID: A39620
Included Lab Sample IDs: 1798169, 1798170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	100	P/P	90 - 110
Sulfate	98.0	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A69449
Included Lab Sample IDs: 1798173, 1798174

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A69450
Included Lab Sample IDs: 1798169, 1798170

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

Reference Method: SM 2120 B
Run ID: A69465
Included Lab Sample IDs: 1798169, 1798170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.7	98.4	P/P	90 - 115

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A69554
Included Lab Sample IDs: 1798171, 1798172

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A69587
Included Lab Sample IDs: 1798171, 1798172

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A69641

Included Lab Sample IDs: 1798169, 1798170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	102	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A69683

Included Lab Sample IDs: 1798171, 1798172

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

Reference Method: SM 4500 F-C-97

Run ID: A69701

Included Lab Sample IDs: 1798169, 1798170

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A69708

Included Lab Sample IDs: 1798171, 1798172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.2	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69756

Included Lab Sample IDs: 1798171, 1798172

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	100	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				7.34	
EPA 300.0 Rev. 2.1	Chloride	99.4	98.9 99.9		0.131	
	Sulfate	96.8	96.3 95.2		1.95	
EPA 350.1 Rev. 2.0	Ammonia-N	98.9	97.8 100			1.98
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	105 104			0.457
EPA 353.2 Rev. 2.0	NO2NO3-N	102	101 102			0.755
	NO2NO3-N	103	101 103			1.96
EPA 365.1 Rev. 2.0	Total-P	98.1	99.3 106			6.57
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.6	99.5 102			1.99
SM 2120 B	Color (true)				0.821	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
SM 2320 B-97	Total Alkalinity	101			0.569	
SM 2540 C-97	TDS				0.623	
SM 4500 F-C-97	Fluoride	96.5	98.7 99.3			0.473
SM 5310 B-00	Organic Carbon	100	97.0 98.2			1.19

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1798169, 1798170
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1798169, 1798170
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1798169, 1798170
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1798171, 1798172
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1798171, 1798172
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1798171, 1798172
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1798171, 1798172
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1798173, 1798174
SM 2120 B / E31780	True Color measured at 450 nm	1798169, 1798170
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1798169, 1798170
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1798169, 1798170
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1798169, 1798170
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1798169, 1798170
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1798171, 1798172

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	05/12/2016			05/12/2016 15:28	Sima Feizi	1798169, 1798170
EPA 300.0 Rev. 2.1	05/12/2016			05/20/2016	Elisa J Lutz	1798169, 1798170
EPA 350.1 Rev. 2.0	05/12/2016			05/18/2016	Diana M. Turner	1798171, 1798172
EPA 351.2 Rev. 2.0	05/12/2016	05/24/2016	Sofia Elnemr	05/26/2016	Christopher Armour	1798171, 1798172
EPA 353.2 Rev. 2.0	05/12/2016			05/19/2016	Peter D. Kaus	1798171, 1798172
EPA 365.1 Rev. 2.0	05/12/2016	05/25/2016	Vijayalakshmi Reddy	05/27/2016	Rochelle Y Jackson	1798171, 1798172
EPA 365.1 Rev. 2.0 dissolved	05/12/2016			05/12/2016 15:20	Julia Storbeck	1798173
	05/12/2016			05/12/2016 15:27	Julia Storbeck	1798174
SM 2120 B	05/12/2016			05/12/2016 15:54	Chrisoulla Rakowski	1798169
	05/12/2016			05/12/2016 15:55	Chrisoulla Rakowski	1798170
SM 2320 B-97	05/12/2016			05/22/2016	Dale L. Simmons	1798169, 1798170
SM 2540 C-97	05/12/2016			05/16/2016	Sima Feizi	1798169, 1798170
SM 2540 D-97	05/12/2016			05/16/2016	Sima Feizi	1798169, 1798170
SM 4500 F-C-97	05/12/2016			05/25/2016	Dale L. Simmons	1798169, 1798170
SM 5310 B-00	05/12/2016			05/25/2016	Diana M. Turner	1798171, 1798172