

Chemical Analysis Report

SW-DIST-2016-12-08-01

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

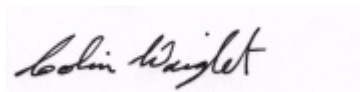
Event Description: **Spring Bayou**
Request ID: **RQ-2016-12-05-29**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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Temple Terrace, FL 33637-0926
Attn: Judy Ashton

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Certified by: Colin Wright, Program Administrator

Date Certified: 30-DEC-2016 14:29

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: SPRING BAYOU

Collection Date/Time: 12/07/2016 13:10

Field ID: G5SW0078

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1856103	EPA 180.1 Rev. 2.0	Turbidity	2.7	A	NTU	P316443	
	SM 2320 B-97	Total Alkalinity	129		mg CaCO3/L	P316734	
	SM 2540 D-97	TSS	6	I	mg/L	P317046	
	SM 4500 F-C-97	Fluoride	0.86		mg F/L	P316735	
1856106	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P316782	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P316692	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P316507	
	EPA 365.1 Rev. 2.0	Total-P	0.065		mg P/L	P316593	
	SM 5310 B-00	Organic Carbon	6.2		mg C/L	P316543	
1856109	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P316523	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: KREAMER BAYOU

Collection Date/Time: 12/07/2016 12:45

Field ID: G5SW0079

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1856104	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P316443	
	SM 2320 B-97	Total Alkalinity	128		mg CaCO3/L	P316734	
	SM 2540 D-97	TSS	4	I	mg/L	P317046	
	SM 4500 F-C-97	Fluoride	0.91		mg F/L	P316735	
1856107	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P316782	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P316692	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P316509	
	EPA 365.1 Rev. 2.0	Total-P	0.048		mg P/L	P316593	
	SM 5310 B-00	Organic Carbon	6.3		mg C/L	P316543	
1856110	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P316528	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: G5SW0125

Collection Date/Time: 12/07/2016 13:30

Field ID: G5SW0125

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1856105	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P316443	
	SM 2320 B-97	Total Alkalinity	131		mg CaCO3/L	P316734	
	SM 2540 D-97	TSS	4	I	mg/L	P317046	
	SM 4500 F-C-97	Fluoride	0.84		mg F/L	P316735	
1856108	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P316865	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P316692	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P316509	
	EPA 365.1 Rev. 2.0	Total-P	0.042		mg P/L	P316593	
	SM 5310 B-00	Organic Carbon	5.9		mg C/L	P316543	
1856111	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P316528	

Field ID: G5SW0125

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment: SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.							

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P316443

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316782

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316865

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P316692

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316507

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316509

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P316593

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P316523

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P316528

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

Reference Method: SM 2320 B-97
Batch ID: P316734

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

Reference Method: SM 2540 D-97
Batch ID: P317046

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P316735

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P316543

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316782

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316865

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P316692

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316507

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316507

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316509

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: P316593

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P316523

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P316528

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

Reference Method: SM 2320 B-97
Batch ID: P316734

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.5		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P316735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P316543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316782

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1855666	Ammonia-N	100	98.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1855796	Ammonia-N	101	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P316692

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1856108	Kjeldahl Nitrogen	102	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1855665	NO2NO3-N	104	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316509

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1856107	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P316593

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1856107	Total-P	96.1	94.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P316523

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1856109	O-Phosphate-P	98.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P316528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1856130	O-Phosphate-P	98.6	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P316735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1856742	Fluoride	97.7	97.7	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P316543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1856106	Organic Carbon	96.3	95.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P316443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856103	Turbidity	8.09	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1855666	Ammonia-N	1.30	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P316865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1855796	Ammonia-N	0.513	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P316692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856108	Kjeldahl Nitrogen	4.15	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1855665	NO2NO3-N	1.06	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P316509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856107	NO2NO3-N	0.482	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P316593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856107	Total-P	1.79	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P316523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856109	O-Phosphate-P	2.16	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P316528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856130	O-Phosphate-P	1.43	Spike	P	0 - 20

Reference Method: SM 2320 B-97

Batch ID: P316734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856742	Total Alkalinity	0.365	Sample	P	0 - 4.8

Reference Method: SM 4500 F-C-97

Batch ID: P316735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856742	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00

Batch ID: P316543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1856106	Organic Carbon	0.898	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 180.1 Rev. 2.0

Run ID: A73258

Included Lab Sample IDs: 1856103, 1856104, 1856105

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A73269

Included Lab Sample IDs: 1856106, 1856107, 1856108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	98.0	P/P	90 - 110
NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A73279

Included Lab Sample IDs: 1856109, 1856110, 1856111

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.8	98.4	P/P	90 - 110
O-Phosphate-P	98.4	97.7	P/P	90 - 110
O-Phosphate-P	99.6	99.6	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A73284

Included Lab Sample IDs: 1856106, 1856107, 1856108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A73350

Included Lab Sample IDs: 1856106, 1856107, 1856108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.0	98.8	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A73358

Included Lab Sample IDs: 1856103, 1856104, 1856105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.5	98.5	P/P	90 - 110
Total Alkalinity	98.6	96.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A73358

Included Lab Sample IDs: 1856103, 1856104, 1856105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.0	99.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A73371

Included Lab Sample IDs: 1856106, 1856107

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	97.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A73395
Included Lab Sample IDs: 1856106, 1856107, 1856108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	104	P/P	90 - 110
Kjeldahl Nitrogen	103	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A73402
Included Lab Sample IDs: 1856108

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	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 180.1 Rev. 2.0	Turbidity				8.09	
EPA 350.1 Rev. 2.0	Ammonia-N	98.8	100 98.5			1.30
	Ammonia-N	103	101 99.4			0.513
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	102 107			4.15
EPA 353.2 Rev. 2.0	NO2NO3-N	103	104 102			1.06
	NO2NO3-N	102	104 104			0.482
EPA 365.1 Rev. 2.0	Total-P	103	96.1 94.3			1.79
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.4	98.0 100			2.16
	O-Phosphate-P	104	98.6 100			1.43
SM 2320 B-97	Total Alkalinity	98.5			0.365	
SM 4500 F-C-97	Fluoride	95.8	97.7 97.7			0.0
SM 5310 B-00	Organic Carbon	99.0	96.3 95.3			0.898

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1856103, 1856104, 1856105
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1856106, 1856107, 1856108
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1856106, 1856107, 1856108
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1856106, 1856107, 1856108
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1856106, 1856107, 1856108
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1856109, 1856110, 1856111
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1856103, 1856104, 1856105
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1856103, 1856104, 1856105
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1856103, 1856104, 1856105
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1856106, 1856107, 1856108

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	12/08/2016			12/08/2016 16:30	Sima Feizi	1856103, 1856104, 1856105
EPA 350.1 Rev. 2.0	12/08/2016			12/13/2016	Sofia Elnemr	1856106, 1856107
	12/08/2016			12/14/2016	Sofia Elnemr	1856108
EPA 351.2 Rev. 2.0	12/08/2016	12/13/2016	Adrian Shelby	12/15/2016	Joseph Suarez	1856106, 1856107, 1856108
EPA 353.2 Rev. 2.0	12/08/2016			12/09/2016	Beverly Y. Sanders	1856106, 1856107, 1856108
EPA 365.1 Rev. 2.0	12/08/2016	12/12/2016	Vijayalakshmi Reddy	12/13/2016	Lipi Saha	1856106, 1856107, 1856108
EPA 365.1 Rev. 2.0 dissolved	12/08/2016			12/08/2016 14:35	Julia Storbeck	1856109
	12/08/2016			12/08/2016 15:45	Julia Storbeck	1856110
	12/08/2016			12/08/2016 15:50	Julia Storbeck	1856111
SM 2320 B-97	12/08/2016			12/13/2016	Dale L. Simmons	1856103, 1856104, 1856105
SM 2540 D-97	12/08/2016			12/13/2016	Sima Feizi	1856103, 1856104, 1856105
SM 4500 F-C-97	12/08/2016			12/13/2016	Dale L. Simmons	1856103, 1856104, 1856105
SM 5310 B-00	12/08/2016			12/10/2016	Julie Michelle Frank	1856106, 1856107, 1856108