

Chemical Analysis Report

SW-DIST-2016-05-06-01

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

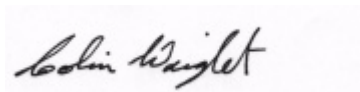
Event Description: **1700A, 1668C**
Request ID: **RQ-2016-05-02-81**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Colin Wright, Environmental Administrator

Date Certified: 01-JUN-2016 17:51

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: G5SW0119

Collection Date/Time: 05/05/2016 10:06

Field ID: G5SW0119

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1796420	EPA 180.1 Rev. 2.0	Turbidity	26		NTU	P303721	
	EPA 300.0 Rev. 2.1	Chloride	75		mg Cl/L	P304371	
		Sulfate	12		mg SO4/L	P304374	
	SM 2120 B	Color (true)	77		PCU	P303707	
	SM 2320 B-97	Total Alkalinity	52		mg CaCO3/L	P304330	
	SM 2540 C-97	TDS	274		mg/L	P304435	
	SM 2540 D-97	TSS	46	I	mg/L	P304391	
	SM 4500 F-C-97	Fluoride	0.18		mg F/L	P304334	
1796422	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P304219	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.9		mg N/L	P304588	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P304267	
	EPA 365.1 Rev. 2.0	Total-P	0.32		mg P/L	P304702	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P304874	
1796424	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P303716	

Ref. Method and Comment:

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

Sample Location: G1SW0035

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

Field ID: G1SW0035

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1796421	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P303721	
	EPA 300.0 Rev. 2.1	Chloride	52		mg Cl/L	P304371	
		Sulfate	23		mg SO4/L	P304374	
	SM 2120 B	Color (true)	25	A	PCU	P303707	
	SM 2320 B-97	Total Alkalinity	75		mg CaCO3/L	P304330	
	SM 2540 C-97	TDS	210		mg/L	P304435	
	SM 2540 D-97	TSS	4	I	mg/L	P304391	
	SM 4500 F-C-97	Fluoride	0.098	I	mg F/L	P304334	
1796423	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P304219	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P304588	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.010		mg N/L	P304267	
	EPA 365.1 Rev. 2.0	Total-P	0.082		mg P/L	P304703	
	SM 5310 B-00	Organic Carbon	6.8		mg C/L	P304874	
1796425	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P303716	

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: P303721

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P303721

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304371

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304374

Component	Result	Code	Units
Sulfate	0.20	U	mg SO ₄ /L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304219

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304588

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304267

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304702

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304703

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303716

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P303707

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P304330

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

Reference Method: SM 2540 C-97
Batch ID: P304435

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P304391

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P304334

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P304874

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: P304371

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304374

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304219

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: P304219

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.3		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304588

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304267

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: P304702

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303716

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.1		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P304330

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

Reference Method: SM 4500 F-C-97
Batch ID: P304334

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P304874

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.9		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796390	Chloride	99.6		P	90 - 110
1796489	Chloride	98.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304374

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796390	Sulfate	94.9		P	90 - 110
1796489	Sulfate	97.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304219

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796359	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796391	Kjeldahl Nitrogen	94.8	91.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304267

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796416	NO2NO3-N	96.4	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304702

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796359	Total-P	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796423	Total-P	101	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303716

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796450	O-Phosphate-P	97.9	98.8	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P304334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796490	Fluoride	98.5	98.5	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P304874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1796442	Organic Carbon	93.9	95.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P303721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796387	Turbidity	6.24	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304371

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796489	Chloride	0.251	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P304374

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796489	Sulfate	0.289	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P304219

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796359	Ammonia-N	1.14	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P304588

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796391	Kjeldahl Nitrogen	2.28	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P304267

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796416	NO2NO3-N	1.51	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304702

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796359	Total-P	1.44	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P304703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796423	Total-P	1.12	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P303716

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796450	O-Phosphate-P	0.832	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P303707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796421	Color (true)	5.69	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P304330

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796490	Total Alkalinity	0.279	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P304435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796390	TDS	3.42	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P304334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796490	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P304874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1796442	Organic Carbon	1.07	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: A69317

Included Lab Sample IDs: 1796420, 1796421

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A69320

Included Lab Sample IDs: 1796424, 1796425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	100	P/P	90 - 110
O-Phosphate-P	99.2	99.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A69321

Included Lab Sample IDs: 1796420, 1796421

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A69423

Included Lab Sample IDs: 1796420, 1796421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	100	98.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A69447

Included Lab Sample IDs: 1796422, 1796423

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A69466

Included Lab Sample IDs: 1796422, 1796423

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

Reference Method: SM 2320 B-97

Run ID: A69481

Included Lab Sample IDs: 1796420, 1796421

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

Reference Method: SM 2320 B-97

Run ID: A69481

Included Lab Sample IDs: 1796420, 1796421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.2	P/P	90 - 110
Total Alkalinity	99.4	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A69481

Included Lab Sample IDs: 1796420, 1796421

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A69607

Included Lab Sample IDs: 1796422, 1796423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.3	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69617

Included Lab Sample IDs: 1796422, 1796423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	101	P/P	90 - 110
Total-P	103	102	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A69651

Included Lab Sample IDs: 1796422, 1796423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	97.8	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				6.24	
EPA 300.0 Rev. 2.1	Chloride	99.8	98.5 99.6		0.251	
	Sulfate	98.4	97.2 94.9		0.289	
EPA 350.1 Rev. 2.0	Ammonia-N	98.3	100 102			1.14
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	94.8 91.6			2.28
EPA 353.2 Rev. 2.0	NO2NO3-N	104	96.4 98.0			1.51
EPA 365.1 Rev. 2.0	Total-P	107	103 101			1.44
	Total-P	107	101 103			1.12

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
EPA 365.1 Rev. 2.0 dissolved SM 2120 B	O-Phosphate-P Color (true)	99.1	97.9 98.8		5.69	0.832
SM 2320 B-97	Total Alkalinity	101			0.279	
SM 2540 C-97	TDS				3.42	
SM 4500 F-C-97	Fluoride	98.7	98.5 98.5			0.0
SM 5310 B-00	Organic Carbon	96.9	93.9 95.1			1.07

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1796420, 1796421
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1796420, 1796421
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1796420, 1796421
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1796422, 1796423
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1796422, 1796423
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1796422, 1796423
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1796422, 1796423
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1796424, 1796425
SM 2120 B / E31780	True Color measured at 450 nm	1796420, 1796421
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1796420, 1796421
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1796420, 1796421
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1796420, 1796421
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1796420, 1796421
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1796422, 1796423

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	05/06/2016			05/06/2016 13:16	Sima Feizi	1796420, 1796421
EPA 300.0 Rev. 2.1	05/06/2016			05/13/2016	Elisa J Lutz	1796420, 1796421
EPA 350.1 Rev. 2.0	05/06/2016			05/12/2016	Diana M. Turner	1796422, 1796423
EPA 351.2 Rev. 2.0	05/06/2016	05/19/2016	Sofia Elnemr	05/20/2016	Christopher Armour	1796422, 1796423
EPA 353.2 Rev. 2.0	05/06/2016			05/13/2016	Peter D. Kaus	1796422, 1796423
EPA 365.1 Rev. 2.0	05/06/2016	05/20/2016	Lipi Saha	05/20/2016	Lipi Saha	1796422, 1796423
EPA 365.1 Rev. 2.0 dissolved	05/06/2016			05/06/2016 13:49	Julia Storbeck	1796425
	05/06/2016			05/06/2016 14:17	Julia Storbeck	1796424
SM 2120 B	05/06/2016			05/06/2016 12:41	Rochelle Y Jackson	1796420
	05/06/2016			05/06/2016 12:43	Rochelle Y Jackson	1796421
SM 2320 B-97	05/06/2016			05/14/2016	Dale L. Simmons	1796420, 1796421
SM 2540 C-97	05/06/2016			05/11/2016	Yijie Li	1796420, 1796421
SM 2540 D-97	05/06/2016			05/11/2016	Yijie Li	1796420, 1796421
SM 4500 F-C-97	05/06/2016			05/14/2016	Dale L. Simmons	1796420, 1796421
SM 5310 B-00	05/06/2016			05/23/2016	Diana M. Turner	1796422, 1796423