Chemical Analysis Report

NE-DIST-2016-09-08-02

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

Event Description: **Suwannee 2**
Request ID: **RQ-2016-09-05-21**
Customer: **NE-DIST**
Project ID: **SMP**

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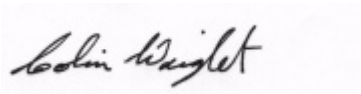
Certified by: Colin Wright, Environmental Administrator

Date Certified: 27-SEP-2016 12:03



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: Mill Creek at Bellamy/Alligator **Collection Date/Time: 09/07/2016 11:45**

Field ID: G1NE0605 09072016 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1829457	EPA 180.1 Rev. 2.0	Turbidity	4.8		NTU	P310870	
	EPA 300.0 Rev. 2.1	Chloride	17	A	mg Cl/L	P311400	
		Sulfate	3.8	A	mg SO4/L	P311406	
	SM 2120 B	Color (true)	270		PCU	P310844	
	SM 2320 B-97	Total Alkalinity	11		mg CaCO3/L	P311189	
	SM 2540 C-97	TDS	94		mg/L	P311634	
	SM 2540 D-97	TSS	4	I	mg/L	P311570	
	SM 4500 F-C-97	Fluoride	0.22		mg F/L	P311194	
1829459	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P311077	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P310958	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.068		mg N/L	P311278	
	EPA 365.1 Rev. 2.0	Total-P	0.83		mg P/L	P311223	
	SM 5310 B-00	Organic Carbon	27		mg C/L	P311105	
1829461	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.66		mg P/L	P310834	

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: Rocky Creek at CR 235 **Collection Date/Time: 09/07/2016 13:00**

Field ID: G1NE0644 09072016 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1829458	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P310870	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P311400	
		Sulfate	9.7		mg SO4/L	P311406	
	SM 2120 B	Color (true)	410		PCU	P310844	
	SM 2320 B-97	Total Alkalinity	25		mg CaCO3/L	P311189	
	SM 2540 C-97	TDS	141		mg/L	P311634	
	SM 2540 D-97	TSS	2	U	mg/L	P311570	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P311194	
1829460	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P311077	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P311263	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P311278	
	EPA 365.1 Rev. 2.0	Total-P	0.63		mg P/L	P311223	
	SM 5310 B-00	Organic Carbon	41		mg C/L	P311105	
1829462	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.54		mg P/L	P310835	

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: P310870

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: P311400

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311406

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311077

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P310958

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311263

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311278

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311223

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310834

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310835

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: P310844

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P311189

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

Reference Method: SM 2540 C-97
Batch ID: P311634

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P311570

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P311194

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P311105

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: P311400

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311406

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311077

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311077

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	105		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P310958

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311263

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311278

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: P311223

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	94.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310834

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310835

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

Reference Method: SM 2320 B-97
Batch ID: P311189

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P311194

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	92 - 103

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P311105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	104		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829457	Chloride	97.9		P	90 - 110
1829585	Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311406

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829457	Sulfate	98.7		P	90 - 110
1829585	Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311077

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829352	Ammonia-N	104	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P310958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829419	Kjeldahl Nitrogen	88.9	90.8	F/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311263

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829517	Kjeldahl Nitrogen	96.9	84.2	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311278

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829427	NO2NO3-N	106	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829419	Total-P	102	97.1	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310834

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829429	O-Phosphate-P	96.8	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829475	O-Phosphate-P	99.9	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P311194

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829410	Fluoride	96.4	97.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P311105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1829427	Organic Carbon	105	104	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P310870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829411	Turbidity	10.0	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829457	Chloride	0.357	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829457	Sulfate	0.285	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829352	Ammonia-N	1.30	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P310958

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829419	Kjeldahl Nitrogen	1.53	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311263

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829517	Kjeldahl Nitrogen	9.69	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311278

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829427	NO2NO3-N	0.265	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311223

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829419	Total-P	2.98	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310834

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829429	O-Phosphate-P	1.40	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P310835

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829475	O-Phosphate-P	1.19	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P310844

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829470	Color (true)	2.15	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P311189

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829410	Total Alkalinity	1.96	Sample	P	0 - 4.8

Quality Assurance Report
Precision

Reference Method: SM 2540 C-97
Batch ID: P311634

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829412	TDS	0.563	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P311194

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829410	Fluoride	0.470	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P311105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1829427	Organic Carbon	0.661	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 365.1 Rev. 2.0 dissolved
Run ID: A71491
Included Lab Sample IDs: 1829461, 1829462

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.9	99.0	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A71492
Included Lab Sample IDs: 1829457, 1829458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.6	96.9	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A71499
Included Lab Sample IDs: 1829457, 1829458

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A71576
Included Lab Sample IDs: 1829457, 1829458

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A71576
Included Lab Sample IDs: 1829457, 1829458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	101	101	P/P	90 - 110
Sulfate	101	99.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A71590
Included Lab Sample IDs: 1829459

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.8	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A71596
Included Lab Sample IDs: 1829459, 1829460

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

Reference Method: SM 5310 B-00
Run ID: A71605
Included Lab Sample IDs: 1829459, 1829460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	106	105	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A71639
Included Lab Sample IDs: 1829457, 1829458

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: A71639
Included Lab Sample IDs: 1829457, 1829458

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A71651
Included Lab Sample IDs: 1829459, 1829460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A71678
Included Lab Sample IDs: 1829459, 1829460

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A71711
Included Lab Sample IDs: 1829460

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	97.7	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		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					10.0	
EPA 300.0 Rev. 2.1	Chloride	101	97.9	99.2		0.357	
	Sulfate	99.6	98.7	99.2		0.285	
EPA 350.1 Rev. 2.0	Ammonia-N	105	104	103			1.30
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	88.9	90.8			1.53
	Kjeldahl Nitrogen	96.8	96.9	84.2			9.69
EPA 353.2 Rev. 2.0	NO2NO3-N	104	106	106			0.265
EPA 365.1 Rev. 2.0	Total-P	94.6	102	97.1			2.98
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	96.8	98.6			1.40
	O-Phosphate-P	103	99.9	101			1.19
SM 2120 B	Color (true)					2.15	
SM 2320 B-97	Total Alkalinity	104				1.96	
SM 2540 C-97	TDS					0.563	
SM 4500 F-C-97	Fluoride	99.8	96.4	97.0			0.470
SM 5310 B-00	Organic Carbon	104	105	104			0.661

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1829457, 1829458
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1829457, 1829458
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1829457, 1829458
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1829459, 1829460
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1829459, 1829460
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1829459, 1829460
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1829459, 1829460
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1829461, 1829462
SM 2120 B / E31780	True Color measured at 450 nm	1829457, 1829458
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1829457, 1829458
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1829457, 1829458
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1829457, 1829458
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1829457, 1829458

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1829459, 1829460

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	09/08/2016			09/08/2016 17:32	Sima Feizi	1829457, 1829458
EPA 300.0 Rev. 2.1	09/08/2016			09/16/2016	Ping Hua	1829457, 1829458
EPA 350.1 Rev. 2.0	09/08/2016			09/08/2016	Joseph Suarez	1829459, 1829460
EPA 351.2 Rev. 2.0	09/08/2016	09/12/2016	Adrian Shelby	09/13/2016	Christopher Armour	1829459
	09/08/2016	09/16/2016	Adrian Shelby	09/19/2016	Virginia P. Brown	1829460
EPA 353.2 Rev. 2.0	09/08/2016			09/15/2016	Peter D. Kaus	1829459, 1829460
EPA 365.1 Rev. 2.0	09/08/2016	09/15/2016	Vijayalakshmi Reddy	09/16/2016	Lipi Saha	1829459, 1829460
EPA 365.1 Rev. 2.0 dissolved	09/08/2016			09/08/2016 15:59	Julia Storbeck	1829461
	09/08/2016			09/08/2016 16:00	Julia Storbeck	1829462
SM 2120 B	09/08/2016			09/08/2016 19:31	Julie Michelle Frank	1829457, 1829458
SM 2320 B-97	09/08/2016			09/14/2016	Dale L. Simmons	1829457, 1829458
SM 2540 C-97	09/08/2016			09/12/2016	Sima Feizi	1829457, 1829458
SM 2540 D-97	09/08/2016			09/12/2016	Sima Feizi	1829457, 1829458
SM 4500 F-C-97	09/08/2016			09/14/2016	Dale L. Simmons	1829457, 1829458
SM 5310 B-00	09/08/2016			09/14/2016	Sofia Elnemr	1829459, 1829460