

Chemical Analysis Report

NE-DIST-2016-09-15-02

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

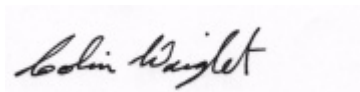
Event Description: **Nassau MidWest**
Request ID: **RQ-2016-09-12-29**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
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Certified by: Colin Wright, Environmental Administrator

Date Certified: 07-OCT-2016 13:56

A handwritten signature in black ink, appearing to read "Colin Wright", is written 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: Calkins trib at Hamp Register Rd

Collection Date/Time: 09/14/2016 09:40

Field ID: G4NE0050 09132016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831862	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P311236	
	EPA 300.0 Rev. 2.1	Chloride	7.5		mg Cl/L	P311767	
		Sulfate	0.41	I	mg SO4/L	P311770	
	SM 2120 B	Color (true)	510		PCU	P311247	
	SM 2320 B-97	Total Alkalinity	2.2	I	mg CaCO3/L	P311735	
	SM 2540 C-97	TDS	91		mg/L	P312207	
	SM 2540 D-97	TSS	2	U	mg/L	P311878	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P311739	
1831864	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P311424	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P311610	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.035		mg N/L	P311671	
	EPA 365.1 Rev. 2.0	Total-P	0.027		mg P/L	P311903	
	SM 5310 B-00	Organic Carbon	49		mg C/L	P311529	
1831866	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P311241	

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: Unnamed Branch at CR121

Collection Date/Time: 09/14/2016 11:30

Field ID: G4NE0135 09132016

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1831863	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P311236	
	EPA 300.0 Rev. 2.1	Chloride	5.4		mg Cl/L	P311765	
		Sulfate	4.6		mg SO4/L	P311768	
	SM 2120 B	Color (true)	84		PCU	P311247	
	SM 2320 B-97	Total Alkalinity	75		mg CaCO3/L	P311735	
	SM 2540 C-97	TDS	127		mg/L	P312207	
	SM 2540 D-97	TSS	4	I	mg/L	P311878	
	SM 4500 F-C-97	Fluoride	0.055	I	mg F/L	P311739	
1831865	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P311424	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.76		mg N/L	P311610	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P311671	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P311903	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P311529	
1831867	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P311241	

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: P311236

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: P311765

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311767

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311768

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311770

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311424

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311610

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311671

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311903

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311241

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: P311247

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P311735

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

Reference Method: SM 2540 C-97
Batch ID: P312207

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P311878

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P311739

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P311529

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: P311765

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	94.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311767

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311768

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311768

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311770

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311424

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.5		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311610

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311671

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311903

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311241

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

Reference Method: SM 2320 B-97
Batch ID: P311735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P311739

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.3		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
 Batch ID: P311529

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P311765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831863	Chloride	94.5		P	90 - 110
1832089	Chloride	95.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P311767

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1832801	Chloride	98.7		P	90 - 110
1832827	Chloride	99.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P311768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831863	Sulfate	95.1		P	90 - 110
1832089	Sulfate	98.5	98.9	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P311770

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1832801	Sulfate	91.3		P	90 - 110
1832827	Sulfate	96.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P311424

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831810	Ammonia-N	99.6	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P311610

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831832	Kjeldahl Nitrogen	105	99.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P311671

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831831	NO2NO3-N	104	104	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831819	Total-P	105	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311241

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831836	O-Phosphate-P	98.2	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P311739

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831827	Fluoride	98.5	98.5	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P311529

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1831753	Organic Carbon	101	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P311236

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831824	Turbidity	2.05	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1832089	Chloride	0.178	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1832801	Chloride	0.622	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1832089	Sulfate	0.413	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P311770

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1832801	Sulfate	2.54	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P311424

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831810	Ammonia-N	4.44	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P311610

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831832	Kjeldahl Nitrogen	6.33	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P311671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831831	NO2NO3-N	0.273	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P311903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831819	Total-P	2.48	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P311241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831836	O-Phosphate-P	1.90	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P311247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831695	Color (true)	2.62	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P311735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831827	Total Alkalinity	0.275	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P312207

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831826	TDS	0.0	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P311739

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831827	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P311529

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1831753	Organic Carbon	0.0	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: A71650
Included Lab Sample IDs: 1831862, 1831863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A71652
Included Lab Sample IDs: 1831866, 1831867

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.5	98.8	P/P	90 - 110
O-Phosphate-P	98.8	98.6	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A71654
Included Lab Sample IDs: 1831862, 1831863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.7	97.9	P/P	85 - 115
Color (true)	97.1	98.9	P/P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A71708
Included Lab Sample IDs: 1831864, 1831865

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A71708

Included Lab Sample IDs: 1831864, 1831865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	95.7	95.2	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A71737

Included Lab Sample IDs: 1831864, 1831865

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A71777

Included Lab Sample IDs: 1831864, 1831865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A71784

Included Lab Sample IDs: 1831864, 1831865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.9	98.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71789

Included Lab Sample IDs: 1831862, 1831863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.3	98.1	P/P	90 - 110
Chloride	97.7	99.3	P/P	90 - 110
Sulfate	96.7	99.2	P/P	90 - 110
Sulfate	99.8	98.6	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A71798

Included Lab Sample IDs: 1831862, 1831863

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

Reference Method: SM 4500 F-C-97

Run ID: A71798

Included Lab Sample IDs: 1831862, 1831863

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A71910
Included Lab Sample IDs: 1831864, 1831865

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	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				2.05	
EPA 300.0 Rev. 2.1	Chloride	94.2	95.0 94.5		0.178	
	Chloride	99.2	98.7 99.7		0.622	
	Sulfate	96.5	98.5 98.9 95.1			0.413
	Sulfate	97.7	91.3 96.5		2.54	
EPA 350.1 Rev. 2.0	Ammonia-N	96.5	99.6 107			4.44
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.9	105 99.0			6.33
EPA 353.2 Rev. 2.0	NO2NO3-N	107	104 104			0.273
EPA 365.1 Rev. 2.0	Total-P	98.4	105 102			2.48
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	98.2 100			1.90
SM 2120 B	Color (true)				2.62	
SM 2320 B-97	Total Alkalinity	102			0.275	
SM 2540 C-97	TDS				0.0	
SM 4500 F-C-97	Fluoride	98.3	98.5 98.5			0.0
SM 5310 B-00	Organic Carbon	101	101 101			0.0

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1831862, 1831863
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1831862, 1831863
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1831862, 1831863
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1831864, 1831865
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1831864, 1831865
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1831864, 1831865
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1831864, 1831865
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1831866, 1831867
SM 2120 B / E31780	True Color measured at 450 nm	1831862, 1831863
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1831862, 1831863
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1831862, 1831863
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1831862, 1831863
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1831862, 1831863

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1831864, 1831865

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	09/15/2016			09/15/2016 15:35	Sima Feizi	1831862, 1831863
EPA 300.0 Rev. 2.1	09/15/2016			09/23/2016	Ping Hua	1831863
	09/15/2016			09/24/2016	Ping Hua	1831862
EPA 350.1 Rev. 2.0	09/15/2016			09/16/2016	Sofia Elnemr	1831864, 1831865
EPA 351.2 Rev. 2.0	09/15/2016	09/21/2016	Adrian Shelby	09/22/2016	Christopher Armour	1831864, 1831865
EPA 353.2 Rev. 2.0	09/15/2016			09/22/2016	Peter D. Kaus	1831864, 1831865
EPA 365.1 Rev. 2.0	09/15/2016	09/27/2016	Vijayalakshmi Reddy	09/29/2016	Lipi Saha	1831864, 1831865
EPA 365.1 Rev. 2.0 dissolved	09/15/2016			09/15/2016 15:54	Julia Storbeck	1831866
	09/15/2016			09/15/2016 16:03	Julia Storbeck	1831867
SM 2120 B	09/15/2016			09/15/2016 18:44	Julie Michelle Frank	1831863
	09/15/2016			09/15/2016 19:20	Julie Michelle Frank	1831862
SM 2320 B-97	09/15/2016			09/23/2016	Dale L. Simmons	1831862, 1831863
SM 2540 C-97	09/15/2016			09/20/2016	Sima Feizi	1831862, 1831863
SM 2540 D-97	09/15/2016			09/20/2016	Sima Feizi	1831862, 1831863
SM 4500 F-C-97	09/15/2016			09/23/2016	Dale L. Simmons	1831862, 1831863
SM 5310 B-00	09/15/2016			09/20/2016	Sofia Elnemr	1831864, 1831865