

Chemical Analysis Report

NE-DIST-2016-07-07-01

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

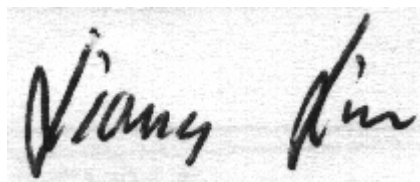
Event Description: **Suwannee 1**
Request ID: **RQ-2016-07-04-11**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 28-JUL-2016 11:12

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical group are included in this report: Nutrients.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: Rose Creek @ Brookwood

Collection Date/Time: 07/06/2016 10:10

Field ID: G1NE0019

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814175	EPA 180.1 Rev. 2.0	Turbidity	2.9		NTU	P307533	
	EPA 300.0 Rev. 2.1	Chloride	5.0	A	mg Cl/L	P308121	
		Sulfate	0.20	U	mg SO4/L	P308120	
	SM 2120 B	Color (true)	290		PCU	P307507	
	SM 2320 B-97	Total Alkalinity	30		mg CaCO3/L	P307894	
	SM 2540 C-97	TDS	90		mg/L	P308243	
	SM 2540 D-97	TSS	5	I	mg/L	P308174	
	SM 4500 F-C-97	Fluoride	0.074	I	mg F/L	P307897	
1814177	EPA 350.1 Rev. 2.0	Ammonia-N	0.062		mg N/L	P307786	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P307705	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.027		mg N/L	P307927	
	EPA 365.1 Rev. 2.0	Total-P	0.31		mg P/L	P307663	
	SM 5310 B-00	Organic Carbon	35		mg C/L	P308048	
1814179	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.22		mg P/L	P307500	

Ref. Method and Comment:

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

Sample Location: Falling Creek @ 135

Collection Date/Time: 07/06/2016 12:10

Field ID: #21010018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1814176	EPA 180.1 Rev. 2.0	Turbidity	2.3		NTU	P307533	
	EPA 300.0 Rev. 2.1	Chloride	7.7		mg Cl/L	P308121	
		Sulfate	2.7		mg SO4/L	P308120	
	SM 2120 B	Color (true)	210		PCU	P307507	
	SM 2320 B-97	Total Alkalinity	20		mg CaCO3/L	P307894	
	SM 2540 C-97	TDS	74		mg/L	P308243	
	SM 2540 D-97	TSS	2	I	mg/L	P308174	
	SM 4500 F-C-97	Fluoride	0.16		mg F/L	P307897	
1814178	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P307786	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.80		mg N/L	P307775	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.069		mg N/L	P307927	
	EPA 365.1 Rev. 2.0	Total-P	0.34		mg P/L	P307663	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P308255	
1814180	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.28		mg P/L	P307500	

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: P307533

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: P308120

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308121

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307786

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307705

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307775

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307927

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307663

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307500

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

Reference Method: SM 2120 B
Batch ID: P307507

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P307894

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

Reference Method: SM 2540 C-97
Batch ID: P308243

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P308174

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P307897

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P308048

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

Reference Method: SM 5310 B-00
Batch ID: P308255

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: P308120

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308121

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307786

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: P307786

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307775

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307927

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: P307663

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307500

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

Reference Method: SM 2320 B-97
Batch ID: P307894

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P307897

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

Reference Method: SM 5310 B-00
Batch ID: P308048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P308255

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	92.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814175	Sulfate	99.1		P	90 - 110
1814176	Sulfate	98.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P308121

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814175	Chloride	98.8		P	90 - 110
1814176	Chloride	98.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P307786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814158	Ammonia-N	101	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814126	Kjeldahl Nitrogen	98.3	93.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814196	Kjeldahl Nitrogen	96.8	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814127	NO2NO3-N	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307663

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814125	Total-P	102	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P307500

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814198	O-Phosphate-P	94.3	95.2	P/P	90 - 110

Reference Method: SM 4500 F-C-97
 Batch ID: P307897

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814395	Fluoride	98.7	100	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P308048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814096	Organic Carbon	100	99.8	P/P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P308255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1814178	Organic Carbon	91.8	88.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P307533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814154	Turbidity	5.67	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P308120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814175	Sulfate	0.456	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P308121

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814175	Chloride	0.861	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P307786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814158	Ammonia-N	0.118	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814126	Kjeldahl Nitrogen	4.73	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P307775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814196	Kjeldahl Nitrogen	1.90	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P307927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814127	NO2NO3-N	0.475	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P307663

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814125	Total-P	1.49	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P307500

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814198	O-Phosphate-P	0.861	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P307507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814286	Color (true)	1.38	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P307894

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814395	Total Alkalinity	0.425	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P308243

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814155	TDS	0.0	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P307897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814395	Fluoride	0.933	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P308048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814096	Organic Carbon	0.172	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P308255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1814178	Organic Carbon	1.79	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: A70438
Included Lab Sample IDs: 1814179, 1814180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.8	97.8	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A70439
Included Lab Sample IDs: 1814175, 1814176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	94.2	93.0	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A70445
Included Lab Sample IDs: 1814175, 1814176

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A70513
Included Lab Sample IDs: 1814177, 1814178

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A70518

Included Lab Sample IDs: 1814177, 1814178

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A70537

Included Lab Sample IDs: 1814177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.9	96.2	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A70540

Included Lab Sample IDs: 1814175, 1814176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.1	99.2	P/P	90 - 110
Chloride	99.2	98.7	P/P	90 - 110
Sulfate	94.6	99.2	P/P	90 - 110
Sulfate	99.2	94.8	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A70542

Included Lab Sample IDs: 1814175, 1814176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	104	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A70542

Included Lab Sample IDs: 1814175, 1814176

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A70551

Included Lab Sample IDs: 1814177, 1814178

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A70552

Included Lab Sample IDs: 1814178

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A70583
Included Lab Sample IDs: 1814177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	97.8	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A70641
Included Lab Sample IDs: 1814178

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.0	95.4	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				5.67	
EPA 300.0 Rev. 2.1	Chloride	98.0	98.8 98.5		0.861	
	Sulfate	97.7	99.1 98.2		0.456	
EPA 350.1 Rev. 2.0	Ammonia-N	99.7	101 102			0.118
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.0	98.3 93.0			4.73
	Kjeldahl Nitrogen	102	96.8 99.3			1.90
EPA 353.2 Rev. 2.0	NO2NO3-N	104	105 106			0.475
EPA 365.1 Rev. 2.0	Total-P	100	102 101			1.49
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	94.3 95.2			0.861
SM 2120 B	Color (true)				1.38	
SM 2320 B-97	Total Alkalinity	103			0.425	
SM 2540 C-97	TDS				0.0	
SM 4500 F-C-97	Fluoride	98.3	98.7 100			0.933
SM 5310 B-00	Organic Carbon	100	100 99.8			0.172
	Organic Carbon	92.4	91.8 88.4			1.79

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1814175, 1814176
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1814175, 1814176
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1814175, 1814176
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1814177, 1814178
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1814177, 1814178
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1814177, 1814178
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1814177, 1814178

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1814179, 1814180
SM 2120 B / E31780	True Color measured at 450 nm	1814175, 1814176
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1814175, 1814176
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1814175, 1814176
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1814175, 1814176
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1814175, 1814176
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1814177, 1814178

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	07/07/2016			07/07/2016 15:16	Sima Feizi	1814175, 1814176
EPA 300.0 Rev. 2.1	07/07/2016			07/16/2016	Ping Hua	1814175, 1814176
EPA 350.1 Rev. 2.0	07/07/2016			07/12/2016	Julie Michelle Frank	1814177, 1814178
EPA 351.2 Rev. 2.0	07/07/2016	07/12/2016	Sofia Elnemr	07/13/2016	Christopher Armour	1814177
	07/07/2016	07/13/2016	Sofia Elnemr	07/14/2016	Christopher Armour	1814178
EPA 353.2 Rev. 2.0	07/07/2016			07/14/2016	Beverly Y. Sanders	1814177, 1814178
EPA 365.1 Rev. 2.0	07/07/2016	07/11/2016	Vijayalakshmi Reddy	07/12/2016	Lipi Saha	1814177, 1814178
EPA 365.1 Rev. 2.0 dissolved	07/07/2016			07/07/2016 16:01	Julia Storbeck	1814179
	07/07/2016			07/07/2016 16:02	Julia Storbeck	1814180
SM 2120 B	07/07/2016			07/07/2016 18:07	Rochelle Y Jackson	1814175
	07/07/2016			07/07/2016 18:08	Rochelle Y Jackson	1814176
SM 2320 B-97	07/07/2016			07/13/2016	Dale L. Simmons	1814175, 1814176
SM 2540 C-97	07/07/2016			07/11/2016	Sima Feizi	1814175, 1814176
SM 2540 D-97	07/07/2016			07/11/2016	Sima Feizi	1814175, 1814176
SM 4500 F-C-97	07/07/2016			07/13/2016	Dale L. Simmons	1814175, 1814176
SM 5310 B-00	07/07/2016			07/15/2016	Sofia Elnemr	1814177
	07/07/2016			07/18/2016	Sofia Elnemr	1814178