

Chemical Analysis Report

NW-DIST-2016-08-03-01

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

Event Description: **WBID 959G 1040A 881 959G 959B**

Request ID: **RQ-2016-08-01-45**

Customer: **NW-DIST**

Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government St
Suite 208A
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 25-AUG-2016 15:44

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: BOGGY CREEK AT SR 97A

Collection Date/Time: 08/02/2016 12:40

Field ID: G5NW0009

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1821228	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P309136	
	EPA 300.0 Rev. 2.1	Chloride	5.3		mg Cl/L	P309730	
		Sulfate	0.67		mg SO4/L	P309733	
	SM 2120 B	Color (true)	26	A	PCU	P309398	
	SM 2320 B-97	Total Alkalinity	2.3	I	mg CaCO3/L	P309335	
	SM 2540 C-97	TDS	21	I	mg/L	P309787	
	SM 2540 D-97	TSS	3	I	mg/L	P309710	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P309342	
1821230	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P309166	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24		mg N/L	P309590	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.78		mg N/L	P309610	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P309569	
	SM 5310 B-00	Organic Carbon	3.5		mg C/L	P310029	
1821232	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P309141	

Sample Location: MOORE CREEK

Collection Date/Time: 08/02/2016 13:50

Field ID: G4NW0318

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1821229	EPA 180.1 Rev. 2.0	Turbidity	26		NTU	P309136	
	EPA 300.0 Rev. 2.1	Chloride	3.8		mg Cl/L	P309730	
		Sulfate	0.44	I	mg SO4/L	P309733	
	SM 2120 B	Color (true)	33	A	PCU	P309401	
	SM 2320 B-97	Total Alkalinity	2.9		mg CaCO3/L	P309335	
	SM 2540 C-97	TDS	25		mg/L	P309787	
	SM 2540 D-97	TSS	67		mg/L	P309710	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P309342	
1821231	EPA 350.1 Rev. 2.0	Ammonia-N	0.028		mg N/L	P309166	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77		mg N/L	P309590	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.97		mg N/L	P309753	
	EPA 365.1 Rev. 2.0	Total-P	0.066		mg P/L	P309569	
	SM 5310 B-00	Organic Carbon	8.0		mg C/L	P310029	
1821233	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P309141	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P309136

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: P309730

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309733

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309166

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309590

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309610

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309753

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309569

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309141

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

Reference Method: SM 2120 B
Batch ID: P309398

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2120 B
Batch ID: P309401

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P309335

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

Reference Method: SM 2540 C-97
Batch ID: P309787

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P309710

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P309342

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P310029

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: P309730

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309733

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	93.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309166

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: P309166

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309590

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309610

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309753

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: P309569

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309141

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

Reference Method: SM 2320 B-97
Batch ID: P309335

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

Reference Method: SM 4500 F-C-97
Batch ID: P309342

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P310029

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	103		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309730

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821193	Chloride	97.8		P	90 - 110
1821228	Chloride	99.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P309733

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821193	Sulfate	96.1		P	90 - 110
1821228	Sulfate	96.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P309166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821230	Ammonia-N	102	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P309590

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821264	Kjeldahl Nitrogen	103	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309610

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1822534	NO2NO3-N	97.6	97.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821287	NO2NO3-N	95.4	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309569

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821204	Total-P	102	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309141

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821232	O-Phosphate-P	98.4	99.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P309342

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821367	Fluoride	98.8	99.5	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
 Batch ID: P310029

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1821634	Organic Carbon	106	108	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P309136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821203	Turbidity	1.02	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P309730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821193	Chloride	0.0451	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P309733

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821193	Sulfate	1.51	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P309166

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821230	Ammonia-N	2.38	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P309590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821264	Kjeldahl Nitrogen	3.89	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P309610

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1822534	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P309753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821287	NO2NO3-N	0.866	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P309569

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821204	Total-P	2.05	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P309141

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821232	O-Phosphate-P	0.965	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P309398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821228	Color (true)	0.0831	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P309401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821229	Color (true)	0.845	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P309335

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821367	Total Alkalinity	0.161	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P309787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821203	TDS	6.10	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P309710

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821203	TSS	5.06	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P309342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821367	Fluoride	0.467	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P310029

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1821634	Organic Carbon	1.24	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: SM 2120 B
Run ID: A70928
Included Lab Sample IDs: 1821228, 1821229

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.9	97.9	P/P	85 - 115
Color (true)	98.5	98.8	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A70929
Included Lab Sample IDs: 1821228, 1821229

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A70930
Included Lab Sample IDs: 1821232, 1821233

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	99.4	P/P	90 - 110
O-Phosphate-P	99.7	99.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A70937
Included Lab Sample IDs: 1821230, 1821231

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A70986

Included Lab Sample IDs: 1821228, 1821229

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	104	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A70986

Included Lab Sample IDs: 1821228, 1821229

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A71077

Included Lab Sample IDs: 1821230

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A71078

Included Lab Sample IDs: 1821228, 1821229

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	98.6	P/P	90 - 110
Chloride	98.6	99.8	P/P	90 - 110
Sulfate	95.5	96.6	P/P	90 - 110
Sulfate	99.4	95.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A71098

Included Lab Sample IDs: 1821230, 1821231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	97.3	P/P	90 - 110
Kjeldahl Nitrogen	97.3	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A71113

Included Lab Sample IDs: 1821231

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A71125

Included Lab Sample IDs: 1821231

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A71127

Included Lab Sample IDs: 1821230

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	96.5	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A71232

Included Lab Sample IDs: 1821230, 1821231

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	103	105	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				1.02	
EPA 300.0 Rev. 2.1	Chloride	98.1	97.8 99.0		0.0451	
	Sulfate	93.8	96.1 96.1		1.51	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	102 105			2.38
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	103 98.4			3.89
EPA 353.2 Rev. 2.0	NO2NO3-N	102	97.6 97.6			0.0
	NO2NO3-N	104	95.4 96.4			0.866
EPA 365.1 Rev. 2.0	Total-P	101	102 99.9			2.05
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	98.4 99.4			0.965
SM 2120 B	Color (true)				0.0831	
	Color (true)				0.845	
SM 2320 B-97	Total Alkalinity	103			0.161	
SM 2540 C-97	TDS				6.10	
SM 2540 D-97	TSS				5.06	
SM 4500 F-C-97	Fluoride	99.0	98.8 99.5			0.467
SM 5310 B-00	Organic Carbon	103	106 108			1.24

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1821228, 1821229
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1821228, 1821229
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1821228, 1821229
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1821230, 1821231
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1821230, 1821231
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1821230, 1821231

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1821230, 1821231
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1821232, 1821233
SM 2120 B / E31780	True Color measured at 450 nm	1821228, 1821229
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1821228, 1821229
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1821228, 1821229
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1821228, 1821229
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1821228, 1821229
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1821230, 1821231

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	08/03/2016			08/03/2016 15:05	Sima Feizi	1821228, 1821229
EPA 300.0 Rev. 2.1	08/03/2016			08/11/2016	Elisa J Lutz	1821228, 1821229
EPA 350.1 Rev. 2.0	08/03/2016			08/03/2016	Julie Michelle Frank	1821230, 1821231
EPA 351.2 Rev. 2.0	08/03/2016	08/11/2016	Martin Acosta	08/12/2016	Christopher Armour	1821230, 1821231
EPA 353.2 Rev. 2.0	08/03/2016			08/11/2016	Beverly Y. Sanders	1821230
	08/03/2016			08/15/2016	Beverly Y. Sanders	1821231
EPA 365.1 Rev. 2.0	08/03/2016	08/11/2016	Vijayalakshmi Reddy	08/12/2016	Lipi Saha	1821231
	08/03/2016	08/11/2016	Vijayalakshmi Reddy	08/15/2016	Lipi Saha	1821230
EPA 365.1 Rev. 2.0 dissolved	08/03/2016			08/03/2016 15:13	Julia Storbeck	1821232
	08/03/2016			08/03/2016 15:40	Julia Storbeck	1821233
SM 2120 B	08/03/2016			08/03/2016 15:02	Rochelle Y Jackson	1821228
	08/03/2016			08/03/2016 15:29	Rochelle Y Jackson	1821229
SM 2320 B-97	08/03/2016			08/06/2016	Dale L. Simmons	1821228, 1821229
SM 2540 C-97	08/03/2016			08/05/2016	Yijie Li	1821228, 1821229
SM 2540 D-97	08/03/2016			08/05/2016	Yijie Li	1821228, 1821229
SM 4500 F-C-97	08/03/2016			08/06/2016	Dale L. Simmons	1821228, 1821229
SM 5310 B-00	08/03/2016			08/18/2016	Sofia Elnemr	1821230, 1821231