Chemical Analysis Report

NE-DIST-2016-04-20-01

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

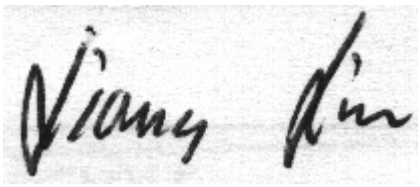
Event Description: **Suw. SCI-Olustee**
Request ID: **RQ-2016-04-11-12**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

For additional information please contact
Timothy W. Fitzpatrick
Liang-Tsair Lin, Ph.D.
Colin Wright, Ph.D.
Thekkekalathil Chandrasekhar, PhD, QA Officer
Phone (850) 245-8085

Certified by: Liang Lin, Environmental Administrator

Date Certified: 13-MAY-2016 18:03



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: Rhuda Br @ 196 Ave **Collection Date/Time: 04/19/2016 10:40**

Field ID: 21030146 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1790669	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P302623	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P303123	
		Sulfate	3.5		mg SO4/L	P303125	
	SM 2120 B	Color (true)	200		PCU	P302593	
	SM 2320 B-97	Total Alkalinity	8.4		mg CaCO3/L	P302991	
	SM 2540 C-97	TDS	96		mg/L	P303352	
	SM 2540 D-97	TSS	2	U	mg/L	P303212	
	SM 4500 F-C-97	Fluoride	0.19		mg F/L	P302994	
1790671	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P303368	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P303456	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.045		mg N/L	P303001	
	EPA 365.1 Rev. 2.0	Total-P	0.48		mg P/L	P303670	
	SM 5310 B-00	Organic Carbon	20		mg C/L	P303343	
1790673	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.43		mg P/L	P302614	

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: Rocky Cr @ 156 Ave **Collection Date/Time: 04/19/2016 13:00**

Field ID: Rocky Cr @ 156 Ave Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1790670	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P302623	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P303123	
		Sulfate	1.7		mg SO4/L	P303125	
	SM 2120 B	Color (true)	370		PCU	P302593	
	SM 2320 B-97	Total Alkalinity	22		mg CaCO3/L	P302991	
	SM 2540 C-97	TDS	134		mg/L	P303352	
	SM 2540 D-97	TSS	2	I	mg/L	P303212	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P302994	
1790672	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P303368	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P303456	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.028		mg N/L	P303001	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P303169	
	SM 5310 B-00	Organic Carbon	36		mg C/L	P303343	
1790674	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.15		mg P/L	P302614	

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: P302623

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: P303123

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303125

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303368

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303456

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303001

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303169

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303670

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302614

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

Reference Method: SM 2120 B
Batch ID: P302593

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P302991

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

Reference Method: SM 2540 C-97
Batch ID: P303352

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P303212

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P302994

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P303343

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: P303123

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	96.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303125

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303368

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303456

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303456

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303001

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: P303169

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303670

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302614

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

Reference Method: SM 2320 B-97
Batch ID: P302991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.6		P	95 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P302994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.2		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P303343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303123

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303123

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790694	Chloride	93.4		P	90 - 110
1790709	Chloride	95.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790694	Sulfate	93.7		P	90 - 110
1790709	Sulfate	92.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790649	Ammonia-N	99.0	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303456

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790567	Kjeldahl Nitrogen	85.8	90.5	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303001

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790649	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790672	Total-P	98.3	96.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303670

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790658	Total-P	101	95.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302614

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790659	O-Phosphate-P	94.5	94.9	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P302994

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790694	Fluoride	100	100	P/P	91 - 105

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P303343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1790568	Organic Carbon	96.0	96.8	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P302623

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790657	Turbidity	0.570	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303123

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790694	Chloride	0.161	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790694	Sulfate	0.597	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790649	Ammonia-N	1.33	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303456

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790567	Kjeldahl Nitrogen	4.23	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790649	NO2NO3-N	1.47	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790672	Total-P	0.942	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303670

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790658	Total-P	4.99	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302614

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790659	O-Phosphate-P	0.422	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P302593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790663	Color (true)	1.66	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P302991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790694	Total Alkalinity	0.560	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P303352

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790663	TDS	6.20	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P302994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790694	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P303343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1790568	Organic Carbon	0.829	Spike	P	0 - 20

Quality Assurance Report
Precision

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Calibration Verification

Reference Method: SM 2120 B
Run ID: A68985
Included Lab Sample IDs: 1790669, 1790670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	98.5	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A68990
Included Lab Sample IDs: 1790673, 1790674

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.3	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A68992
Included Lab Sample IDs: 1790669, 1790670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A69105
Included Lab Sample IDs: 1790671, 1790672

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

Reference Method: SM 2320 B-97
Run ID: A69110
Included Lab Sample IDs: 1790669, 1790670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.4	101	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A69110
Included Lab Sample IDs: 1790669, 1790670

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A69144
Included Lab Sample IDs: 1790669, 1790670

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A69144
Included Lab Sample IDs: 1790669, 1790670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	99.1	99.3	P/P	90 - 110
Sulfate	99.3	97.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A69158
Included Lab Sample IDs: 1790672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A69207
Included Lab Sample IDs: 1790671, 1790672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	98.7	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A69209
Included Lab Sample IDs: 1790671, 1790672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A69327
Included Lab Sample IDs: 1790671, 1790672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.4	96.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A69346
Included Lab Sample IDs: 1790671

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	99.1	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					0.570	
EPA 300.0 Rev. 2.1	Chloride	96.2	93.4	95.6		0.161	
	Sulfate	95.7	93.7	92.8		0.597	

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 350.1 Rev. 2.0	Ammonia-N	99.6	99.0	101			1.33
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	85.8	90.5			4.23
EPA 353.2 Rev. 2.0	NO2NO3-N	104	101	102			1.47
EPA 365.1 Rev. 2.0	Total-P	100	98.3	96.9			0.942
	Total-P	97.5	101	95.7			4.99
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.4	94.5	94.9			0.422
SM 2120 B	Color (true)					1.66	
SM 2320 B-97	Total Alkalinity	99.6				0.560	
SM 2540 C-97	TDS					6.20	
SM 4500 F-C-97	Fluoride	97.2	100	100			0.0
SM 5310 B-00	Organic Carbon	96.4	96.0	96.8			0.829

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1790669, 1790670
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1790669, 1790670
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1790669, 1790670
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1790671, 1790672
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1790671, 1790672
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1790671, 1790672
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1790671, 1790672
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1790673, 1790674
SM 2120 B / E31780	True Color measured at 450 nm	1790669, 1790670
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1790669, 1790670
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1790669, 1790670
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1790669, 1790670
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1790669, 1790670
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1790671, 1790672

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	04/20/2016			04/20/2016 14:20	Sima Feizi	1790669, 1790670
EPA 300.0 Rev. 2.1	04/20/2016			04/27/2016	Elisa J Lutz	1790669, 1790670
EPA 350.1 Rev. 2.0	04/20/2016			05/02/2016	Diana M. Turner	1790671, 1790672
EPA 351.2 Rev. 2.0	04/20/2016	05/04/2016	Sofia Elnemr	05/06/2016	Christopher Armour	1790671, 1790672
EPA 353.2 Rev. 2.0	04/20/2016			04/26/2016	Peter D. Kaus	1790671, 1790672
EPA 365.1 Rev. 2.0	04/20/2016	04/28/2016	Lipi Saha	04/28/2016	Lipi Saha	1790672
	04/20/2016	05/06/2016	Vijayalakshmi Reddy	05/09/2016	Lipi Saha	1790671
EPA 365.1 Rev. 2.0 dissolved	04/20/2016			04/20/2016 15:34	Ping Hua	1790674
	04/20/2016			04/20/2016 15:35	Ping Hua	1790673
SM 2120 B	04/20/2016			04/20/2016 13:54	Rochelle Y Jackson	1790669
	04/20/2016			04/20/2016 13:55	Rochelle Y Jackson	1790670
SM 2320 B-97	04/20/2016			04/26/2016	Dale L. Simmons	1790669, 1790670
SM 2540 C-97	04/20/2016			04/22/2016	Yijie Li	1790669, 1790670
SM 2540 D-97	04/20/2016			04/22/2016	Yijie Li	1790669, 1790670
SM 4500 F-C-97	04/20/2016			04/26/2016	Dale L. Simmons	1790669, 1790670
SM 5310 B-00	04/20/2016			04/29/2016	Sofia Elnemr	1790671, 1790672