Chemical Analysis Report

CEN-DIST-2017-04-27-02

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

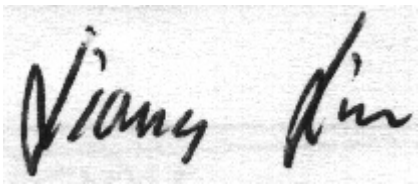
Event Description: **Spring Garden Lk / Deep Crk**
Request ID: **RQ-2017-04-24-61**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Mike Linger

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

Certified by: Liang Lin, Environmental Administrator

Date Certified: 24-MAY-2017 10:25



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: DEEP CREEK @ **Collection Date/Time: 04/26/2017 10:58**

Field ID: G2CE0115 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1893464	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P324191	
	EPA 300.0 Rev. 2.1	Chloride	190		mg Cl/L	P324673	
		Sulfate	34		mg SO4/L	P324669	
	SM 2120 B	Color (true)	35	A	PCU	P324144	
	SM 2320 B-97	Total Alkalinity	110		mg CaCO3/L	P325141	
	SM 2540 C-97	TDS	463	A	mg/L	P325036	
	SM 2540 D-97	TSS	4	IA	mg/L	P324591	
	SM 4500 F-C-97	Fluoride	0.10		mg F/L	P324831	
1893466	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P324258	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P324285	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.024		mg N/L	P324388	
	EPA 365.1 Rev. 2.0	Total-P	0.068		mg P/L	P324323	
	SM 5310 B-00	Organic Carbon	6.4		mg C/L	P324282	
1893468	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016		mg P/L	P324183	

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: SPRING GARDEN LAKE @ **Collection Date/Time: 04/26/2017 11:32**

Field ID: G2CE0117 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1893465	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P324191	
	EPA 300.0 Rev. 2.1	Chloride	330		mg Cl/L	P324673	
		Sulfate	53		mg SO4/L	P324669	
	SM 2120 B	Color (true)	19		PCU	P324144	
	SM 2320 B-97	Total Alkalinity	99		mg CaCO3/L	P325141	
	SM 2540 C-97	TDS	723		mg/L	P325036	
	SM 2540 D-97	TSS	5	I	mg/L	P324591	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P324831	
1893467	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P324258	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.80		mg N/L	P324285	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P324388	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P324323	
	SM 5310 B-00	Organic Carbon	8.5		mg C/L	P324282	
1893469	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P324185	

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: P324191

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: P324669

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324673

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324258

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324285

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324388

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324323

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324183

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324185

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

Reference Method: SM 2120 B
Batch ID: P324144

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P325141

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

Reference Method: SM 2540 C-97
Batch ID: P325036

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P324591

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P324831

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P324282

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: P324669

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324673

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324258

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324285

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: P324285

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324388

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324323

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324183

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324185

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.5		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P325141

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

Reference Method: SM 4500 F-C-97
Batch ID: P324831

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P324282

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	102		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324669

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: P324669

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1892987	Sulfate	98.8		P	90 - 110
1892988	Sulfate	98.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324673

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1892987	Chloride	97.3		P	90 - 110
1892988	Chloride	95.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1892992	Ammonia-N	109	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1893467	Kjeldahl Nitrogen	102	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324388

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1893466	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1893547	Total-P	101	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1893431	O-Phosphate-P	96.9	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324185

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1893582	O-Phosphate-P	99.4	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P324831

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1893545	Fluoride	96.8	96.1	P/P	91 - 105

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P324282

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1893288	Organic Carbon	103	103	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P324191

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893425	Turbidity	1.53	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324669

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1892987	Sulfate	0.593	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324673

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1892987	Chloride	0.0770	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1892992	Ammonia-N	0.925	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324285

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893467	Kjeldahl Nitrogen	1.45	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324388

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893466	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893547	Total-P	2.89	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893431	O-Phosphate-P	0.658	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324185

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893582	O-Phosphate-P	0.901	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P324144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893464	Color (true)	1.21	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P325141

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893545	Total Alkalinity	0.451	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P325036

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893464	TDS	0.864	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P324831

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893545	Fluoride	0.477	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P324282

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1893288	Organic Carbon	0.146	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: A76036
Included Lab Sample IDs: 1893464, 1893465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.7	94.3	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A76048
Included Lab Sample IDs: 1893468, 1893469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.2	98.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A76055
Included Lab Sample IDs: 1893464, 1893465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A76071
Included Lab Sample IDs: 1893466, 1893467

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

Reference Method: SM 5310 B-00
Run ID: A76081
Included Lab Sample IDs: 1893466, 1893467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.7	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A76107
Included Lab Sample IDs: 1893466

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A76117
Included Lab Sample IDs: 1893466, 1893467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A76133
Included Lab Sample IDs: 1893466, 1893467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	103	P/P	90 - 110
Kjeldahl Nitrogen	98.6	98.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A76148
Included Lab Sample IDs: 1893464, 1893465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	106	105	P/P	90 - 110
Sulfate	99.3	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A76173
Included Lab Sample IDs: 1893467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	97.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A76242
Included Lab Sample IDs: 1893464, 1893465

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

Reference Method: SM 2320 B-97
Run ID: A76363
Included Lab Sample IDs: 1893464, 1893465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	103	P/P	90 - 110
Total Alkalinity	103	100	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					1.53	
EPA 300.0 Rev. 2.1	Chloride	101	97.3	95.5		0.0770	
	Sulfate	99.8	98.8	98.4		0.593	
EPA 350.1 Rev. 2.0	Ammonia-N	101	109	108			0.925
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.6	102	104			1.45
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100	100			0.0
EPA 365.1 Rev. 2.0	Total-P	99.6	101	97.0			2.89

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.2	96.9	98.0			0.658
	O-Phosphate-P	99.5	99.4	100			0.901
SM 2120 B	Color (true)					1.21	
SM 2320 B-97	Total Alkalinity	103				0.451	
SM 2540 C-97	TDS					0.864	
SM 4500 F-C-97	Fluoride	97.0	96.8	96.1			0.477
SM 5310 B-00	Organic Carbon	102	103	103			0.146

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1893464, 1893465
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1893464, 1893465
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1893464, 1893465
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1893466, 1893467
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1893466, 1893467
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1893466, 1893467
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1893466, 1893467
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1893468, 1893469
SM 2120 B / E31780	True Color measured at 450 nm	1893464, 1893465
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1893464, 1893465
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1893464, 1893465
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1893464, 1893465
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1893464, 1893465
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1893466, 1893467

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	04/27/2017			04/27/2017 16:59	Sima Feizi	1893464, 1893465
EPA 300.0 Rev. 2.1	04/27/2017			05/04/2017	Ping Hua	1893464, 1893465
EPA 350.1 Rev. 2.0	04/27/2017			04/28/2017	Julie Michelle Frank	1893466, 1893467
EPA 351.2 Rev. 2.0	04/27/2017	05/01/2017	Adrian Shelby	05/02/2017	Joseph Suarez	1893466, 1893467
EPA 353.2 Rev. 2.0	04/27/2017			05/02/2017	Beverly Y. Sanders	1893466, 1893467
EPA 365.1 Rev. 2.0	04/27/2017	05/01/2017	Vijayalakshmi Reddy	05/02/2017	Christopher Armour	1893466
	04/27/2017	05/01/2017	Vijayalakshmi Reddy	05/02/2017	Lipi Saha	1893467
EPA 365.1 Rev. 2.0 dissolved	04/27/2017			04/27/2017 16:25	Anthony C. Onicha	1893468, 1893469
SM 2120 B	04/27/2017			04/27/2017 16:38	Julia Storbeck	1893464
	04/27/2017			04/27/2017 16:44	Julia Storbeck	1893465
SM 2320 B-97	04/27/2017			05/09/2017	Dale L. Simmons	1893464, 1893465
SM 2540 C-97	04/27/2017			05/01/2017	Sima Feizi	1893464, 1893465
SM 2540 D-97	04/27/2017			05/01/2017	Sima Feizi	1893464, 1893465
SM 4500 F-C-97	04/27/2017			05/06/2017	Dale L. Simmons	1893464, 1893465
SM 5310 B-00	04/27/2017			04/28/2017	Julie Michelle Frank	1893466, 1893467