Chemical Analysis Report

CEN-DIST-2017-05-09-01

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

Event Description: **Noname / Silver (SemCo)**
Request ID: **RQ-2017-05-08-71**
Customer: **CEN-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 02-JUN-2017 14:37

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: Silver Lake @ Center **Collection Date/Time: 05/08/2017 11:35**

Field ID: G1CE0007 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1897279	EPA 180.1 Rev. 2.0	Turbidity	4.0	A	NTU	P324933	
	EPA 300.0 Rev. 2.1	Chloride	160		mg Cl/L	P325190	
		Sulfate	38		mg SO4/L	P325187	
	SM 2120 B	Color (true)	15		PCU	P324903	
	SM 2320 B-97	Total Alkalinity	121		mg CaCO3/L	P325466	
	SM 2540 C-97	TDS	533		mg/L	P325342	
	SM 2540 D-97	TSS	6	I	mg/L	P325326	
	SM 4500 F-C-97	Fluoride	0.61		mg F/L	P325468	
1897281	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P325047	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.8		mg N/L	P325087	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P325001	
	EPA 365.1 Rev. 2.0	Total-P	0.027		mg P/L	P324988	
	SM 5310 B-00	Organic Carbon	35		mg C/L	P325232	
1897283	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P324940	

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: Noname Lake @ Center **Collection Date/Time: 05/08/2017 14:30**

Field ID: G2CE0068 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1897280	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P324933	
	EPA 300.0 Rev. 2.1	Chloride	18	A	mg Cl/L	P325825	
		Sulfate	10	A	mg SO4/L	P325829	
	SM 2120 B	Color (true)	26		PCU	P324903	
	SM 2320 B-97	Total Alkalinity	13		mg CaCO3/L	P325466	
	SM 2540 C-97	TDS	77		mg/L	P325342	
	SM 2540 D-97	TSS	5	I	mg/L	P325326	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P325468	
1897282	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P325047	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P325087	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P325001	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P324988	
	SM 5310 B-00	Organic Carbon	9.9		mg C/L	P325232	
1897284	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P324940	

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: P324933

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: P325187

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325190

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325825

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325829

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P325047

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P325087

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P325001

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324988

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324940

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2120 B
Batch ID: P324903

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P325466

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

Reference Method: SM 2540 C-97
Batch ID: P325342

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P325326

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P325468

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P325232

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: P325187

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325190

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325825

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325825

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325829

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P325047

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P325087

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P325001

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	108		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324988

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324940

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

Reference Method: SM 2320 B-97
Batch ID: P325466

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

Reference Method: SM 4500 F-C-97
Batch ID: P325468

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.0		P	92 - 103

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P325232

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897150	Sulfate	93.8		P	90 - 110
1897207	Sulfate	95.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897150	Chloride	98.1		P	90 - 110
1897207	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325825

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897280	Chloride	97.5		P	90 - 110
1898026	Chloride	98.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897280	Sulfate	93.1		P	90 - 110
1898026	Sulfate	94.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P325047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897116	Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P325087

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897282	Kjeldahl Nitrogen	92.4	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P325001

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897213	NO2NO3-N	105	106	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897212	Total-P	102	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324940

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897216	O-Phosphate-P	99.8	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P325468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897159	Fluoride	97.9	99.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P325232

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1897211	Organic Carbon	91.9	92.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P324933

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897279	Turbidity	2.47	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897207	Sulfate	0.420	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897207	Chloride	0.0469	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897280	Chloride	0.385	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P325829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897280	Sulfate	1.38	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P325047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897116	Ammonia-N	0.717	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P325087

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897282	Kjeldahl Nitrogen	3.07	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P325001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897213	NO2NO3-N	0.733	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897212	Total-P	3.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324940

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897216	O-Phosphate-P	0.200	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P324903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897289	Color (true)	2.27	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P325466

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897159	Total Alkalinity	0.405	Sample	P	0 - 4.8

Quality Assurance Report
Precision

Reference Method: SM 2540 C-97
Batch ID: P325342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897159	TDS	4.44	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P325468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897159	Fluoride	1.02	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P325232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1897211	Organic Carbon	0.694	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 300.0 Rev. 2.1
Run ID: A76269
Included Lab Sample IDs: 1897279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	103	P/P	90 - 110
Sulfate	97.3	101	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A76295
Included Lab Sample IDs: 1897279, 1897280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.2	101	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A76301
Included Lab Sample IDs: 1897279, 1897280

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A76302
Included Lab Sample IDs: 1897283, 1897284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.9	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A76314
Included Lab Sample IDs: 1897281, 1897282

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A76336
Included Lab Sample IDs: 1897281, 1897282

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A76356
Included Lab Sample IDs: 1897281, 1897282

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	98.0	P/P	90 - 110
Total-P	99.2	98.5	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A76393
Included Lab Sample IDs: 1897281, 1897282

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.6	92.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A76436
Included Lab Sample IDs: 1897281, 1897282

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.6	101	P/P	90 - 110
Kjeldahl Nitrogen	99.9	97.6	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A76498
Included Lab Sample IDs: 1897279, 1897280

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

Reference Method: SM 4500 F-C-97
Run ID: A76498
Included Lab Sample IDs: 1897279, 1897280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	97.1	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A76672
Included Lab Sample IDs: 1897280

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A76672
Included Lab Sample IDs: 1897280

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	102	P/P	90 - 110
Sulfate	106	98.3	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					2.47	
EPA 300.0 Rev. 2.1	Chloride	105	100	98.1		0.0469	
	Chloride	101	97.5	98.8		0.385	
	Sulfate	97.0	95.3	93.8		0.420	
	Sulfate	96.6	93.1	94.6		1.38	
EPA 350.1 Rev. 2.0	Ammonia-N	102	103	102			0.717
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.3	92.4	97.2			3.07
EPA 353.2 Rev. 2.0	NO2NO3-N	108	105	106			0.733
EPA 365.1 Rev. 2.0	Total-P	98.4	102	98.8			3.31
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	99.8	100			0.200
SM 2120 B	Color (true)					2.27	
SM 2320 B-97	Total Alkalinity	103				0.405	
SM 2540 C-97	TDS					4.44	
SM 4500 F-C-97	Fluoride	94.0	97.9	99.1			1.02
SM 5310 B-00	Organic Carbon	96.2	91.9	92.6			0.694

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1897279, 1897280
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1897279, 1897280
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1897279, 1897280
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1897281, 1897282
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1897281, 1897282
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1897281, 1897282
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1897281, 1897282
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1897283, 1897284
SM 2120 B / E31780	True Color measured at 450 nm	1897279, 1897280
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1897279, 1897280
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1897279, 1897280
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1897279, 1897280

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1897279, 1897280
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1897281, 1897282

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	05/09/2017			05/09/2017 15:52	Sima Feizi	1897279, 1897280
EPA 300.0 Rev. 2.1	05/09/2017			05/12/2017	Ping Hua	1897279
	05/09/2017			05/24/2017	Ping Hua	1897280
EPA 350.1 Rev. 2.0	05/09/2017			05/10/2017	Julie Michelle Frank	1897281, 1897282
EPA 351.2 Rev. 2.0	05/09/2017	05/11/2017	Adrian Shelby	05/15/2017	Joseph Suarez	1897281, 1897282
EPA 353.2 Rev. 2.0	05/09/2017			05/10/2017	Beverly Y. Sanders	1897281, 1897282
EPA 365.1 Rev. 2.0	05/09/2017	05/10/2017	Vijayalakshmi Reddy	05/11/2017	Lipi Saha	1897281, 1897282
EPA 365.1 Rev. 2.0 dissolved	05/09/2017			05/09/2017 15:00	Anthony C. Onicha	1897283
	05/09/2017			05/09/2017 15:01	Anthony C. Onicha	1897284
SM 2120 B	05/09/2017			05/09/2017 14:45	Julia Storbeck	1897279
	05/09/2017			05/09/2017 14:46	Julia Storbeck	1897280
SM 2320 B-97	05/09/2017			05/17/2017	Dale L. Simmons	1897279, 1897280
SM 2540 C-97	05/09/2017			05/10/2017	Yijie Li	1897279, 1897280
SM 2540 D-97	05/09/2017			05/10/2017	Yijie Li	1897279, 1897280
SM 4500 F-C-97	05/09/2017			05/17/2017	Dale L. Simmons	1897279, 1897280
SM 5310 B-00	05/09/2017			05/12/2017	Christopher Armour	1897281, 1897282