Chemical Analysis Report

CEN-DIST-2017-04-25-02

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

Event Description: **Jackson / Amoret**
Request ID: **RQ-2017-04-24-56**
Customer: **CEN-DIST**
Project ID: **SMP**

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FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
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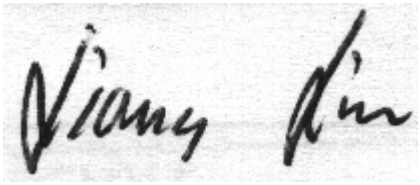
Date Certified: 19-MAY-2017 13:13



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: Lake Amoret 85m SW of Center **Collection Date/Time: 04/24/2017 13:20**

Field ID: G4CE0072 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1891906	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P323976	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P324309	
		Sulfate	21		mg SO4/L	P324311	
	SM 2120 B	Color (true)	25		PCU	P324079	
	SM 2320 B-97	Total Alkalinity	22		mg CaCO3/L	P324651	
	SM 2540 C-97	TDS	99	A	mg/L	P324360	
	SM 2540 D-97	TSS	4	IA	mg/L	P324366	
	SM 4500 F-C-97	Fluoride	0.042	I	mg F/L	P324653	
1891908	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P324249	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.97		mg N/L	P323988	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P324127	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P324007	
	SM 5310 B-00	Organic Carbon	8.1		mg C/L	P323997	
1891910	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P323980	

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: Jackson Canal 1100m Downstream of Control Structure **Collection Date/Time: 04/24/2017 11:50**

Field ID: G4CE0060 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1891907	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P323976	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P324309	
		Sulfate	0.40	I	mg SO4/L	P324311	
	SM 2120 B	Color (true)	85	A	PCU	P324079	
	SM 2320 B-97	Total Alkalinity	25		mg CaCO3/L	P324652	
	SM 2540 C-97	TDS	103		mg/L	P324360	
	SM 2540 D-97	TSS	4	I	mg/L	P324366	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P324654	RPD
1891909	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P324249	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P323988	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P324127	
	EPA 365.1 Rev. 2.0	Total-P	0.064		mg P/L	P324056	
	SM 5310 B-00	Organic Carbon	16		mg C/L	P323997	
1891911	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.019		mg P/L	P323980	

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: P323976

Component	Result	Code	Units

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P323976

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324309

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324311

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324249

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P323988

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324127

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324007

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324056

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P323980

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: P324079

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P324651

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

Reference Method: SM 2320 B-97
Batch ID: P324652

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

Reference Method: SM 2540 C-97
Batch ID: P324360

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P324366

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P324653

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P324654

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P323997

Component	Result	Code	Units
Organic Carbon	0.5	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324309

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: P324309

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324311

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324249

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P323988

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324127

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: P324007

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324056

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P323980

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.2		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P324651

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P324652

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P324653

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.3		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P324654

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

Reference Method: SM 5310 B-00
Batch ID: P323997

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324309

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891234	Chloride	101		P	90 - 110
1891365	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324311

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891234	Sulfate	99.0		P	90 - 110
1891365	Sulfate	94.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324249

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891886	Ammonia-N	96.6	94.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P323988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891925	Kjeldahl Nitrogen	94.9	101	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324127

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891886	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324007

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891908	Total-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324056

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891924	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P323980

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891865	O-Phosphate-P	97.3	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P324653

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1892103	Fluoride	98.9	96.1	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P324654

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891951	Fluoride	97.6	101	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P323997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1891862	Organic Carbon	101	99.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P323976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891885	Turbidity	4.31	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891234	Chloride	0.0793	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324311

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891234	Sulfate	0.582	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324249

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891886	Ammonia-N	1.73	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P323988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891925	Kjeldahl Nitrogen	5.16	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324127

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891886	NO2NO3-N	0.962	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891908	Total-P	0.640	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891924	Total-P	0.674	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P323980

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891865	O-Phosphate-P	1.11	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B
Batch ID: P324079

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891907	Color (true)	0.265	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P324651

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1892103	Total Alkalinity	1.73	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P324652

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891951	Total Alkalinity	0.195	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P324360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891906	TDS	8.08	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P324653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1892103	Fluoride	2.56	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P324654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891951	Fluoride	3.01	Spike	F	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P323997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1891862	Organic Carbon	1.59	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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A75986
Included Lab Sample IDs: 1891910, 1891911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A75987
Included Lab Sample IDs: 1891906, 1891907

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

Reference Method: SM 5310 B-00
Run ID: A75992
Included Lab Sample IDs: 1891908, 1891909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	96.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A75999
Included Lab Sample IDs: 1891906, 1891907

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	102	P/P	90 - 110
Sulfate	94.0	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A76029
Included Lab Sample IDs: 1891908, 1891909

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A76033
Included Lab Sample IDs: 1891909

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A76038
Included Lab Sample IDs: 1891908, 1891909

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A76052
Included Lab Sample IDs: 1891908

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A76070
Included Lab Sample IDs: 1891908, 1891909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	92.1	94.7	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A76196
Included Lab Sample IDs: 1891906, 1891907

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A76196
Included Lab Sample IDs: 1891906, 1891907

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	99.0	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					4.31	
EPA 300.0 Rev. 2.1	Chloride	102	101	102		0.0793	
	Sulfate	98.9	99.0	94.1		0.582	
EPA 350.1 Rev. 2.0	Ammonia-N	95.6	96.6	94.8			1.73
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	98.0	94.9	101			5.16
EPA 353.2 Rev. 2.0	NO2NO3-N	102	104	104			0.962
EPA 365.1 Rev. 2.0	Total-P	98.8	101	102			0.640
	Total-P	102	103	104			0.674
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.2	97.3	99.0			1.11
SM 2120 B	Color (true)					0.265	
SM 2320 B-97	Total Alkalinity	102				1.73	
	Total Alkalinity	102				0.195	
SM 2540 C-97	TDS					8.08	
SM 4500 F-C-97	Fluoride	95.3	98.9	96.1			2.56
	Fluoride	97.2	97.6	101			3.01
SM 5310 B-00	Organic Carbon	97.6	101	99.6			1.59

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1891906, 1891907
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1891906, 1891907

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1891906, 1891907
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1891908, 1891909
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1891908, 1891909
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1891908, 1891909
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1891908, 1891909
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1891910, 1891911
SM 2120 B / E31780	True Color measured at 450 nm	1891906, 1891907
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1891906, 1891907
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1891906, 1891907
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1891906, 1891907
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1891906, 1891907
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1891908, 1891909

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	04/25/2017			04/25/2017 15:41	Sima Feizi	1891906, 1891907
EPA 300.0 Rev. 2.1	04/25/2017			04/29/2017	Ping Hua	1891906, 1891907
EPA 350.1 Rev. 2.0	04/25/2017			04/27/2017	Julie Michelle Frank	1891908, 1891909
EPA 351.2 Rev. 2.0	04/25/2017	04/26/2017	Adrian Shelby	04/27/2017	Joseph Suarez	1891908, 1891909
EPA 353.2 Rev. 2.0	04/25/2017			04/27/2017	Beverly Y. Sanders	1891908, 1891909
EPA 365.1 Rev. 2.0	04/25/2017	04/26/2017	Vijayalakshmi Reddy	04/27/2017	Lipi Saha	1891908, 1891909
EPA 365.1 Rev. 2.0 dissolved	04/25/2017			04/25/2017 14:03	Lipi Saha	1891910, 1891911
SM 2120 B	04/25/2017			04/25/2017 16:04	Blanca Fach	1891906
	04/25/2017			04/25/2017 16:05	Blanca Fach	1891907
SM 2320 B-97	04/25/2017			05/03/2017	Dale L. Simmons	1891906
	04/25/2017			05/04/2017	Dale L. Simmons	1891907
SM 2540 C-97	04/25/2017			04/26/2017	Yijie Li	1891906, 1891907
SM 2540 D-97	04/25/2017			04/26/2017	Yijie Li	1891906, 1891907
SM 4500 F-C-97	04/25/2017			05/03/2017	Dale L. Simmons	1891906
	04/25/2017			05/04/2017	Dale L. Simmons	1891907
SM 5310 B-00	04/25/2017			04/25/2017	Julie Michelle Frank	1891908, 1891909