Chemical Analysis Report

CEN-DIST-2018-09-12-02

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

Event Description: **Shaw / Louise / Haw**
Request ID: **RQ-2018-09-10-59**
Customer: **CEN-DIST**
Project ID: **SMP**

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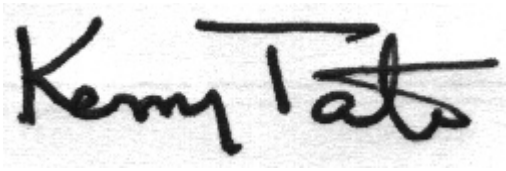
Date Certified: 27-SEP-2018 15:41



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 Louise @ Center of South Lobe **Collection Date/Time: 09/11/2018 11:28**

Field ID: G2CE0065 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2024382	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P351635	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P351985	
		Sulfate	16		mg SO4/L	P351989	
	SM 2120 B	Color (true)	42		PCU	P351516	
	SM 2320 B-97	Total Alkalinity	13		mg CaCO3/L	P351712	
	SM 2540 C-97	TDS	95		mg/L	P351934	
	SM 2540 D-97	TSS	3	I	mg/L	P351976	
	SM 4500 F-C-97	Fluoride	0.098	I	mg F/L	P351716	
2024384	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P351764	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.79		mg N/L	P351746	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P351695	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P351602	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P351878	
2024386	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P351520	

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: Shaw Lake @ Center of North Lobe **Collection Date/Time: 09/11/2018 12:20**

Field ID: G2CE0127 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2024383	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P351635	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P351985	
		Sulfate	1.7		mg SO4/L	P351989	
	SM 2120 B	Color (true)	590		PCU	P351516	
	SM 2320 B-97	Total Alkalinity	6.8		mg CaCO3/L	P351712	
	SM 2540 C-97	TDS	124		mg/L	P351934	
	SM 2540 D-97	TSS	3	I	mg/L	P351976	
	SM 4500 F-C-97	Fluoride	0.047	I	mg F/L	P351716	
2024385	EPA 350.1 Rev. 2.0	Ammonia-N	0.041		mg N/L	P351764	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P351747	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P351696	
	EPA 365.1 Rev. 2.0	Total-P	0.056		mg P/L	P351602	
	SM 5310 B-00	Organic Carbon	44		mg C/L	P351878	
2024387	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.013		mg P/L	P351520	

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: P351635

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351985

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351989

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351764

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351746

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351747

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351695

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351696

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351602

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351520

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

Reference Method: SM 2120 B
Batch ID: P351516

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P351712

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

Reference Method: SM 2540 C-97
Batch ID: P351934

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P351976

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P351716

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P351878

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: P351985

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351764

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351746

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351747

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351695

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351696

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351602

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	109		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351520

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P351516

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.7		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P351712

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P351716

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P351878

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2023823	Chloride	98.6		P	90 - 110
2024371	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2023823	Sulfate	97.2		P	90 - 110
2024371	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351764

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024372	Ammonia-N	97.8	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024210	Kjeldahl Nitrogen	98.9	95.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351747

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024421	Kjeldahl Nitrogen	94.6	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351695

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024209	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024409	NO2NO3-N	99.6	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351602

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024280	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351520

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024386	O-Phosphate-P	95.5	95.0	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P351716

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024886	Fluoride	99.5	98.8	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P351878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2024208	Organic Carbon	95.2	94.2	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P351635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024420	Turbidity	2.83	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2023823	Chloride	0.658	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2023823	Sulfate	0.702	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351764

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024372	Ammonia-N	2.56	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024210	Kjeldahl Nitrogen	2.75	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024421	Kjeldahl Nitrogen	1.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351695

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024209	NO2NO3-N	0.990	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024409	NO2NO3-N	0.707	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351602

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024280	Total-P	0.820	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P351520

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024386	O-Phosphate-P	0.525	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P351516

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024466	Color (true)	0.850	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P351712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024886	Total Alkalinity	0.425	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P351934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024196	TDS	8.45	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P351716

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024886	Fluoride	0.473	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P351878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2024208	Organic Carbon	0.575	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: SM 2120 B
Run ID: A86442
Included Lab Sample IDs: 2024382, 2024383

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.1	97.7	P/P	90 - 115
Color (true)	99.4	97.1	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A86443
Included Lab Sample IDs: 2024386, 2024387

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	99.2	P/P	90 - 110
O-Phosphate-P	99.6	99.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A86474
Included Lab Sample IDs: 2024382, 2024383

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	103	102	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A86488
Included Lab Sample IDs: 2024385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	108	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A86506
Included Lab Sample IDs: 2024384, 2024385

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

Reference Method: SM 2320 B-97
Run ID: A86512
Included Lab Sample IDs: 2024382, 2024383

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A86512
Included Lab Sample IDs: 2024382, 2024383

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A86516
Included Lab Sample IDs: 2024384

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A86531
Included Lab Sample IDs: 2024384, 2024385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.4	97.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A86551
Included Lab Sample IDs: 2024384, 2024385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	97.5	P/P	90 - 110
Kjeldahl Nitrogen	98.4	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A86566
Included Lab Sample IDs: 2024382, 2024383

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

Reference Method: SM 5310 B-00
Run ID: A86574
Included Lab Sample IDs: 2024384, 2024385

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.1	94.2	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					2.83	
EPA 300.0 Rev. 2.1	Chloride	100	98.6	100		0.658	
	Sulfate	99.9	97.2	100		0.702	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	97.8	101			2.56
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	98.9	95.0			2.75
	Kjeldahl Nitrogen	102	94.6	97.5			1.49
EPA 353.2 Rev. 2.0	NO2NO3-N	100	100	102			0.990
	NO2NO3-N	100	99.6	101			0.707
EPA 365.1 Rev. 2.0	Total-P	109	103	104			0.820
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	95.5	95.0			0.525
SM 2120 B	Color (true)	96.7				0.850	
SM 2320 B-97	Total Alkalinity	103				0.425	
SM 2540 C-97	TDS					8.45	
SM 4500 F-C-97	Fluoride	98.2	99.5	98.8			0.473
SM 5310 B-00	Organic Carbon	96.0	95.2	94.2			0.575

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2024382, 2024383
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2024382, 2024383
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2024382, 2024383
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2024384, 2024385
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2024384, 2024385
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2024384, 2024385
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2024384, 2024385
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2024386, 2024387
SM 2120 B / E31780	True Color measured at 450 nm	2024382, 2024383
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2024382, 2024383
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2024382, 2024383
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2024382, 2024383
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2024382, 2024383
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2024384, 2024385

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	09/12/2018			09/12/2018 17:42	Megan Treadwell	2024382, 2024383
EPA 300.0 Rev. 2.1	09/12/2018			09/19/2018 02:10	Lipi Saha	2024382
	09/12/2018			09/19/2018 02:47	Lipi Saha	2024383
EPA 350.1 Rev. 2.0	09/12/2018			09/17/2018 14:01	Ping Hua	2024384
	09/12/2018			09/17/2018 14:03	Ping Hua	2024385
EPA 351.2 Rev. 2.0	09/12/2018	09/17/2018 15:30	Adrian Shelby	09/18/2018 11:52	Joseph Suarez	2024384
	09/12/2018	09/17/2018 15:30	Adrian Shelby	09/18/2018 12:00	Joseph Suarez	2024385
EPA 353.2 Rev. 2.0	09/12/2018			09/14/2018 12:37	Lauren Bottorf	2024384
	09/12/2018			09/14/2018 12:51	Lauren Bottorf	2024385
EPA 365.1 Rev. 2.0	09/12/2018	09/13/2018 15:36	Sima Feizi	09/14/2018 10:57	Beverly Y. Sanders	2024385
	09/12/2018	09/13/2018 15:36	Sima Feizi	09/14/2018 13:19	Beverly Y. Sanders	2024384
EPA 365.1 Rev. 2.0 dissolved	09/12/2018			09/12/2018 15:14	Julia Storbeck	2024386
	09/12/2018			09/12/2018 15:50	Julia Storbeck	2024387
SM 2120 B	09/12/2018			09/12/2018 16:05	DeAsia Armster	2024382
	09/12/2018			09/12/2018 16:23	DeAsia Armster	2024383
SM 2320 B-97	09/12/2018			09/14/2018 18:52	Dale L. Simmons	2024382
	09/12/2018			09/14/2018 19:01	Dale L. Simmons	2024383
SM 2540 C-97	09/12/2018			09/14/2018 15:32	Yijie Li	2024382, 2024383
SM 2540 D-97	09/12/2018			09/14/2018 15:32	Yijie Li	2024382, 2024383
SM 4500 F-C-97	09/12/2018			09/14/2018 18:52	Dale L. Simmons	2024382
	09/12/2018			09/14/2018 19:01	Dale L. Simmons	2024383
SM 5310 B-00	09/12/2018			09/17/2018 20:52	Megan Treadwell	2024384
	09/12/2018			09/17/2018 21:06	Megan Treadwell	2024385