Chemical Analysis Report

SE-DIST-2018-08-30-02

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

Event Description: **SMP- North Lakes**
Request ID: **RQ-2018-08-27-37**
Customer: **SE-DIST**
Project ID: **SMP**

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FL Dept. of Environmental Protection
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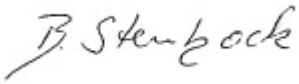
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 14-SEP-2018 17:37



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: Henderson Pond **Collection Date/Time: 08/29/2018 14:30**

Field ID: G2SE0010 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2021076	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P351090	
	EPA 300.0 Rev. 2.1	Chloride	36		mg Cl/L	P351228	
		Sulfate	2.3		mg SO4/L	P351230	
	SM 2120 B	Color (true)	130		PCU	P350972	
	SM 2320 B-97	Total Alkalinity	15		mg CaCO3/L	P351369	
	SM 2540 C-97	TDS	112	A	mg/L	P351244	
	SM 2540 D-97	TSS	2	UA	mg/L	P351094	
	SM 4500 F-C-97	Fluoride	0.055	I	mg F/L	P351373	
2021077	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P351213	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P351044	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P351131	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P351065	
	SM 5310 B-00	Organic Carbon	19		mg C/L	P351132	
2021078	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P350975	

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: Lake Eden **Collection Date/Time: 08/29/2018 15:00**

Field ID: G2SE0014 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2021079	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P351090	
	EPA 300.0 Rev. 2.1	Chloride	35		mg Cl/L	P351228	
		Sulfate	3.0		mg SO4/L	P351230	
	SM 2120 B	Color (true)	150		PCU	P350972	
	SM 2320 B-97	Total Alkalinity	23		mg CaCO3/L	P351369	
	SM 2540 C-97	TDS	110		mg/L	P351244	
	SM 2540 D-97	TSS	2	U	mg/L	P351094	
	SM 4500 F-C-97	Fluoride	0.059	I	mg F/L	P351373	
2021080	EPA 350.1 Rev. 2.0	Ammonia-N	0.068		mg N/L	P351213	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P351045	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.010		mg N/L	P351307	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P351065	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P351132	
2021081	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	I	mg P/L	P350975	

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: P351090

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351228

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351230

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351213

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351044

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351045

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351131

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351307

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351065

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: P350975

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

Reference Method: SM 2120 B
Batch ID: P350972

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P351369

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

Reference Method: SM 2540 C-97
Batch ID: P351244

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P351094

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P351373

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P351132

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: P351228

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351230

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351213

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	93.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351044

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351045

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351131

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351307

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351065

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P350975

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P350972

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

Reference Method: SM 2320 B-97
Batch ID: P351369

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

Reference Method: SM 4500 F-C-97
Batch ID: P351373

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

Reference Method: SM 5310 B-00
Batch ID: P351132

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.5		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351228

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021064	Chloride	102		P	90 - 110
2021250	Chloride	108		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021064	Sulfate	101		P	90 - 110
2021250	Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351213

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021066	Ammonia-N	103	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351044

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021066	Kjeldahl Nitrogen	104	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021177	Kjeldahl Nitrogen	98.9	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351131

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021049	NO2NO3-N	102		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351307

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021080	NO2NO3-N	99.4	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021177	Total-P	101	95.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P350975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021078	O-Phosphate-P	92.8	93.7	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P351373

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2021242	Fluoride	100	99.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P351132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2020931	Organic Carbon	94.6	95.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P351090

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021048	Turbidity	2.40	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351228

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021064	Chloride	1.72	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P351230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021064	Sulfate	1.64	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P351213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021066	Ammonia-N	0.484	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351044

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021066	Kjeldahl Nitrogen	1.81	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P351045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021177	Kjeldahl Nitrogen	1.20	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021049	NO2NO3-N	0.557	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P351307

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021080	NO2NO3-N	2.36	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P351065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021177	Total-P	5.11	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P350975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021078	O-Phosphate-P	0.965	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P350972

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021046	Color (true)	5.90	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P351369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021242	Total Alkalinity	0.607	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P351244

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021076	TDS	0.889	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P351373

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2021242	Fluoride	0.979	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P351132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2020931	Organic Carbon	0.724	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: A86213
Included Lab Sample IDs: 2021076, 2021079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.1	99.4	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A86214
Included Lab Sample IDs: 2021078, 2021081

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	99.0	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A86280
Included Lab Sample IDs: 2021076, 2021079

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A86289
Included Lab Sample IDs: 2021077, 2021080

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A86290
Included Lab Sample IDs: 2021077, 2021080

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A86298
Included Lab Sample IDs: 2021077

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

Reference Method: SM 5310 B-00
Run ID: A86299
Included Lab Sample IDs: 2021077, 2021080

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.0	95.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A86312
Included Lab Sample IDs: 2021076, 2021079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	105	103	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A86312
Included Lab Sample IDs: 2021076, 2021079

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A86328
Included Lab Sample IDs: 2021077, 2021080

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	103	P/P	90 - 110
Ammonia-N	98.5	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A86354
Included Lab Sample IDs: 2021080

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

Reference Method: SM 2320 B-97
Run ID: A86387
Included Lab Sample IDs: 2021076, 2021079

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: A86387
Included Lab Sample IDs: 2021076, 2021079

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	101	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					2.40	
EPA 300.0 Rev. 2.1	Chloride	109	102	108		1.72	
	Sulfate	106	101	108		1.64	
EPA 350.1 Rev. 2.0	Ammonia-N	93.8	103	104			0.484
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	104	101			1.81
	Kjeldahl Nitrogen	103	98.9	100			1.20
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102				0.557
	NO2NO3-N	98.5	99.4	102			2.36
EPA 365.1 Rev. 2.0	Total-P	99.2	101	95.4			5.11
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	92.8	93.7			0.965
SM 2120 B	Color (true)	101				5.90	
SM 2320 B-97	Total Alkalinity	103				0.607	
SM 2540 C-97	TDS					0.889	
SM 4500 F-C-97	Fluoride	101	100	99.1			0.979
SM 5310 B-00	Organic Carbon	95.5	94.6	95.6			0.724

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2021076, 2021079
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2021076, 2021079
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2021076, 2021079
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2021077, 2021080
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2021077, 2021080
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2021077, 2021080
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2021077, 2021080
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2021078, 2021081
SM 2120 B / E31780	True Color measured at 450 nm	2021076, 2021079
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2021076, 2021079
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2021076, 2021079
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2021076, 2021079
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2021076, 2021079
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2021077, 2021080

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	08/30/2018			08/30/2018 16:04	Megan Treadwell	2021076, 2021079
EPA 300.0 Rev. 2.1	08/30/2018			09/06/2018 21:50	Lipi Saha	2021076
	08/30/2018			09/06/2018 22:02	Lipi Saha	2021079
EPA 350.1 Rev. 2.0	08/30/2018			09/05/2018 13:16	Ping Hua	2021077
	08/30/2018			09/05/2018 13:23	Ping Hua	2021080
EPA 351.2 Rev. 2.0	08/30/2018	09/04/2018 12:00	Adrian Shelby	09/05/2018 11:32	Joseph Suarez	2021077
	08/30/2018	09/04/2018 12:00	Adrian Shelby	09/05/2018 11:36	Joseph Suarez	2021080
EPA 353.2 Rev. 2.0	08/30/2018			09/05/2018 15:32	Lauren Bottorf	2021077
	08/30/2018			09/07/2018 13:26	Lauren Bottorf	2021080
EPA 365.1 Rev. 2.0	08/30/2018	09/04/2018 14:44	Sima Feizi	09/05/2018 10:50	Beverly Y. Sanders	2021077
	08/30/2018	09/04/2018 14:44	Sima Feizi	09/05/2018 10:51	Beverly Y. Sanders	2021080
EPA 365.1 Rev. 2.0 dissolved	08/30/2018			08/30/2018 15:58	Julia Storbeck	2021078
	08/30/2018			08/30/2018 16:11	Julia Storbeck	2021081
SM 2120 B	08/30/2018			08/30/2018 15:09	DeAsia Armster	2021076
	08/30/2018			08/30/2018 15:10	DeAsia Armster	2021079
SM 2320 B-97	08/30/2018			09/07/2018 08:45	Dale L. Simmons	2021076
	08/30/2018			09/07/2018 08:55	Dale L. Simmons	2021079
SM 2540 C-97	08/30/2018			08/31/2018 09:00	DeAsia Armster	2021076, 2021079
SM 2540 D-97	08/30/2018			08/31/2018 09:00	DeAsia Armster	2021076, 2021079
SM 4500 F-C-97	08/30/2018			09/07/2018 08:45	Dale L. Simmons	2021076
	08/30/2018			09/07/2018 08:55	Dale L. Simmons	2021079
SM 5310 B-00	08/30/2018			09/05/2018 00:20	Megan Treadwell	2021077
	08/30/2018			09/05/2018 00:33	Megan Treadwell	2021080