

Chemical Analysis Report

SW-DIST-2019-03-26-01

Florida Department of Environmental Protection
Central Laboratory
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DOH Accreditation E31780

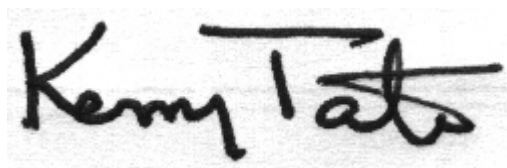
Event Description: **SMP - Bear, Green, Thomas**
Request ID: **RQ-2019-03-25-05**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 10-APR-2019 13:23

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first few letters of the last name.

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 by the Florida Department of Health Environmental Laboratory Certification Program 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: BEAR CREEK @ BEACON

Collection Date/Time: 03/25/2019 09:30

Field ID: G5SW0102

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2072329	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P361083	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P361400	
		Sulfate	38		mg SO4/L	P361402	
		Color (true)	14		PCU	P361077	
	SM 2320 B-97	Total Alkalinity	164		mg CaCO3/L	P361715	
	SM 2540 C-97	TDS	452		mg/L	P361412	
	SM 2540 D-97	TSS	5	I	mg/L	P361416	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P361654	
2072332	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P361377	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.90		mg N/L	P361150	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P361131	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P361198	
	SM 5310 B-00	Organic Carbon	4.2		mg C/L	P361173	
2072335	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.024		mg P/L	P361087	

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: GREEN LAKE NORTH

Collection Date/Time: 03/25/2019 10:30

Field ID: G5SW0107

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2072330	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P361083	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P361400	
		Sulfate	0.25	I	mg SO4/L	P361402	
	SM 2120 B	Color (true)	35	A	PCU	P361077	
	SM 2320 B-97	Total Alkalinity	16		mg CaCO3/L	P361715	
	SM 2540 C-97	TDS	58		mg/L	P361412	
	SM 2540 D-97	TSS	2	I	mg/L	P361416	
	SM 4500 F-C-97	Fluoride	0.058	I	mg F/L	P361654	
2072333	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P361377	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P361150	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P361131	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P361198	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P361173	
2072336	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361087	

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 THOMAS @ CENTER

Collection Date/Time: 03/25/2019 11:15

Field ID: G5SW0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2072331	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P361083	
	EPA 300.0 Rev. 2.1	Chloride	21		mg Cl/L	P361400	
		Sulfate	8.4		mg SO4/L	P361402	
	SM 2120 B	Color (true)	29		PCU	P361077	
	SM 2320 B-97	Total Alkalinity	4.9		mg CaCO3/L	P361715	
	SM 2540 C-97	TDS	64		mg/L	P361412	
	SM 2540 D-97	TSS	2	U	mg/L	P361416	
	SM 4500 F-C-97	Fluoride	0.072	I	mg F/L	P361654	
2072334	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P361377	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P361150	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P361131	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P361198	
	SM 5310 B-00	Organic Carbon	7.5		mg C/L	P361173	
2072337	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361087	

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: P361083

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361400

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361377

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361150

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361131

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361198

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361087

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

Reference Method: SM 2120 B
Batch ID: P361077

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P361715

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P361412

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P361416

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P361654

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P361173

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: P361400

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361377

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361150

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361131

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361198

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361087

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.3		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P361077

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P361715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.9		P	98 - 107

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P361654

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.3		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P361173

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072330	Chloride	101		P	90 - 110
2072401	Chloride	96.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072330	Sulfate	104		P	90 - 110
2072401	Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361377

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072179	Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072178	Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361131

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072332	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361198

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072333	Total-P	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361087

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072337	O-Phosphate-P	98.7	99.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P361654

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072792	Fluoride	99.6	100	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P361173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2072332	Organic Carbon	97.7	98.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361083

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072350	Turbidity	1.36	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072401	Chloride	0.945	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361402

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072401	Sulfate	1.06	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361377

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072179	Ammonia-N	0.329	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072178	Kjeldahl Nitrogen	1.64	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361131

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072332	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361198

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072333	Total-P	0.143	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361087

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072337	O-Phosphate-P	0.807	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
 Batch ID: P361077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072330	Color (true)	1.52	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P361715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072792	Total Alkalinity	0.487	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
 Batch ID: P361412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072350	TDS	5.53	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P361654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072792	Fluoride	0.467	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
 Batch ID: P361173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2072332	Organic Carbon	0.587	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: A90241

Included Lab Sample IDs: 2072329, 2072330, 2072331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	99.0	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A90242

Included Lab Sample IDs: 2072329, 2072330, 2072331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A90243

Included Lab Sample IDs: 2072335, 2072336, 2072337

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	99.1	P/P	90 - 110
O-Phosphate-P	99.5	98.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A90262

Included Lab Sample IDs: 2072332, 2072333, 2072334

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

Reference Method: SM 5310 B-00

Run ID: A90286

Included Lab Sample IDs: 2072332, 2072333, 2072334

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	97.6	P/P	90 - 110
Organic Carbon	97.6	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A90306

Included Lab Sample IDs: 2072332, 2072333, 2072334

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.8	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90324

Included Lab Sample IDs: 2072332

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90331

Included Lab Sample IDs: 2072333, 2072334

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90331

Included Lab Sample IDs: 2072333, 2072334

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A90355

Included Lab Sample IDs: 2072332, 2072333, 2072334

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A90374

Included Lab Sample IDs: 2072329, 2072330, 2072331

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

Reference Method: SM 4500 F-C-97

Run ID: A90475

Included Lab Sample IDs: 2072329, 2072330, 2072331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	99.1	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A90507

Included Lab Sample IDs: 2072329, 2072330, 2072331

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.4	98.0	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	MS
EPA 180.1 Rev. 2.0	Turbidity				1.36	
EPA 300.0 Rev. 2.1	Chloride	102	96.7	101	0.945	
	Sulfate	103	99.2	104	1.06	
EPA 350.1 Rev. 2.0	Ammonia-N	101	103	102		0.329
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	105	103		1.64
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	103	103		0.0
EPA 365.1 Rev. 2.0	Total-P	103	100	100		0.143
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3	98.7	99.5		0.807
SM 2120 B	Color (true)	100			1.52	
SM 2320 B-97	Total Alkalinity	99.9			0.487	
SM 2540 C-97	TDS				5.53	
SM 4500 F-C-97	Fluoride	98.3	99.6	100		0.467
SM 5310 B-00	Organic Carbon	98.8	97.7	98.4		0.587

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2072329, 2072330, 2072331
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2072329, 2072330, 2072331
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2072329, 2072330, 2072331
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2072332, 2072333, 2072334
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2072332, 2072333, 2072334
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2072332, 2072333, 2072334
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2072332, 2072333, 2072334
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2072335, 2072336, 2072337
SM 2120 B / E31780	True Color measured at 450 nm	2072329, 2072330, 2072331
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2072329, 2072330, 2072331
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2072329, 2072330, 2072331
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2072329, 2072330, 2072331
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2072329, 2072330, 2072331
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2072332, 2072333, 2072334

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	03/26/2019			03/26/2019 16:32	Adrian Shelby	2072329, 2072330, 2072331
EPA 300.0 Rev. 2.1	03/26/2019			03/29/2019 04:10	Lipi Saha	2072330
	03/26/2019			03/29/2019 04:34	Lipi Saha	2072329
	03/26/2019			03/29/2019 04:46	Lipi Saha	2072331
EPA 350.1 Rev. 2.0	03/26/2019			03/29/2019 11:48	Ping Hua	2072332
	03/26/2019			03/29/2019 11:50	Ping Hua	2072333
	03/26/2019			03/29/2019 11:51	Ping Hua	2072334
EPA 351.2 Rev. 2.0	03/26/2019	03/27/2019 14:00	Jhamieka S. Greenwood	03/28/2019 14:59	Joseph Suarez	2072332
	03/26/2019	03/27/2019 14:00	Jhamieka S. Greenwood	03/28/2019 15:00	Joseph Suarez	2072333
	03/26/2019	03/27/2019 14:00	Jhamieka S. Greenwood	03/28/2019 15:02	Joseph Suarez	2072334
EPA 353.2 Rev. 2.0	03/26/2019			03/27/2019 08:24	Beverly Y. Sanders	2072332
	03/26/2019			03/27/2019 08:30	Beverly Y. Sanders	2072333
	03/26/2019			03/27/2019 08:31	Beverly Y. Sanders	2072334
EPA 365.1 Rev. 2.0	03/26/2019	03/28/2019 13:10	Adrian Shelby	03/29/2019 13:04	Rosalyn Ballman	2072332
	03/26/2019	03/28/2019 13:10	Adrian Shelby	03/29/2019 14:38	Rosalyn Ballman	2072333
	03/26/2019	03/28/2019 13:10	Adrian Shelby	03/29/2019 14:40	Rosalyn Ballman	2072334
EPA 365.1 Rev. 2.0 dissolved	03/26/2019			03/26/2019 15:25	Jhamieka S. Greenwood	2072337
	03/26/2019			03/26/2019 16:05	Jhamieka S. Greenwood	2072335
	03/26/2019			03/26/2019 16:06	Jhamieka S. Greenwood	2072336
SM 2120 B	03/26/2019			03/26/2019 15:50	Mariam Hanna	2072329
	03/26/2019			03/26/2019 15:52	Mariam Hanna	2072330, 2072331
SM 2320 B-97	03/26/2019			04/05/2019 17:10	Dale L. Simmons	2072329
	03/26/2019			04/05/2019 17:19	Dale L. Simmons	2072330
	03/26/2019			04/05/2019 17:29	Dale L. Simmons	2072331
SM 2540 C-97	03/26/2019			03/27/2019 14:03	Yijie Li	2072329, 2072330, 2072331
SM 2540 D-97	03/26/2019			03/27/2019 14:03	Yijie Li	2072329, 2072330, 2072331
SM 4500 F-C-97	03/26/2019			04/04/2019 03:40	Dale L. Simmons	2072329
	03/26/2019			04/04/2019 03:51	Dale L. Simmons	2072330
	03/26/2019			04/04/2019 04:03	Dale L. Simmons	2072331
SM 5310 B-00	03/26/2019			03/27/2019 15:32	Julia Storbeck	2072332
	03/26/2019			03/27/2019 16:57	Julia Storbeck	2072334
	03/26/2019			03/27/2019 18:36	Julia Storbeck	2072333