

Chemical Analysis Report

CEN-DIST-2019-04-03-01

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

Event Description: **Whip / Coon / Center**
Request ID: **RQ-2019-04-01-63**
Customer: **CEN-DIST**
Project ID: **SMP**

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Date Certified: 22-APR-2019 18:11



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: Coon Lake @ Center

Collection Date/Time: 04/02/2019 10:36

Field ID: G4CE0162

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074562	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P361523	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P361867	
		Sulfate	7.6		mg SO4/L	P361869	
	SM 2120 B	Color (true)	220		PCU	P361548	
	SM 2320 B-97	Total Alkalinity	3.7		mg CaCO3/L	P361854	
	SM 2540 C-97	TDS	114		mg/L	P362129	
	SM 2540 D-97	TSS	2	I	mg/L	P362039	
	SM 4500 F-C-97	Fluoride	0.045	I	mg F/L	P362443	
2074565	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P361944	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.96		mg N/L	P361753	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.022		mg N/L	P361626	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P361622	
	SM 5310 B-00	Organic Carbon	21		mg C/L	P361614	
2074568	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P361530	

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 Center @ Center

Collection Date/Time: 04/02/2019 10:49

Field ID: G4CE0163

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074563	EPA 180.1 Rev. 2.0	Turbidity	5.8		NTU	P361523	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P361867	
		Sulfate	9.8		mg SO4/L	P361869	
	SM 2120 B	Color (true)	370		PCU	P361548	
	SM 2320 B-97	Total Alkalinity	2.2	I	mg CaCO3/L	P361854	
	SM 2540 C-97	TDS	122		mg/L	P362129	
	SM 2540 D-97	TSS	4	I	mg/L	P362039	
	SM 4500 F-C-97	Fluoride	0.048	I	mg F/L	P362443	
2074566	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P361944	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P361753	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.055		mg N/L	P361626	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P361622	
	SM 5310 B-00	Organic Carbon	27		mg C/L	P361614	
2074569	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P361530	

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 Whippoorwill @ Center

Collection Date/Time: 04/02/2019 12:27

Field ID: G4CE0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2074564	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P361523	
	EPA 300.0 Rev. 2.1	Chloride	29		mg Cl/L	P361867	
		Sulfate	21		mg SO4/L	P361869	
	SM 2120 B	Color (true)	50	A	PCU	P361548	
	SM 2320 B-97	Total Alkalinity	17		mg CaCO3/L	P361854	
	SM 2540 C-97	TDS	126	A	mg/L	P362129	
	SM 2540 D-97	TSS	3	IA	mg/L	P362039	
	SM 4500 F-C-97	Fluoride	0.061	I	mg F/L	P362443	
2074567	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P361944	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P361753	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P361626	
	EPA 365.1 Rev. 2.0	Total-P	0.023		mg P/L	P361622	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P361614	
2074570	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P361530	

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: P361523

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361867

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361869

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361944

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361753

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361626

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361622

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361530

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

Reference Method: SM 2120 B
Batch ID: P361548

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P361854

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

Reference Method: SM 2540 C-97
Batch ID: P362129

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362039

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P361614

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: P361867

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P361869

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

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P361944

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P361753

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: P361626

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: P361622

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P361530

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

Reference Method: SM 2120 B
 Batch ID: P361548

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

Reference Method: SM 2320 B-97
 Batch ID: P361854

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	98 - 107

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P361614

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074445	Chloride	99.9		P	90 - 110
2074548	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361869

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074445	Sulfate	95.8		P	90 - 110
2074548	Sulfate	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361944

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074567	Ammonia-N	101	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074565	Kjeldahl Nitrogen	108	97.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361626

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074555	NO2NO3-N	99.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074567	Total-P	95.8	99.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074570	O-Phosphate-P	93.5	95.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074564	Fluoride	96.3	95.8	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P361614

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074549	Organic Carbon	98.7	99.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P361523

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074613	Turbidity	4.43	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074445	Chloride	0.699	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P361869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074445	Sulfate	1.05	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P361944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074567	Ammonia-N	0.00919	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P361753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074565	Kjeldahl Nitrogen	6.20	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P361626

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074555	NO2NO3-N	0.568	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P361622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074567	Total-P	3.88	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P361530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074570	O-Phosphate-P	1.59	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P361548

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074564	Color (true)	3.15	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P361854

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074374	Total Alkalinity	1.01	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P362129

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074564	TDS	4.76	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P362443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074564	Fluoride	0.482	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P361614

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074549	Organic Carbon	0.843	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A90416

Included Lab Sample IDs: 2074562, 2074563, 2074564

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A90417

Included Lab Sample IDs: 2074568, 2074569, 2074570

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.5	97.9	P/P	90 - 110
O-Phosphate-P	99.5	98.5	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A90429

Included Lab Sample IDs: 2074562, 2074563, 2074564

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	101	P/P	85 - 115
Color (true)	98.4	102	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A90436

Included Lab Sample IDs: 2074565, 2074566, 2074567

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

Reference Method: SM 5310 B-00

Run ID: A90463

Included Lab Sample IDs: 2074565, 2074566, 2074567

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A90535

Included Lab Sample IDs: 2074565, 2074566, 2074567

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A90538

Included Lab Sample IDs: 2074562, 2074563, 2074564

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A90560

Included Lab Sample IDs: 2074562, 2074563, 2074564

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A90592

Included Lab Sample IDs: 2074565, 2074566, 2074567

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	108	P/P	90 - 110
Kjeldahl Nitrogen	104	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A90596

Included Lab Sample IDs: 2074565, 2074566, 2074567

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

Reference Method: SM 4500 F-C-97

Run ID: A90826

Included Lab Sample IDs: 2074562, 2074563, 2074564

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.1	98.6	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				4.43	
EPA 300.0 Rev. 2.1	Chloride	101	99.9	101	0.699	
	Sulfate	100	95.8	99.8	1.05	
EPA 350.1 Rev. 2.0	Ammonia-N	102	101	101		0.0091
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	108	97.1		6.20
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	102	99.2			0.568
EPA 365.1 Rev. 2.0	Total-P	105	95.8	99.8		3.88
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8	93.5	95.0		1.59
SM 2120 B	Color (true)	101			3.15	
SM 2320 B-97	Total Alkalinity	101			1.01	
SM 2540 C-97	TDS				4.76	
SM 4500 F-C-97	Fluoride	97.3	96.3	95.8		0.482
SM 5310 B-00	Organic Carbon	101	98.7	99.6		0.843

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2074562, 2074563, 2074564
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2074562, 2074563, 2074564
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2074562, 2074563, 2074564
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2074565, 2074566, 2074567
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2074565, 2074566, 2074567
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2074565, 2074566, 2074567
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2074565, 2074566, 2074567
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2074568, 2074569, 2074570
SM 2120 B / E31780	True Color measured at 450 nm	2074562, 2074563, 2074564
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2074562, 2074563, 2074564
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2074562, 2074563, 2074564
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2074562, 2074563, 2074564
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2074562, 2074563, 2074564
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2074565, 2074566, 2074567

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	04/03/2019			04/03/2019 16:46	Adrian Shelby	2074562, 2074563, 2074564
EPA 300.0 Rev. 2.1	04/03/2019			04/10/2019 03:21	Lipi Saha	2074562
	04/03/2019			04/10/2019 03:33	Lipi Saha	2074563
	04/03/2019			04/10/2019 03:45	Lipi Saha	2074564
EPA 350.1 Rev. 2.0	04/03/2019			04/09/2019 13:42	Ping Hua	2074567
	04/03/2019			04/09/2019 13:54	Ping Hua	2074566
	04/03/2019			04/09/2019 13:55	Ping Hua	2074565
EPA 351.2 Rev. 2.0	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 11:46	Joseph Suarez	2074565
	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 11:53	Joseph Suarez	2074566
	04/03/2019	04/08/2019 15:00	Jhamieka S. Greenwood	04/10/2019 11:55	Joseph Suarez	2074567
EPA 353.2 Rev. 2.0	04/03/2019			04/04/2019 10:28	Beverly Y. Sanders	2074565
	04/03/2019			04/04/2019 10:29	Beverly Y. Sanders	2074566
	04/03/2019			04/04/2019 10:30	Beverly Y. Sanders	2074567
EPA 365.1 Rev. 2.0	04/03/2019	04/05/2019 13:45	Sima Feizi	04/08/2019 16:00	Rosalyn Ballman	2074565
	04/03/2019	04/05/2019 13:45	Sima Feizi	04/08/2019 16:01	Rosalyn Ballman	2074566
	04/03/2019	04/05/2019 13:45	Sima Feizi	04/08/2019 16:02	Rosalyn Ballman	2074567
EPA 365.1 Rev. 2.0 dissolved	04/03/2019			04/03/2019 17:25	Jhamieka S. Greenwood	2074570
	04/03/2019			04/03/2019 18:20	Jhamieka S. Greenwood	2074568
	04/03/2019			04/03/2019 18:21	Jhamieka S. Greenwood	2074569
SM 2120 B	04/03/2019			04/03/2019 16:23	Mariam Hanna	2074564
	04/03/2019			04/03/2019 17:01	Mariam Hanna	2074562
	04/03/2019			04/03/2019 17:02	Mariam Hanna	2074563
SM 2320 B-97	04/03/2019			04/09/2019 18:40	Samantha Davila	2074562
	04/03/2019			04/09/2019 18:51	Samantha Davila	2074563
	04/03/2019			04/09/2019 19:03	Samantha Davila	2074564
SM 2540 C-97	04/03/2019			04/05/2019 15:52	Yijie Li	2074562, 2074563, 2074564
SM 2540 D-97	04/03/2019			04/05/2019 15:52	Yijie Li	2074562, 2074563, 2074564
SM 4500 F-C-97	04/03/2019			04/18/2019 07:44	Samantha Davila	2074564
	04/03/2019			04/18/2019 08:41	Samantha Davila	2074562
	04/03/2019			04/18/2019 08:47	Samantha Davila	2074563
SM 5310 B-00	04/03/2019			04/05/2019 01:16	Julia Storbeck	2074565
	04/03/2019			04/05/2019 01:29	Julia Storbeck	2074566
	04/03/2019			04/05/2019 01:41	Julia Storbeck	2074567