

Chemical Analysis Report

SW-DIST-2019-05-23-01

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

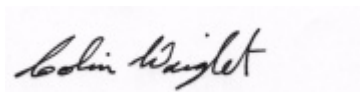
Event Description: **LVI**s
Request ID: **RQ-2019-05-20-06**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Judy Ashton

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 06-JUN-2019 10:28

A handwritten signature in black ink, appearing to read "Colin Wright", is shown on a light-colored background.

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: Commston Lake @ Center

Collection Date/Time: 05/22/2019 12:40

Field ID: G2SW0113

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088540	EPA 180.1 Rev. 2.0	Turbidity	1.2	A	NTU	P364477	
	EPA 300.0 Rev. 2.1	Chloride	32		mg Cl/L	P364874	
		Sulfate	4.3		mg SO4/L	P364875	
	SM 2120 B	Color (true)	56	A	PCU	P364481	
	SM 2320 B-97	Total Alkalinity	25		mg CaCO3/L	P364858	
	SM 2540 C-97	TDS	115		mg/L	P364828	
	SM 2540 D-97	TSS	2	U	mg/L	P364668	
	SM 4500 F-C-97	Fluoride	0.091	I	mg F/L	P364862	
2088542	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P364911	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P364825	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P364726	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P364832	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P364643	
2088544	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P364461	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Hanna @ Center

Collection Date/Time: 05/22/2019 10:15

Field ID: G2SW0078

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2088541	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P364477	
	EPA 300.0 Rev. 2.1	Chloride	36		mg Cl/L	P364874	
		Sulfate	4.0		mg SO4/L	P364875	
	SM 2120 B	Color (true)	57		PCU	P364481	
	SM 2320 B-97	Total Alkalinity	39		mg CaCO3/L	P364858	
	SM 2540 C-97	TDS	133		mg/L	P364828	
	SM 2540 D-97	TSS	2	I	mg/L	P364668	
	SM 4500 F-C-97	Fluoride	0.097	I	mg F/L	P364862	
2088543	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P364911	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P364825	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P364726	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P364832	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P364643	
2088545	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P364461	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P364477

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364874

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364875

Component	Result	Code	Units
Sulfate	0.20	U	mg SO ₄ /L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364911

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364825

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364726

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364832

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364461

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

Reference Method: SM 2120 B
Batch ID: P364481

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P364858

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

Reference Method: SM 2540 C-97
Batch ID: P364828

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P364668

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P364862

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P364643

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: P364874

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364875

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364911

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: P364825

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364726

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364832

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364461

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.5		P	90 - 110

Reference Method: SM 2120 B
Batch ID: P364481

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

Reference Method: SM 2320 B-97
Batch ID: P364858

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	105		P	98 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P364862

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P364643

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364874

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088391	Chloride	98.4		P	90 - 110
2088541	Chloride	96.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364875

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088391	Sulfate	96.5		P	90 - 110
2088541	Sulfate	98.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364911

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088884	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364726

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088434	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364832

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088542	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364461

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088545	O-Phosphate-P	92.3	93.0	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P364862

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088894	Fluoride	98.4	98.4	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P364643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2088455	Organic Carbon	91.6	94.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P364477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088540	Turbidity	3.45	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364874

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088391	Chloride	0.241	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364875

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088391	Sulfate	0.375	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088884	Ammonia-N	1.58	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088455	Kjeldahl Nitrogen	4.28	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364726

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088434	NO2NO3-N	0.985	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088542	Total-P	0.644	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P364461

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088545	O-Phosphate-P	0.756	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P364481

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088540	Color (true)	0.820	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P364858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088894	Total Alkalinity	0.418	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P364828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088433	TDS	1.55	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P364862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088894	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P364643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2088455	Organic Carbon	1.33	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 365.1 Rev. 2.0 dissolved

Run ID: A91629

Included Lab Sample IDs: 2088544, 2088545

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.5	96.5	P/P	90 - 110
O-Phosphate-P	98.8	97.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A91630

Included Lab Sample IDs: 2088540, 2088541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A91631

Included Lab Sample IDs: 2088540, 2088541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115

Reference Method: SM 5310 B-00

Run ID: A91711

Included Lab Sample IDs: 2088542, 2088543

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.5	94.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A91740

Included Lab Sample IDs: 2088542, 2088543

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A91748

Included Lab Sample IDs: 2088540, 2088541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Chloride	101	101	P/P	90 - 110
Sulfate	101	100	P/P	90 - 110
Sulfate	99.9	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A91798

Included Lab Sample IDs: 2088540, 2088541

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A91798

Included Lab Sample IDs: 2088540, 2088541

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A91814

Included Lab Sample IDs: 2088542, 2088543

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A91819

Included Lab Sample IDs: 2088542, 2088543

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	100	P/P	90 - 110
Total-P	100	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A91832

Included Lab Sample IDs: 2088542, 2088543

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	100	P/P	90 - 110
Kjeldahl Nitrogen	97.9	104	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		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					3.45	
EPA 300.0 Rev. 2.1	Chloride	98.9	98.4	96.3		0.241	
	Sulfate	98.3	96.5	98.1		0.375	
EPA 350.1 Rev. 2.0	Ammonia-N	101	102	104			1.58
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101					4.28
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	102	101			0.985
EPA 365.1 Rev. 2.0	Total-P	96.5	101	101			0.644
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.5	92.3	93.0			0.756
SM 2120 B	Color (true)	101				0.820	
SM 2320 B-97	Total Alkalinity	105				0.418	
SM 2540 C-97	TDS					1.55	
SM 4500 F-C-97	Fluoride	97.9	98.4	98.4			0.0
SM 5310 B-00	Organic Carbon	93.2	91.6	94.0			1.33

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2088540, 2088541
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2088540, 2088541
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2088540, 2088541
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2088542, 2088543
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2088542, 2088543
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2088542, 2088543
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2088542, 2088543
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2088544, 2088545
SM 2120 B / E31780	True Color measured at 450 nm	2088540, 2088541
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2088540, 2088541
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2088540, 2088541
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2088540, 2088541
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2088540, 2088541
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2088542, 2088543

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	05/23/2019			05/23/2019 15:53	Sima Feizi	2088540, 2088541
EPA 300.0 Rev. 2.1	05/23/2019			05/30/2019 17:30	Lipi Saha	2088541
	05/23/2019			05/30/2019 19:56	Lipi Saha	2088540
EPA 350.1 Rev. 2.0	05/23/2019			05/31/2019 12:13	Ping Hua	2088542
	05/23/2019			05/31/2019 12:15	Ping Hua	2088543
EPA 351.2 Rev. 2.0	05/23/2019	05/31/2019 13:15	Adrian Shelby	06/03/2019 15:28	Joseph Suarez	2088542
	05/23/2019	05/31/2019 13:15	Adrian Shelby	06/03/2019 15:33	Joseph Suarez	2088543
EPA 353.2 Rev. 2.0	05/23/2019			05/30/2019 09:24	Beverly Y. Sanders	2088542
	05/23/2019			05/30/2019 09:25	Beverly Y. Sanders	2088543
EPA 365.1 Rev. 2.0	05/23/2019	05/31/2019 15:15	Adrian Shelby	06/03/2019 15:12	Julia Storbeck	2088542
	05/23/2019	05/31/2019 15:15	Adrian Shelby	06/03/2019 15:20	Julia Storbeck	2088543
EPA 365.1 Rev. 2.0 dissolved	05/23/2019			05/23/2019 14:49	Jhamieka S. Greenwood	2088545
	05/23/2019			05/23/2019 15:17	Jhamieka S. Greenwood	2088544
SM 2120 B	05/23/2019			05/23/2019 16:22	Madeline Funaro	2088540
	05/23/2019			05/23/2019 16:23	Madeline Funaro	2088541
SM 2320 B-97	05/23/2019			06/01/2019 17:41	Dale L. Simmons	2088540
	05/23/2019			06/01/2019 17:53	Dale L. Simmons	2088541
SM 2540 C-97	05/23/2019			05/28/2019 15:10	Sima Feizi	2088540, 2088541
SM 2540 D-97	05/23/2019			05/28/2019 15:10	Sima Feizi	2088540, 2088541
SM 4500 F-C-97	05/23/2019			06/01/2019 17:41	Dale L. Simmons	2088540
	05/23/2019			06/01/2019 17:53	Dale L. Simmons	2088541
SM 5310 B-00	05/23/2019			05/29/2019 01:42	Julia Storbeck	2088542
	05/23/2019			05/29/2019 01:56	Julia Storbeck	2088543