

Chemical Analysis Report

NE-DIST-2020-12-23-01

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

Event Description: **Pellicer Creek and Pringle makeup**

Request ID: **RQ-2020-12-28-03**

Customer: **NE-DIST**

Project ID: **SMP**

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Date Certified: 20-JAN-2021 11:25



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: Pringle Br Unnamed Dirt Rd 0.5mi S Dave Br

Collection Date/Time: 12/22/2020 10:25

Field ID: 27010203

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2215552	EPA 180.1 Rev. 2.0	Turbidity	2.6	A	NTU	P391698	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P392041	
		Sulfate	0.86		mg SO4/L	P392043	
	SM 2120 B-2011	Color (true)	310	A	PCU	P391692	
	SM 2320 B-2011	Total Alkalinity	43		mg CaCO3/L	P391892	
	SM 2540 C-2011	TDS	148		mg/L	P391953	
	SM 2540 D-2011	TSS	2	U	mg/L	P391960	
	SM 4500 F-C-2011	Fluoride	0.047	I	mg F/L	P391894	MS
	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P391725	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9	J	mg N/L	P391995	MS
2215553	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P391741	
	EPA 365.1 Rev. 2.0	Total-P	0.053		mg P/L	P391757	
	SM 5310 B-2011	Organic Carbon	30		mg C/L	P391941	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.036		mg P/L	P391700	
	dissolved						

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Precision for replicate analysis is outside the control limits.

Sample Location: FB_122220

Collection Date/Time: 12/22/2020 10:30

Field ID: FB_122220

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2215555	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P391698	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P392041	
		Sulfate	0.20	U	mg SO4/L	P392043	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P391692	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P391892	
	SM 2540 C-2011	TDS	15	U	mg/L	P391952	
	SM 2540 D-2011	TSS	2	U	mg/L	P391959	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P391894	MS
2215556	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P391725	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P391839	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P391741	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P391757	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P391941	
2215557	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P391700	

Ref. Method and Comment:

SM 2540 D-2011: 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 and relative percent difference are unavailable because of analytical difficulties.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P391698

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392041

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392043

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391725

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391839

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391995

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391741

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P391757

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391700

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P391692

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P391892

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

Reference Method: SM 2540 C-2011
Batch ID: P391952

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P391953

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P391959

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P391960

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P391894

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P391941

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: P392041

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: P392043

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391725

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391839

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391995

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391741

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: P391757

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391700

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

Reference Method: SM 2120 B-2011
Batch ID: P391692

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P391892

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.1		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P391894

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.7		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P391941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392041

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215468	Chloride	97.5		P	90 - 110
2215984	Chloride	97.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P392043

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215468	Sulfate	97.0		P	90 - 110
2215984	Sulfate	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P391725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215517	Ammonia-N	97.8	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P391995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2216246	Kjeldahl Nitrogen	114	107	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P391741

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215674	NO2NO3-N	95.3	95.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P391757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215516	Total-P	100	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P391700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215554	O-Phosphate-P	95.7	96.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P391894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215931	Fluoride	93.0	91.5	F/F	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P391941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2215897	Organic Carbon	100		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P391698

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215552	Turbidity	2.71	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P392041

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215468	Chloride	0.00329	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P392043

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215468	Sulfate	0.448	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P391725

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215517	Ammonia-N	0.712	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P391995

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2216246	Kjeldahl Nitrogen	6.75	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P391741

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215674	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P391757

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215516	Total-P	0.486	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P391700

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215554	O-Phosphate-P	0.380	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2120 B-2011
Batch ID: P391692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215552	Color (true)	0.540	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P391892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215931	Total Alkalinity	2.78	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P391952

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215322	TDS	3.85	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P391953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215468	TDS	1.90	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P391894

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215931	Fluoride	1.45	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P391941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2215897	Organic Carbon	0.883	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A102763

Included Lab Sample IDs: 2215552, 2215555

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	106	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A102767

Included Lab Sample IDs: 2215552, 2215555

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: A102768

Included Lab Sample IDs: 2215554, 2215557

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.8	99.8	P/P	90 - 110
O-Phosphate-P	99.8	98.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A102776

Included Lab Sample IDs: 2215553, 2215556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	100	P/P	90 - 110
Ammonia-N	99.3	97.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A102788

Included Lab Sample IDs: 2215553, 2215556

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A102813

Included Lab Sample IDs: 2215556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A102819

Included Lab Sample IDs: 2215553

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	100	P/P	85 - 115

Reference Method: SM 2320 B-2011

Run ID: A102854

Included Lab Sample IDs: 2215552, 2215555

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

Reference Method: SM 2320 B-2011

Run ID: A102854

Included Lab Sample IDs: 2215552, 2215555

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.3	97.4	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A102854

Included Lab Sample IDs: 2215552, 2215555

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	95.8	96.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A102855

Included Lab Sample IDs: 2215556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	96.2	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A102874

Included Lab Sample IDs: 2215553, 2215556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	95.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A102875

Included Lab Sample IDs: 2215552, 2215555

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.8	100	P/P	90 - 110
Sulfate	99.5	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A102934

Included Lab Sample IDs: 2215553

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	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 SMP	MS
					LCS	
EPA 180.1 Rev. 2.0	Turbidity				2.71	
EPA 300.0 Rev. 2.1	Chloride	98.9	97.5	97.6	0.0032	
	Sulfate	99.0	97.0	99.8	0.448	
EPA 350.1 Rev. 2.0	Ammonia-N	100	97.8	98.8		0.712
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105				
	Kjeldahl Nitrogen	100	114	107		6.75
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	95.3	95.3		0.0
EPA 365.1 Rev. 2.0	Total-P	102	100	99.7		0.486
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	95.7	96.2		0.380
SM 2120 B-2011	Color (true)	103			0.540	
SM 2320 B-2011	Total Alkalinity	97.1			2.78	
SM 2540 C-2011	TDS				3.85	
	TDS				1.90	
SM 4500 F-C-2011	Fluoride	95.7	93.0	91.5		1.45
SM 5310 B-2011	Organic Carbon	95.3	100			0.883

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2215552, 2215555
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2215552, 2215555
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2215552, 2215555
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2215553, 2215556
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2215553, 2215556
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2215553, 2215556
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2215553, 2215556
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2215554, 2215557
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2215552, 2215555
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2215552, 2215555
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2215552, 2215555
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2215552, 2215555
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2215552, 2215555
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2215553, 2215556

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	12/23/2020			12/23/2020 14:15	Yen Ta	2215552, 2215555
EPA 300.0 Rev. 2.1	12/23/2020			01/06/2021 23:51	Lipi Saha	2215552
	12/23/2020			01/07/2021 00:03	Lipi Saha	2215555
EPA 350.1 Rev. 2.0	12/23/2020			12/26/2020 19:04	Ping Hua	2215553
	12/23/2020			12/26/2020 19:51	Ping Hua	2215556
EPA 351.2 Rev. 2.0	12/23/2020	01/06/2021 14:20	David Boose	01/07/2021 13:51	Virginia P. Brown	2215553
	12/23/2020	12/29/2020 10:24	Yen Ta	12/30/2020 17:19	Virginia P. Brown	2215556
EPA 353.2 Rev. 2.0	12/23/2020			12/28/2020 08:46	Beverly Y. Sanders	2215553
	12/23/2020			12/28/2020 08:47	Beverly Y. Sanders	2215556
EPA 365.1 Rev. 2.0	12/23/2020	12/28/2020 12:53	Yen Ta	12/29/2020 13:49	Shengyu Wang	2215556
	12/23/2020	12/28/2020 12:53	Yen Ta	12/29/2020 17:16	Benjamin T. Nordmann	2215553
EPA 365.1 Rev. 2.0 dissolved	12/23/2020			12/23/2020 16:14	Virginia P. Brown	2215554
	12/23/2020			12/23/2020 16:21	Virginia P. Brown	2215557
SM 2120 B-2011	12/23/2020			12/23/2020 14:43	Benjamin T. Nordmann	2215555
	12/23/2020			12/23/2020 14:44	Benjamin T. Nordmann	2215552
SM 2320 B-2011	12/23/2020			12/30/2020 17:51	Dale L. Simmons	2215552
	12/23/2020			12/30/2020 18:00	Dale L. Simmons	2215555
SM 2540 C-2011	12/23/2020			12/26/2020 16:45	Yijie Li	2215552, 2215555
SM 2540 D-2011	12/23/2020			12/26/2020 16:45	Yijie Li	2215552, 2215555
SM 4500 F-C-2011	12/23/2020			12/30/2020 17:51	Dale L. Simmons	2215552
	12/23/2020			12/30/2020 18:00	Dale L. Simmons	2215555
SM 5310 B-2011	12/23/2020			01/04/2021 08:54	Touraj Touran	2215553
	12/23/2020			01/04/2021 09:07	Touraj Touran	2215556