

Chemical Analysis Report

CEN-DIST-2021-11-24-01

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

Event Description: **Volusia Blue + Blank**
Request ID: **RQ-2021-11-15-09**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:

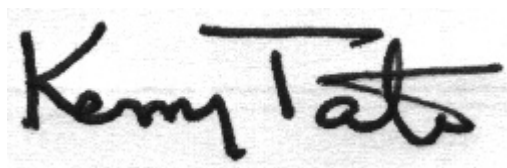
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 14-DEC-2021 12:52

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 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: Lake Ingram East

Collection Date/Time: 11/23/2021 10:08

Field ID: G4CE0155

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291243	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P406764	
	EPA 300.0 Rev. 2.1	Chloride	9.3	A	mg Cl/L	P407155	
		Sulfate	3.4	A	mg SO4/L	P407158	
	SM 2120 B-2011	Color (true)	26	A	PCU	P406763	
	SM 2320 B-2011	Total Alkalinity	8.4		mg CaCO3/L	P407029	
	SM 2540 C-2011	TDS	45		mg/L	P407178	
	SM 2540 D-2011	TSS	3	I	mg/L	P407179	
	SM 4500 F-C-2011	Fluoride	0.036	I	mg F/L	P407038	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P407082	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P406982	
2291244	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P406773	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P406827	
	SM 5310 B-2011	Organic Carbon	9.1		mg C/L	P407060	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P406762	
	dissolved						

Ref. Method and Comment:

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

Sample Location: FB

Collection Date/Time: 11/23/2021 10:32

Field ID: FB_11232021

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2291246	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P406764	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P407155	
		Sulfate	0.20	U	mg SO4/L	P407158	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P406763	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P407029	
	SM 2540 C-2011	TDS	15	U	mg/L	P407178	
	SM 2540 D-2011	TSS	2	U	mg/L	P407179	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P407038	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P407082	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P406982	
2291247	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P406774	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P406827	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P407060	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P406762	
	dissolved						
2291248	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P406762	

Ref. Method and Comment:

SM 2540 D-2011: 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: P406764

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407155

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407158

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407082

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406982

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406773

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406774

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406827

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P406762

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: P406763

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P407029

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

Reference Method: SM 2540 C-2011
Batch ID: P407178

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P407179

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P407038

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P407060

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: P407155

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P407158

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P407082

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P406982

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: P406773

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P406774

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: P406827

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P406762

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

Reference Method: SM 2120 B-2011
 Batch ID: P406763

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.4		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P407029

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.6		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P407038

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P407060

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291243	Chloride	98.9		P	90 - 110
2291468	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407158

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291243	Sulfate	97.0		P	90 - 110
2291468	Sulfate	97.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291244	Ammonia-N	98.2	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406982

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291244	Kjeldahl Nitrogen	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291001	NO2NO3-N	97.0	96.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291341	NO2NO3-N	95.0	95.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406827

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291430	Total-P	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P406762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291245	O-Phosphate-P	94.4	95.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P407038

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292330	Fluoride	98.3	101	P/P	92 - 107

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P407060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2290296	Organic Carbon	102		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P406764

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291217	Turbidity	1.92	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291243	Chloride	1.04	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407158

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291243	Sulfate	1.90	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291244	Ammonia-N	0.613	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291244	Kjeldahl Nitrogen	0.196	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291001	NO2NO3-N	0.419	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291341	NO2NO3-N	0.525	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406827

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291430	Total-P	1.49	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P406762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291245	O-Phosphate-P	0.844	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P406763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291243	Color (true)	0.134	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P407029

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292330	Total Alkalinity	1.87	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P407178

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291216	TDS	1.72	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P407038

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292330	Fluoride	1.47	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P407060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2290296	Organic Carbon	1.04	Sample	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A109089

Included Lab Sample IDs: 2291245, 2291248

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.6	99.5	P/P	90 - 110
O-Phosphate-P	99.7	99.6	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A109090

Included Lab Sample IDs: 2291243, 2291246

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.5	99.9	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A109091

Included Lab Sample IDs: 2291243, 2291246

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109108

Included Lab Sample IDs: 2291244, 2291247

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	98.5	P/P	90 - 110
NO2NO3-N	99.0	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109194

Included Lab Sample IDs: 2291244, 2291247

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

Reference Method: SM 2320 B-2011

Run ID: A109203

Included Lab Sample IDs: 2291243, 2291246

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	97.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A109203

Included Lab Sample IDs: 2291243, 2291246

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109213

Included Lab Sample IDs: 2291244, 2291247

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109213

Included Lab Sample IDs: 2291244, 2291247

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.7	95.5	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A109215

Included Lab Sample IDs: 2291244, 2291247

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	97.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A109228

Included Lab Sample IDs: 2291244, 2291247

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	98.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A109256

Included Lab Sample IDs: 2291243, 2291246

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

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 180.1 Rev. 2.0	Turbidity				1.92	
EPA 300.0 Rev. 2.1	Chloride	100	98.9	101	1.04	
	Sulfate	98.4	97.0	97.9	1.90	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	98.2	99.0		0.613
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	101	102		0.196
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	97.0	96.4		0.419
	NO ₂ NO ₃ -N	99.0	95.0	95.5		0.525
EPA 365.1 Rev. 2.0	Total-P	104	105	103		1.49
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.3	94.4	95.2		0.844
SM 2120 B-2011	Color (true)	99.4			0.134	
SM 2320 B-2011	Total Alkalinity	99.6			1.87	
SM 2540 C-2011	TDS				1.72	
SM 4500 F-C-2011	Fluoride	102	98.3	101		1.47
SM 5310 B-2011	Organic Carbon	100	102		1.04	

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2291243, 2291246
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2291243, 2291246
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2291243, 2291246
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2291244, 2291247
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2291244, 2291247
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2291244, 2291247
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2291244, 2291247
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2291245, 2291248
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2291243, 2291246
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2291243, 2291246
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2291243, 2291246
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2291243, 2291246
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2291243, 2291246
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2291244, 2291247

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	11/24/2021			11/24/2021 15:37	Khloe J Berg	2291243, 2291246
EPA 300.0 Rev. 2.1	11/24/2021			12/07/2021 05:59	James L Waggeberby	2291243
	11/24/2021			12/07/2021 07:00	James L Waggeberby	2291246
EPA 350.1 Rev. 2.0	11/24/2021			12/06/2021 15:17	Ping Hua	2291244
	11/24/2021			12/06/2021 15:32	Ping Hua	2291247
EPA 351.2 Rev. 2.0	11/24/2021	12/03/2021 12:03	Benjamin T. Nordmann	12/06/2021 09:35	Alexandra J Mattheus	2291244
	11/24/2021	12/03/2021 12:03	Benjamin T. Nordmann	12/06/2021 09:40	Alexandra J Mattheus	2291247
EPA 353.2 Rev. 2.0	11/24/2021			11/29/2021 09:46	Beverly Y. Sanders	2291244
	11/24/2021			11/29/2021 10:05	Beverly Y. Sanders	2291247
EPA 365.1 Rev. 2.0	11/24/2021	12/01/2021 13:15	Simonne.V. Calhoun	12/03/2021 12:27	Shengyu Ding	2291247
	11/24/2021	12/01/2021 13:15	Simonne.V. Calhoun	12/03/2021 12:30	Shengyu Ding	2291244
EPA 365.1 Rev. 2.0 dissolved	11/24/2021			11/24/2021 15:12	James L Waggeberby	2291245
	11/24/2021			11/24/2021 15:25	James L Waggeberby	2291248
SM 2120 B-2011	11/24/2021			11/24/2021 15:12	Madeline Gruver	2291243
	11/24/2021			11/24/2021 15:13	Madeline Gruver	2291246
SM 2320 B-2011	11/24/2021			12/04/2021 00:10	Dale L. Simmons	2291243
	11/24/2021			12/04/2021 00:19	Dale L. Simmons	2291246
SM 2540 C-2011	11/24/2021			11/29/2021 15:32	Yijie Li	2291243, 2291246
SM 2540 D-2011	11/24/2021			11/29/2021 14:36	Yijie Li	2291243, 2291246
SM 4500 F-C-2011	11/24/2021			12/04/2021 00:10	Dale L. Simmons	2291243
	11/24/2021			12/04/2021 00:19	Dale L. Simmons	2291246
SM 5310 B-2011	11/24/2021			12/04/2021 09:56	Touraj Touran	2291244
	11/24/2021			12/04/2021 10:07	Touraj Touran	2291247