Chemical Analysis Report

SW-DIST-2022-06-14-01

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

Event Description: **Run 2**
Request ID: **RQ-2022-06-13-06**
Customer: **SW-DIST**
Project ID: **SMP**

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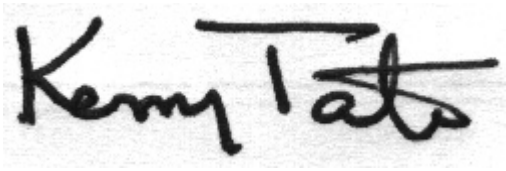
Date Certified: 06-JUL-2022 10:22



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: Blue Spring Run - Citrus County **Collection Date/Time: 06/13/2022 11:45**

Field ID: G4SW0071 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2334321	DEP SOP: NU-094-1	Color (true)**	2.5	U	PCU	P415209	
	EPA 180.1 Rev. 2.0	Turbidity	0.20	I	NTU	P415202	
	EPA 300.0 Rev. 2.1	Chloride	7.3		mg Cl/L	P415544	
		Sulfate	15		mg SO4/L	P415547	
	SM 2320 B-2011	Total Alkalinity	161		mg CaCO3/L	P415748	
	SM 2540 C-2011	TDS	183		mg/L	P415656	
	SM 2540 D-2011	TSS	2	U	mg/L	P415648	
	SM 4500-F- C-2011	Fluoride	0.042	I	mg F/L	P415752	
2334324	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P415824	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P415536	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.67		mg N/L	P415997	
	EPA 365.1 Rev. 2.0	Total-P	0.033		mg P/L	P415469	
	SM 5310 B-2011	Organic Carbon	0.62	I	mg C/L	P415407	

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 are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Otting @ Center **Collection Date/Time: 06/13/2022 12:30**

Field ID: G4SW0113 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2334322	DEP SOP: NU-094-1	Color (true)**	19		PCU	P415209	
	EPA 180.1 Rev. 2.0	Turbidity	9.0		NTU	P415202	
	EPA 300.0 Rev. 2.1	Chloride	2.5		mg Cl/L	P415544	
		Sulfate	0.20	U	mg SO4/L	P415547	
	SM 2320 B-2011	Total Alkalinity	51		mg CaCO3/L	P415748	
	SM 2540 C-2011	TDS	67		mg/L	P415656	
	SM 2540 D-2011	TSS	17		mg/L	P415648	
	SM 4500-F- C-2011	Fluoride	0.040	I	mg F/L	P415752	
2334325	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P415824	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P415783	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P415997	
	EPA 365.1 Rev. 2.0	Total-P	0.057		mg P/L	P415469	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P415407	

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 are unavailable because of high analyte concentration in the QC sample.

Sample Location: FB **Collection Date/Time: 06/13/2022 12:40**

Field ID: FB_06132022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2334323	DEP SOP: NU-094-1	Color (true)**	2.5	U	PCU	P415209	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P415202	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P415544	
		Sulfate	0.20	U	mg SO4/L	P415547	
	SM 2320 B-2011	Total Alkalinity	1.0	U	mg CaCO3/L	P415748	
	SM 2540 C-2011	TDS	15	U	mg/L	P415656	
	SM 2540 D-2011	TSS	2	U	mg/L	P415648	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P415752	
2334326	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P415824	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P415783	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P415997	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P415469	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P415407	

Ref. Method and Comment:
SM 2320 B-2011: The MDL was elevated due to analytical difficulties.
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 are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P415209

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P415202

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415544

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415547

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415824

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415536

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415783

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415997

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P415469

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P415748

Component	Result	Code	Units
Total Alkalinity	1.0	U	mg CaCO3/L

Reference Method: SM 2540 C-2011
Batch ID: P415656

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P415648

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P415752

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P415407

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P415209

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P415202

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415544

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415547

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	97.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415824

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415536

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415783

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415997

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P415469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P415748

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: P415752

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P415407

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415544

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333771	Chloride	96.5		P	90 - 110
2334322	Chloride	98.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415547

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2333771	Sulfate	95.6		P	90 - 110
2334322	Sulfate	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415824

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2334324	Ammonia-N	98.6	97.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415997

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2334332	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P415469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2334360	Total-P	110	108	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P415752

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2334354	Fluoride	98.1	98.1	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P415407

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2334207	Organic Carbon	97.2	97.2	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P415209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334206	Color (true)	1.51	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P415202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334285	Turbidity	5.46	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415544

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333771	Chloride	0.210	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P415547

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333771	Sulfate	0.649	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415824

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334324	Ammonia-N	1.13	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2333672	Kjeldahl Nitrogen	5.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334325	Kjeldahl Nitrogen	3.78	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415997

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334332	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P415469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334360	Total-P	1.05	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P415748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334354	Total Alkalinity	1.22	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P415656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334052	TDS	7.07	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P415752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334354	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P415407

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2334207	Organic Carbon	0.0	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A112824
Included Lab Sample IDs: 2334321, 2334322, 2334323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105
Turbidity	100	100	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A112827
Included Lab Sample IDs: 2334321, 2334322, 2334323

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

Reference Method: SM 5310 B-2011
Run ID: A112926
Included Lab Sample IDs: 2334324, 2334325, 2334326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	95.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A112976
Included Lab Sample IDs: 2334321, 2334322, 2334323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.1	99.9	P/P	90 - 110
Chloride	99.9	100	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110
Sulfate	99.8	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A113008
Included Lab Sample IDs: 2334325

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A113015
Included Lab Sample IDs: 2334324, 2334326

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

Reference Method: SM 2320 B-2011
Run ID: A113064
Included Lab Sample IDs: 2334321, 2334322, 2334323

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.6	97.6	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500-F- C-2011
Run ID: A113064
Included Lab Sample IDs: 2334321, 2334322, 2334323

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A113073
Included Lab Sample IDs: 2334324

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A113107
Included Lab Sample IDs: 2334324, 2334325, 2334326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A113163
Included Lab Sample IDs: 2334325, 2334326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A113172
Included Lab Sample IDs: 2334324, 2334325, 2334326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	100	P/P	90 - 110
NO2NO3-N	97.0	96.0	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	101				1.51	
EPA 180.1 Rev. 2.0	Turbidity	96.6				5.46	
EPA 300.0 Rev. 2.1	Chloride	97.5	96.5	98.3		0.210	
	Sulfate	97.5	95.6	98.2		0.649	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	98.6	97.4			1.13
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103					5.12
	Kjeldahl Nitrogen	105					3.78
EPA 353.2 Rev. 2.0	NO2NO3-N	100	100	100			0.0
EPA 365.1 Rev. 2.0	Total-P	107	108	110			1.05
SM 2320 B-2011	Total Alkalinity	99.6				1.22	
SM 2540 C-2011	TDS					7.07	
SM 4500-F- C-2011	Fluoride	96.9	98.1	98.1			0.0
SM 5310 B-2011	Organic Carbon	95.4	97.2	97.2			0.0

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2334321, 2334322, 2334323
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2334321, 2334322, 2334323
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2334321, 2334322, 2334323
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2334321, 2334322, 2334323
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2334324, 2334325, 2334326
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2334324, 2334325, 2334326
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2334324, 2334325, 2334326
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2334324, 2334325, 2334326
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2334321, 2334322, 2334323
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2334321, 2334322, 2334323
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2334321, 2334322, 2334323
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2334321, 2334322, 2334323
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2334324, 2334325, 2334326

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	06/14/2022			06/14/2022 17:23	Samantha L Bates	2334321
	06/14/2022			06/14/2022 17:24	Samantha L Bates	2334322, 2334323
EPA 180.1 Rev. 2.0	06/14/2022			06/14/2022 16:22	Khloe J Berg	2334321
	06/14/2022			06/14/2022 16:23	Khloe J Berg	2334322
	06/14/2022			06/14/2022 16:27	Khloe J Berg	2334323
EPA 300.0 Rev. 2.1	06/14/2022			06/21/2022 16:10	Anna M. Plaviak	2334322
	06/14/2022			06/21/2022 19:46	Anna M. Plaviak	2334321
	06/14/2022			06/21/2022 19:58	Anna M. Plaviak	2334323
EPA 350.1 Rev. 2.0	06/14/2022			06/27/2022 12:43	Ping Hua	2334324
	06/14/2022			06/27/2022 12:52	Ping Hua	2334325
	06/14/2022			06/27/2022 12:58	Ping Hua	2334326
EPA 351.2 Rev. 2.0	06/14/2022	06/23/2022 16:39	Samantha L Bates	06/24/2022 15:58	Alexandra J Mattheus	2334324
	06/14/2022	06/28/2022 15:50	Samantha L Bates	06/29/2022 11:29	Alexandra J Mattheus	2334325
	06/14/2022	06/28/2022 15:50	Samantha L Bates	06/29/2022 11:34	Alexandra J Mattheus	2334326
EPA 353.2 Rev. 2.0	06/14/2022			06/28/2022 16:12	Touraj Touran	2334324
	06/14/2022			06/28/2022 16:14	Touraj Touran	2334326
	06/14/2022			06/28/2022 17:31	Touraj Touran	2334325
EPA 365.1 Rev. 2.0	06/14/2022	06/22/2022 17:36	Adam P Silver	06/23/2022 12:12	James L Waggerby	2334325
	06/14/2022	06/22/2022 17:36	Adam P Silver	06/23/2022 14:31	James L Waggerby	2334326
	06/14/2022	06/22/2022 17:36	Adam P Silver	06/23/2022 14:33	James L Waggerby	2334324
SM 2320 B-2011	06/14/2022			06/23/2022 03:42	Dale L. Simmons	2334321
	06/14/2022			06/23/2022 03:55	Dale L. Simmons	2334322
	06/14/2022			06/23/2022 04:05	Dale L. Simmons	2334323
SM 2540 C-2011	06/14/2022			06/17/2022 14:36	Yijie Li	2334321, 2334322, 2334323
SM 2540 D-2011	06/14/2022			06/17/2022 14:36	Yijie Li	2334321, 2334322, 2334323
SM 4500-F- C-2011	06/14/2022			06/23/2022 03:42	Dale L. Simmons	2334321
	06/14/2022			06/23/2022 03:55	Dale L. Simmons	2334322
	06/14/2022			06/23/2022 04:05	Dale L. Simmons	2334323
SM 5310 B-2011	06/14/2022			06/17/2022 21:57	Khloe J Berg	2334324
	06/14/2022			06/17/2022 22:11	Khloe J Berg	2334325
	06/14/2022			06/17/2022 22:25	Khloe J Berg	2334326