Chemical Analysis Report

SW-DIST-2023-10-17-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Run 4**
Request ID: **RQ-2023-09-18-34**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 30-OCT-2023 11:43

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: CRYSTAL LAKE AT CENTER **Collection Date/Time: 10/16/2023 10:25**

Field ID: G3SW0076 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2445178	DEP SOP: NU-094-1	Color (true)	21		PCU	P436618	
	EPA 180.1 Rev. 2.0	Turbidity	8.6		NTU	P436620	
	EPA 300.0 Rev. 2.1	Chloride	9.2		mg Cl/L	P436821	
		Sulfate	5.1		mg SO4/L	P436824	
	SM 2320 B-2011	Total Alkalinity	27		mg CaCO3/L	P436799	
	SM 2540 C-2015	TDS	70		mg/L	P437082	
	SM 2540 D-2015	TSS	11	I	mg/L	P437021	
	SM 4500-F- C-2011	Fluoride	0.19		mg F/L	P436803	
2445180	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P436810	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P436637	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P436906	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P436652	
	SM 5310 B-2011	Organic Carbon	9.0		mg C/L	P436850	
2445182	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P436625	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: FB **Collection Date/Time: 10/16/2023 10:45**

Field ID: FB_10162023 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2445179	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P436619	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P436620	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P436821	
		Sulfate	0.20	U	mg SO4/L	P436824	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P436799	
	SM 2540 C-2015	TDS	15	U	mg/L	P437082	
	SM 2540 D-2015	TSS	2	U	mg/L	P437021	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P436803	
2445181	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P436810	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P436637	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P436906	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P436652	
	SM 5310 B-2011	Organic Carbon	0.57	I	mg C/L	P436850	
2445183	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P436625	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
SM 5310 B-2011: The result was confirmed on 10/25/2023.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P436618

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P436619

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P436620

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436821

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436824

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436810

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436637

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436906

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436652

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436625

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

Reference Method: SM 2320 B-2011
Batch ID: P436799

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-2015
Batch ID: P437082

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P437021

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P436803

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P436850

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: P436618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.0		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P436619

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.5		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P436620

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436821

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436824

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436810

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436637

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436906

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436652

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436625

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

Reference Method: SM 2320 B-2011
Batch ID: P436799

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.1		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P437082

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

Reference Method: SM 2540 D-2015
Batch ID: P437021

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.2		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P436803

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.7		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P436850

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436821

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445094	Chloride	104		P	90 - 110
2445372	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436824

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445094	Sulfate	103		P	90 - 110
2445372	Sulfate	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436810

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445180	Ammonia-N	106	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436637

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445126	Kjeldahl Nitrogen	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445180	NO2NO3-N	94.7	95.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436652

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445180	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436625

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445182	O-Phosphate-P	98.0	98.6	P/P	90 - 110

Reference Method: SM 5310 B-2011
Batch ID: P436850

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445180	Organic Carbon	96.0	96.3	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P436618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445092	Color (true)	0.403	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P436619

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445220	Color (true)	0.307	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P436620

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445093	Turbidity	3.24	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436821

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445094	Chloride	1.97	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436824

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445094	Sulfate	1.20	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445180	Ammonia-N	2.89	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436637

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445126	Kjeldahl Nitrogen	0.0202	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445180	NO2NO3-N	1.02	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436652

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445180	Total-P	0.0406	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P436625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445182	O-Phosphate-P	0.610	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P436799

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445672	Total Alkalinity	1.03	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P437082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445187	TDS	5.22	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P436803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445672	Fluoride	0.947	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P436850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445180	Organic Carbon	0.212	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A122198
Included Lab Sample IDs: 2445178, 2445179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 110
Color (true)	102	102	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A122199
Included Lab Sample IDs: 2445178, 2445179

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A122200
Included Lab Sample IDs: 2445182, 2445183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.8	P/P	90 - 110
O-Phosphate-P	99.1	99.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A122209
Included Lab Sample IDs: 2445178, 2445179

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A122239
Included Lab Sample IDs: 2445180, 2445181

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122258
Included Lab Sample IDs: 2445180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.6	98.9	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A122259
Included Lab Sample IDs: 2445178, 2445179

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.6	98.8	P/P	90 - 110
Total Alkalinity	98.8	95.8	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500-F- C-2011
Run ID: A122259
Included Lab Sample IDs: 2445178, 2445179

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A122263
Included Lab Sample IDs: 2445180, 2445181

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

Reference Method: SM 5310 B-2011
Run ID: A122276
Included Lab Sample IDs: 2445180, 2445181

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122291
Included Lab Sample IDs: 2445181

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122299
Included Lab Sample IDs: 2445180, 2445181

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	96.5	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)	99.0				0.403	
	Color (true)	99.5				0.307	
EPA 180.1 Rev. 2.0	Turbidity	104				3.24	
EPA 300.0 Rev. 2.1	Chloride	102	104	106		1.97	
	Sulfate	101	103	106		1.20	
EPA 350.1 Rev. 2.0	Ammonia-N	99.6	106	102			2.89
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	100	100			0.0202
EPA 353.2 Rev. 2.0	NO2NO3-N	97.0	94.7	95.7			1.02
EPA 365.1 Rev. 2.0	Total-P	99.6	107	107			0.0406
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.7	98.0	98.6			0.610
SM 2320 B-2011	Total Alkalinity	97.1				1.03	
SM 2540 C-2015	TDS	93.2				5.22	
SM 2540 D-2015	TSS	95.2					
SM 4500-F- C-2011	Fluoride	99.7					0.947
SM 5310 B-2011	Organic Carbon	94.2	96.0	96.3			0.212

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2445178, 2445179
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2445178, 2445179
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2445178, 2445179
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2445178, 2445179
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2445180, 2445181
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2445180, 2445181
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2445180, 2445181
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2445180, 2445181
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2445182, 2445183
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2445178, 2445179
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2445178, 2445179
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2445178, 2445179
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2445178, 2445179
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2445180, 2445181

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	10/17/2023			10/17/2023 15:35	Anna M. Plaviak	2445178
	10/17/2023			10/17/2023 15:39	Anna M. Plaviak	2445179
EPA 180.1 Rev. 2.0	10/17/2023			10/17/2023 14:46	Khloe J Berg	2445178
	10/17/2023			10/17/2023 14:47	Khloe J Berg	2445179
EPA 300.0 Rev. 2.1	10/17/2023			10/19/2023 06:38	James L Waggerby	2445178
	10/17/2023			10/19/2023 07:23	James L Waggerby	2445179
EPA 350.1 Rev. 2.0	10/17/2023			10/20/2023 11:26	Ping Hua	2445180
	10/17/2023			10/20/2023 11:39	Ping Hua	2445181
EPA 351.2 Rev. 2.0	10/17/2023	10/18/2023 11:29	Ping Hua	10/19/2023 12:33	Ping Hua	2445180
	10/17/2023	10/18/2023 11:29	Ping Hua	10/19/2023 12:34	Ping Hua	2445181
EPA 353.2 Rev. 2.0	10/17/2023			10/20/2023 15:17	Fadila Guebre	2445180
	10/17/2023			10/20/2023 15:30	Fadila Guebre	2445181
EPA 365.1 Rev. 2.0	10/17/2023	10/18/2023 13:42	Adam P Silver	10/20/2023 11:40	James L Waggerby	2445180
	10/17/2023	10/18/2023 13:42	Adam P Silver	10/23/2023 11:47	Chandler E Cox	2445181
EPA 365.1 Rev. 2.0 dissolved	10/17/2023			10/17/2023 15:32	Elise M. Gillis	2445182
	10/17/2023			10/17/2023 16:27	Elise M. Gillis	2445183
SM 2320 B-2011	10/17/2023			10/19/2023 22:57	Dale L. Simmons	2445178
	10/17/2023			10/19/2023 23:50	Dale L. Simmons	2445179
SM 2540 C-2015	10/17/2023			10/20/2023 16:03	Yijie Li	2445178, 2445179
SM 2540 D-2015	10/17/2023			10/20/2023 16:03	Yijie Li	2445178, 2445179
SM 4500-F- C-2011	10/17/2023			10/19/2023 22:57	Dale L. Simmons	2445178
	10/17/2023			10/19/2023 23:50	Dale L. Simmons	2445179
SM 5310 B-2011	10/17/2023			10/19/2023 22:56	Elise M. Gillis	2445180
	10/17/2023			10/20/2023 00:04	Elise M. Gillis	2445181