

Chemical Analysis Report

NW-DIST-2021-06-16-03

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

Event Description: **Project Greenshores**
Request ID: **RQ-2021-06-14-07**
Customer: **NW-DIST**
Project ID: **DISTRICT**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 308
Pensacola, FL 32502-5794
Attn: Michael King

For additional information please contact
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 12-JUL-2021 14:15



NON-CONFORMANCE REPORT INCLUDED

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: Range Marker East of Bayou Texar

Collection Date/Time: 06/14/2021 11:12

Field ID: 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2255231	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P399809	
	SM 2120 B-2011	Color (true)	6.2	Q	PCU	P399804	
	SM 2540 D-2011	TSS	3	I	mg/L	P400049	
2255245	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P400224	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	I	mg N/L	P399932	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P399870	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P400205	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The sample expired upon receipt.

Sample Location: Midpoint between Bay Bridge and Muscogee Wharf

Collection Date/Time: 06/14/2021 11:30

Field ID: 2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2255232	EPA 180.1 Rev. 2.0	Turbidity	1.9	A	NTU	P399809	
	SM 2120 B-2011	Color (true)	5.6	I	PCU	P399804	
	SM 2540 D-2011	TSS	3	U	mg/L	P400049	
2255246	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P400224	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.29	I	mg N/L	P400011	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P399870	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P400205	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: East End of Primary Stormdrain

Collection Date/Time: 06/14/2021 11:40

Field ID: 3

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2255233	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P399809	
	SM 2120 B-2011	Color (true)	4.5	I	PCU	P399804	
	SM 2540 D-2011	TSS	3	U	mg/L	P400049	
2255247	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P400224	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	I	mg N/L	P400011	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P399870	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P400205	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: South of Primary Stormdrain

Collection Date/Time: 06/14/2021 11:50

Field ID: 4

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2255234	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P399809	
	SM 2120 B-2011	Color (true)	6.4		PCU	P399804	
	SM 2540 D-2011	TSS	5	I	mg/L	P400049	
2255248	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	I	mg N/L	P400224	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	I	mg N/L	P400011	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P399870	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P400205	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: End of Chase Street

Collection Date/Time: 06/14/2021 12:06

Field ID: 5

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2255235	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P399809	
	SM 2120 B-2011	Color (true)	4.6	IA	PCU	P399804	
	SM 2540 D-2011	TSS	6	I	mg/L	P400049	
2255249	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P400228	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28	I	mg N/L	P400011	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P399870	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P400205	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Midpoint between Muscogee and Hawkshaw

Collection Date/Time: 06/14/2021 12:15

Field ID: 6

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2255236	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P399809	
	SM 2120 B-2011	Color (true)	4.8	I	PCU	P399804	
	SM 2540 D-2011	TSS	4	IA	mg/L	P400050	
2255250	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P400228	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31	I	mg N/L	P400011	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P399870	
	EPA 365.1 Rev. 2.0	Total-P	0.012		mg P/L	P400205	

Ref. Method and Comment:

SM 2120 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Non-Conformance Report

NCR ID: 8893

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255237	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255238	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255239	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255240	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255241	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255242	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255243	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255244	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255251	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255252	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255253	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255254	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255255	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255256	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255257	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255258	

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived late, samples received outside the acceptable temperature range.

Resolution: Samples will be qualified as appropriate.

Customer contacted, they elected to cancel affected samples. Email correspondence attached to sample submittal forms.

Biology and Chemistry supervisors were notified by email.

Authorized by/Date: Joshua Ayres 7/9/2021

NCR ID: 8894

<u>Event(s)</u>	<u>Job(s)</u>	<u>Sample(s)</u>	<u>Test(s)</u>
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255231	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255232	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255233	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255234	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255235	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255236	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255245	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255246	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255247	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255248	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255249	
NW-DIST-2021-06-16-03	TLH-2021-06-16-44	2255250	

NCR Type: SHIPPING/RECEIVING

NCR Category: Samples arrived late

Observation: Samples arrived late, samples received within the acceptable temperature range.

Resolution: Samples will be qualified as appropriate.

Customer contacted, email correspondence attached to sample submittal forms.

Biology and Chemistry supervisors were notified by email.

Authorized by/Date: Joshua Ayres 6/28/2021

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P399809

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400228

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400011

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399870

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400205

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

Reference Method: SM 2120 B-2011
Batch ID: P399804

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2540 D-2011
Batch ID: P400049

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P400050

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400228

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400011

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: P399870

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400205

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

Reference Method: SM 2120 B-2011
Batch ID: P399804

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2257147	Ammonia-N	106	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400228

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255249	Ammonia-N	96.2	98.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254968	Kjeldahl Nitrogen	99.2	95.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400011

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2254325	Kjeldahl Nitrogen	108	96.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399870

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255132	NO2NO3-N	95.8	96.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400205

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2255577	Total-P	101	99.0	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P399809

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255232	Turbidity	5.21	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400224

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2257147	Ammonia-N	1.33	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P400228

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255249	Ammonia-N	1.95	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P399932

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254968	Kjeldahl Nitrogen	2.37	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P400011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254325	Kjeldahl Nitrogen	9.26	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P399870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255132	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P400205

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2255577	Total-P	2.06	Spike	P	0 - 20

Reference Method: SM 2540 D-2011
Batch ID: P400049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2254967	TSS	7.41	Sample	P	0 - 10

Quality Assurance Report Precision

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A106119

Included Lab Sample IDs: 2255231, 2255232, 2255233, 2255234, 2255235, 2255236

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A106120

Included Lab Sample IDs: 2255231, 2255232, 2255233, 2255234, 2255235, 2255236

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.0	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A106143

Included Lab Sample IDs: 2255245, 2255246, 2255247, 2255248, 2255249, 2255250

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A106212

Included Lab Sample IDs: 2255245

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.8	93.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A106277

Included Lab Sample IDs: 2255246, 2255247, 2255248, 2255249, 2255250

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	95.1	P/P	90 - 110
Kjeldahl Nitrogen	97.6	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A106295

Included Lab Sample IDs: 2255245, 2255246, 2255247, 2255248, 2255249, 2255250

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	98.6	P/P	90 - 110
Ammonia-N	98.8	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106349

Included Lab Sample IDs: 2255245, 2255246, 2255247, 2255248, 2255249, 2255250

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.8	P/P	90 - 110
Total-P	102	100	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					5.21	
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	106	105			1.33
	Ammonia-N	97.8	96.2	98.2			1.95
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.8	99.2	95.1			2.37
	Kjeldahl Nitrogen	100	108	96.8			9.26
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	98.5	95.8	96.3			0.506
EPA 365.1 Rev. 2.0	Total-P	104	101	99.0			2.06
SM 2120 B-2011	Color (true)	100					
SM 2540 D-2011	TSS					7.41	

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2255231, 2255232, 2255233, 2255234, 2255235, 2255236
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2255245, 2255246, 2255247, 2255248, 2255249, 2255250
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2255245, 2255246, 2255247, 2255248, 2255249, 2255250
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2255245, 2255246, 2255247, 2255248, 2255249, 2255250
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2255245, 2255246, 2255247, 2255248, 2255249, 2255250
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2255231, 2255232, 2255233, 2255234, 2255235, 2255236
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2255231, 2255232, 2255233, 2255234, 2255235, 2255236

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	06/16/2021			06/16/2021 10:59	Sarah A Nixon	2255231
	06/16/2021			06/16/2021 11:02	Sarah A Nixon	2255232
	06/16/2021			06/16/2021 11:08	Sarah A Nixon	2255233
	06/16/2021			06/16/2021 11:09	Sarah A Nixon	2255234
	06/16/2021			06/16/2021 11:10	Sarah A Nixon	2255235
	06/16/2021			06/16/2021 11:12	Sarah A Nixon	2255236
EPA 350.1 Rev. 2.0	06/16/2021			06/25/2021 11:35	Ping Hua	2255245
	06/16/2021			06/25/2021 11:36	Ping Hua	2255246
	06/16/2021			06/25/2021 11:37	Ping Hua	2255247
	06/16/2021			06/25/2021 11:39	Ping Hua	2255248
	06/16/2021			06/25/2021 13:04	Ping Hua	2255249
	06/16/2021			06/25/2021 13:08	Ping Hua	2255250
EPA 351.2 Rev. 2.0	06/16/2021	06/18/2021 14:20	Benjamin T. Nordmann	06/21/2021 12:13	Letuzia M De Oliveira	2255245
	06/16/2021	06/21/2021 15:02	Benjamin T. Nordmann	06/24/2021 13:45	Letuzia M De Oliveira	2255246
	06/16/2021	06/21/2021 15:02	Benjamin T. Nordmann	06/24/2021 13:46	Letuzia M De Oliveira	2255247
	06/16/2021	06/21/2021 15:02	Benjamin T. Nordmann	06/24/2021 13:51	Letuzia M De Oliveira	2255248
	06/16/2021	06/21/2021 15:02	Benjamin T. Nordmann	06/24/2021 13:53	Letuzia M De Oliveira	2255249
	06/16/2021	06/21/2021 15:02	Benjamin T. Nordmann	06/24/2021 13:54	Letuzia M De Oliveira	2255250
EPA 353.2 Rev. 2.0	06/16/2021			06/17/2021 11:26	Beverly Y. Sanders	2255245
	06/16/2021			06/17/2021 11:27	Beverly Y. Sanders	2255246
	06/16/2021			06/17/2021 11:28	Beverly Y. Sanders	2255247
	06/16/2021			06/17/2021 11:29	Beverly Y. Sanders	2255248
	06/16/2021			06/17/2021 11:30	Beverly Y. Sanders	2255249
	06/16/2021			06/17/2021 11:31	Beverly Y. Sanders	2255250
EPA 365.1 Rev. 2.0	06/16/2021	06/25/2021 12:24	Madeline Gruver	06/29/2021 14:23	Shengyu Ding	2255245
	06/16/2021	06/25/2021 12:24	Madeline Gruver	06/29/2021 14:24	Shengyu Ding	2255246
	06/16/2021	06/25/2021 12:24	Madeline Gruver	06/29/2021 14:25	Shengyu Ding	2255247
	06/16/2021	06/25/2021 12:24	Madeline Gruver	06/29/2021 14:26	Shengyu Ding	2255248
	06/16/2021	06/25/2021 12:24	Madeline Gruver	06/29/2021 14:34	Shengyu Ding	2255249
	06/16/2021	06/25/2021 12:24	Madeline Gruver	06/29/2021 14:35	Shengyu Ding	2255250
SM 2120 B-2011	06/16/2021			06/16/2021 11:16	Madeline Gruver	2255231
	06/16/2021			06/16/2021 11:17	Madeline Gruver	2255232, 2255233
	06/16/2021			06/16/2021 11:18	Madeline Gruver	2255234
	06/16/2021			06/16/2021 11:20	Madeline Gruver	2255235
	06/16/2021			06/16/2021 11:21	Madeline Gruver	2255236
SM 2540 D-2011	06/16/2021			06/18/2021 15:41	Yijie Li	2255231, 2255232, 2255233, 2255234, 2255235, 2255236