Chemical Analysis Report

NW-DIST-2022-05-11-01

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

Event Description: **Project GreenShores Quarterly Sampling**
Request ID: **RQ-2022-05-09-06**
Customer: **NW-DIST**
Project ID: **DISTRICT**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Miranda Butler

For additional information please contact
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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 07-JUN-2022 10:41

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: Midpoint between Muscogee and Hawkshaw **Collection Date/Time: 05/09/2022 11:19**

Field ID: 6 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326142	DEP SOP: NU-094-1	Color (true)**	16	Y	PCU	P413697	
	EPA 180.1 Rev. 2.0	Turbidity	2.9	Y	NTU	P413737	
	SM 2540 D-2011	TSS	13	Y	mg/L	P414175	
2326146	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I Y	mg N/L	P414095	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.36	I Y	mg N/L	P414147	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.017	Y	mg N/L	P413886	
	EPA 365.1 Rev. 2.0	Total-P	0.014	Y	mg P/L	P413989	

Ref. Method and Comment:
DEP SOP: NU-094-1: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 180.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.
EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

Sample Location: Midpoint between bridge and port spoil pond **Collection Date/Time: 05/09/2022 11:25**

Field ID: 7 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326143	DEP SOP: NU-094-1	Color (true)**	18	Y	PCU	P413697	
	EPA 180.1 Rev. 2.0	Turbidity	2.5	Y	NTU	P413737	
	SM 2540 D-2011	TSS	5	I Y	mg/L	P414175	
2326147	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I Y	mg N/L	P414095	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I Y	mg N/L	P413925	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I Y	mg N/L	P413886	
	EPA 365.1 Rev. 2.0	Total-P	0.012	Y	mg P/L	P413989	

Ref. Method and Comment:
DEP SOP: NU-094-1: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 180.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.
EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

Sample Location: West of Primary Stormdrain **Collection Date/Time: 05/09/2022 11:05**

Field ID: 8 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326144	DEP SOP: NU-094-1	Color (true)**	15	YQ	PCU	P413697	
	EPA 180.1 Rev. 2.0	Turbidity	3.0	YA	NTU	P413737	
	SM 2540 D-2011	TSS	7	I Y	mg/L	P414175	
2326148	EPA 350.1 Rev. 2.0	Ammonia-N	0.025	Y	mg N/L	P414095	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28	I Y	mg N/L	P413925	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036	Y	mg N/L	P413886	
	EPA 365.1 Rev. 2.0	Total-P	0.015	Y	mg P/L	P413989	

Ref. Method and Comment:
DEP SOP: NU-094-1: Sample received outside of the acceptable temperature range. Please see NCR. The sample expired upon receipt.
EPA 180.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.
EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

Sample Location: West of Hawkshaw Lagoon **Collection Date/Time: 05/09/2022 11:47**

Field ID: 9 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326145	DEP SOP: NU-094-1	Color (true)**	15	Y	PCU	P413697	
	EPA 180.1 Rev. 2.0	Turbidity	6.1	Y	NTU	P413737	
	SM 2540 D-2011	TSS	10	I AY	mg/L	P414175	
2326149	EPA 350.1 Rev. 2.0	Ammonia-N	0.025	Y	mg N/L	P414095	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48	Y	mg N/L	P414006	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.026	Y	mg N/L	P413886	
	EPA 365.1 Rev. 2.0	Total-P	0.017	Y	mg P/L	P413989	

Ref. Method and Comment:
DEP SOP: NU-094-1: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 180.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.
EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

Sample Location: South of Bayfront Stormdrain **Collection Date/Time: 05/09/2022 11:42**

Field ID: 10 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326156	DEP SOP: NU-094-1	Color (true)**	17	Y	PCU	P413697	
	EPA 180.1 Rev. 2.0	Turbidity	2.8	Y	NTU	P413737	
	SM 2540 D-2011	TSS	4	I Y	mg/L	P414175	
2326157	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I Y	mg N/L	P414095	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40	Y	mg N/L	P414006	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I Y	mg N/L	P413886	
	EPA 365.1 Rev. 2.0	Total-P	0.012	Y	mg P/L	P413989	

Ref. Method and Comment:
DEP SOP: NU-094-1: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 180.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. Sample received outside of the acceptable temperature range. Please see NCR.
EPA 350.1 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 351.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 353.2 Rev. 2.0: Sample received outside of the acceptable temperature range. Please see NCR.
EPA 365.1 Rev. 2.0: Total-P: Sample received outside of the acceptable temperature range. Please see NCR.

Non-Conformance Report

NCR ID: 9375

Event(s)	Job(s)	Sample(s)	Test(s)
NW-DIST-2022-05-11-01			

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, email correspondence attached to sample submittal forms.
Biology and Chemistry supervisors were notified by email.

Authorized by/Date: Kyle Klug 5/11/2022

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: DEP SOP: NU-094-1
Batch ID: P413697

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413737

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414095

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413925

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414006

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414147

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413886

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413989

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

Reference Method: SM 2540 D-2011
Batch ID: P414175

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P413697

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.7		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414095

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413925

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414006

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414147

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.6		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413886

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413989

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414095

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326147	Ammonia-N	95.6	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413925

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325692	Kjeldahl Nitrogen	98.2	93.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325208	Kjeldahl Nitrogen	91.2	95.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326146	Kjeldahl Nitrogen	104	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325206	NO2NO3-N	97.8	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325859	Total-P	96.0	99.6	P/P	90 - 110

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P413697

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326064	Color (true)	1.28	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P413737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326144	Turbidity	2.31	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P414095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326147	Ammonia-N	1.72	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413925

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325692	Kjeldahl Nitrogen	4.72	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325208	Kjeldahl Nitrogen	2.97	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414147

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326146	Kjeldahl Nitrogen	1.67	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P413886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325206	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P413989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325859	Total-P	3.49	Spike	P	0 - 20

Quality Assurance Report
Precision

* 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: A112064
Included Lab Sample IDs: 2326142, 2326143, 2326144, 2326145, 2326156

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.8	101	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A112080
Included Lab Sample IDs: 2326142, 2326143, 2326144, 2326145, 2326156

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112169
Included Lab Sample IDs: 2326146, 2326147, 2326148, 2326149, 2326157

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112261
Included Lab Sample IDs: 2326146, 2326147, 2326148, 2326149, 2326157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.5	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112297
Included Lab Sample IDs: 2326146, 2326147, 2326148, 2326149, 2326157

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112314
Included Lab Sample IDs: 2326149, 2326157

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112349
Included Lab Sample IDs: 2326147, 2326148

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.4	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112419
Included Lab Sample IDs: 2326146

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	107	102	P/P	90 - 110

Quality Assurance Report
Calibration Verification

* 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)	98.7				1.28	
EPA 180.1 Rev. 2.0	Turbidity	97.3				2.31	
EPA 350.1 Rev. 2.0	Ammonia-N	98.8	95.6	97.4			1.72
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	98.2	93.1			4.72
	Kjeldahl Nitrogen	98.3	91.2	95.1			2.97
	Kjeldahl Nitrogen	98.6	104	102			1.67
EPA 353.2 Rev. 2.0	NO2NO3-N	96.0	97.8	98.3			0.494
EPA 365.1 Rev. 2.0	Total-P	103	96.0	99.6			3.49

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2326142, 2326143, 2326144, 2326145, 2326156
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2326142, 2326143, 2326144, 2326145, 2326156
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2326146, 2326147, 2326148, 2326149, 2326157
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2326146, 2326147, 2326148, 2326149, 2326157
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2326146, 2326147, 2326148, 2326149, 2326157
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2326146, 2326147, 2326148, 2326149, 2326157
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2326142, 2326143, 2326144, 2326145, 2326156

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	05/11/2022			05/11/2022 11:12	Anna M. Plaviak	2326144
	05/11/2022			05/11/2022 11:13	Anna M. Plaviak	2326142
	05/11/2022			05/11/2022 11:14	Anna M. Plaviak	2326143, 2326145
	05/11/2022			05/11/2022 11:15	Anna M. Plaviak	2326156
EPA 180.1 Rev. 2.0	05/11/2022			05/11/2022 10:46	Khloe J Berg	2326144
	05/11/2022			05/11/2022 10:47	Khloe J Berg	2326142, 2326143
	05/11/2022			05/11/2022 10:48	Khloe J Berg	2326156
	05/11/2022			05/11/2022 10:50	Khloe J Berg	2326145
EPA 350.1 Rev. 2.0	05/11/2022			05/19/2022 11:23	Ping Hua	2326147
	05/11/2022			05/19/2022 11:31	Ping Hua	2326146
	05/11/2022			05/19/2022 11:33	Ping Hua	2326148
	05/11/2022			05/19/2022 11:34	Ping Hua	2326149
	05/11/2022			05/19/2022 11:35	Ping Hua	2326157
EPA 351.2 Rev. 2.0	05/11/2022	05/19/2022 15:12	Samantha L Bates	05/20/2022 14:19	Samantha L Bates	2326149
	05/11/2022	05/19/2022 15:12	Samantha L Bates	05/20/2022 14:21	Samantha L Bates	2326157
	05/11/2022	05/20/2022 08:33	Samantha L Bates	05/23/2022 15:18	Alexandra J Mattheus	2326147
	05/11/2022	05/20/2022 08:33	Samantha L Bates	05/23/2022 15:20	Alexandra J Mattheus	2326148
	05/11/2022	05/24/2022 09:04	Samantha L Bates	05/25/2022 11:25	Alexandra J Mattheus	2326146
EPA 353.2 Rev. 2.0	05/11/2022			05/16/2022 10:54	Beverly Y. Sanders	2326146
	05/11/2022			05/16/2022 10:56	Beverly Y. Sanders	2326147
	05/11/2022			05/16/2022 10:57	Beverly Y. Sanders	2326148
	05/11/2022			05/16/2022 10:58	Beverly Y. Sanders	2326149
	05/11/2022			05/16/2022 10:59	Beverly Y. Sanders	2326157
EPA 365.1 Rev. 2.0	05/11/2022	05/18/2022 16:09	Simonne.V. Calhoun	05/20/2022 15:19	James L Waggerby	2326146
	05/11/2022	05/18/2022 16:09	Simonne.V. Calhoun	05/20/2022 15:20	James L Waggerby	2326147
	05/11/2022	05/18/2022 16:09	Simonne.V. Calhoun	05/20/2022 15:28	James L Waggerby	2326148
	05/11/2022	05/18/2022 16:09	Simonne.V. Calhoun	05/20/2022 15:29	James L Waggerby	2326149
	05/11/2022	05/18/2022 16:09	Simonne.V. Calhoun	05/20/2022 15:30	James L Waggerby	2326157
SM 2540 D-2011	05/11/2022			05/13/2022 15:08	Yijie Li	2326142, 2326143, 2326144, 2326145, 2326156