

Chemical Analysis Report

NW-DIST-2022-08-17-01

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-2022-08-15-08**
Customer: **NW-DIST**
Project ID: **DISTRICT**

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

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Certified by: Colin Wright, Program Administrator

Date Certified: 08-SEP-2022 14:28



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 Maker East of Texar

Collection Date/Time: 08/15/2022 09:30

Field ID: 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349769	DEP SOP: NU-094-1	Color (true)	11	YQ	PCU	P418270	
	EPA 180.1 Rev. 2.0	Turbidity	2.6	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418611	
2349783	EPA 350.1 Rev. 2.0	Ammonia-N	0.008	Y	mg N/L	P418247	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.36	IY	mg N/L	P418446	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	IY	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.016	Y	mg P/L	P418605	

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. The sample expired upon receipt.

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 Bay Bridge and Muscogee **Collection Date/Time: 08/15/2022 09:43**

Field ID: 2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349770	DEP SOP: NU-094-1	Color (true)	11	YQ	PCU	P418270	
	EPA 180.1 Rev. 2.0	Turbidity	2.2	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418611	
2349784	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	IY	mg N/L	P418247	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	IY	mg N/L	P418446	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011	Y	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.013	Y	mg P/L	P418605	

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. The sample expired upon receipt.

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: East of Primary Stormdrain

Collection Date/Time: 08/15/2022 09:51

Field ID: 3

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349771	DEP SOP: NU-094-1	Color (true)	11	YQ	PCU	P418270	
	EPA 180.1 Rev. 2.0	Turbidity	1.6	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418611	
2349785	EPA 350.1 Rev. 2.0	Ammonia-N	0.024	Y	mg N/L	P418247	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41	Y	mg N/L	P418644	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.030	Y	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.013	Y	mg P/L	P418605	

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. The sample expired upon receipt.

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 Primary Stormdrain

Collection Date/Time: 08/15/2022 09:57

Field ID: 4

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349772	DEP SOP: NU-094-1	Color (true)	12	YQ	PCU	P418270	
	EPA 180.1 Rev. 2.0	Turbidity	1.2	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418611	
2349786	EPA 350.1 Rev. 2.0	Ammonia-N	0.032	Y	mg N/L	P418489	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.41	Y	mg N/L	P418644	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.040	Y	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.011	Y	mg P/L	P418713	

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. The sample expired upon receipt.

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: End of Chase St.

Collection Date/Time: 08/15/2022 10:13

Field ID: 5

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349773	DEP SOP: NU-094-1	Color (true)	9.6	YQ	PCU	P418270	
	EPA 180.1 Rev. 2.0	Turbidity	1.8	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418611	
2349787	EPA 350.1 Rev. 2.0	Ammonia-N	0.011	Y	mg N/L	P419066	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.018	Y	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.018	Y	mg P/L	P418605	

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. The sample expired upon receipt.

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 Muscogee and Hawkshaw

Collection Date/Time: 08/15/2022 10:23

Field ID: 6

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349774	DEP SOP: NU-094-1	Color (true)	11	YQ	PCU	P418270	
	EPA 180.1 Rev. 2.0	Turbidity	2.1	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	4	IY	mg/L	P418611	
2349788	EPA 350.1 Rev. 2.0	Ammonia-N	0.011	Y	mg N/L	P418739	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	IY	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.015	Y	mg P/L	P418605	

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. The sample expired upon receipt.

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: 08/15/2022 10:29

Field ID: 7

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349775	DEP SOP: NU-094-1	Color (true)	11	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	2.0	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	IY	mg/L	P418611	
2349789	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	IY	mg N/L	P418739	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	IY	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.016	Y	mg P/L	P418368	

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. The sample expired upon receipt.

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: 08/15/2022 10:05

Field ID: 8

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349776	DEP SOP: NU-094-1	Color (true)	10	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	1.4	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418612	
2349790	EPA 350.1 Rev. 2.0	Ammonia-N	0.041	Y	mg N/L	P418489	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35	IY	mg N/L	P418644	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.050	Y	mg N/L	P418379	
	EPA 365.1 Rev. 2.0	Total-P	0.016	Y	mg P/L	P418368	

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. The sample expired upon receipt.

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: 08/15/2022 10:58

Field ID: 9

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349777	DEP SOP: NU-094-1	Color (true)	11	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	1.9	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418612	
2349791	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P418739	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.071	Y	mg N/L	P418381	
	EPA 365.1 Rev. 2.0	Total-P	0.021	Y	mg P/L	P418368	

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. The sample expired upon receipt.

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: 08/15/2022 10:50

Field ID: 10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349778	DEP SOP: NU-094-1	Color (true)	12	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	1.9	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418612	
2349792	EPA 350.1 Rev. 2.0	Ammonia-N	0.019	Y	mg N/L	P418739	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.17	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015	Y	mg N/L	P418381	
	EPA 365.1 Rev. 2.0	Total-P	0.016	Y	mg P/L	P418368	

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. The sample expired upon receipt.

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: Seville Marina Inlet

Collection Date/Time: 08/15/2022 10:43

Field ID: 11

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349779	DEP SOP: NU-094-1	Color (true)	11	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	1.7	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418612	
2349793	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P418739	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.29	Y	mg N/L	P418381	
	EPA 365.1 Rev. 2.0	Total-P	0.042	Y	mg P/L	P418368	

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. The sample expired upon receipt.

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: East of Port Spoil Pond

Collection Date/Time: 08/15/2022 10:35

Field ID: 12

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349780	DEP SOP: NU-094-1	Color (true)	12	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	1.8	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	3	UY	mg/L	P418612	
2349794	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P418739	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	IY	mg N/L	P418381	
	EPA 365.1 Rev. 2.0	Total-P	0.015	Y	mg P/L	P418368	

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. The sample expired upon receipt.

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: Hawkshaw Lagoon at Memorial Bridge

Collection Date/Time: 08/15/2022 11:15

Field ID: 13

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349781	DEP SOP: NU-094-1	Color (true)	12	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	3.3	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	4	IY	mg/L	P418612	
2349795	EPA 350.1 Rev. 2.0	Ammonia-N	0.018	Y	mg N/L	P418739	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	IY	mg N/L	P418443	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	IY	mg N/L	P418381	
	EPA 365.1 Rev. 2.0	Total-P	0.046	Y	mg P/L	P418713	

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. The sample expired upon receipt.

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: 150ft. South of Hawkshaw Lagoon

Collection Date/Time: 08/15/2022 11:23

Field ID: 14

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349782	DEP SOP: NU-094-1	Color (true)	12	YQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	2.8	YQ	NTU	P418265	
	SM 2540 D-2011	TSS	4	IAY	mg/L	P418612	
2349796	EPA 350.1 Rev. 2.0	Ammonia-N	0.038	Y	mg N/L	P418489	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42	Y	mg N/L	P418644	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.047	Y	mg N/L	P418381	
	EPA 365.1 Rev. 2.0	Total-P	0.022	Y	mg P/L	P418713	

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. The sample expired upon receipt.

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: End of Chase St.

Collection Date/Time: 08/15/2022 10:17

Field ID: FB1

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2349797	DEP SOP: NU-094-1	Color (true)	2.5	UYQ	PCU	P418271	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	UYQ	NTU	P418265	
	SM 2540 D-2011	TSS	2	UY	mg/L	P418608	
2349798	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P418680	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	UY	mg N/L	P418442	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	UY	mg N/L	P418528	
	EPA 365.1 Rev. 2.0	Total-P	0.002	UY	mg P/L	P418367	

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. The sample expired upon receipt.

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: 9515

Event(s)

NW-DIST-2022-08-17-01

Job(s)

Sample(s)

Test(s)

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.

Authorized by/Date: Kyle Klug 8/23/2022

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: P418270

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P418271

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418265

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418247

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418489

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418739

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418442

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418443

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418446

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418644

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418379

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418381

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418528

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418367

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418368

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418605

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
Batch ID: P418713

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

Reference Method: SM 2540 D-2011
Batch ID: P418608

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P418611

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P418612

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: P418270

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P418271

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418265

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418247

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418489

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418739

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418442

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418443

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.7		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418446

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418644

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418379

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418381

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418528

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: P418367

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418368

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418605

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418713

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: P418247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349966	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418489

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349786	Ammonia-N	106	107	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349824	Ammonia-N	97.4	99.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418739

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349475	Ammonia-N	105	107	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351352	Ammonia-N	98.6	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418442

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349546	Kjeldahl Nitrogen	105	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418443

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349475	Kjeldahl Nitrogen	105	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418446

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2348028	Kjeldahl Nitrogen	103	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418644

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349796	Kjeldahl Nitrogen	99.2	100	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418379

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349576	NO2NO3-N	94.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418381

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349791	NO2NO3-N	98.1	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349824	NO2NO3-N	99.5	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349717	Total-P	108	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349789	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349551	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418713

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2351352	Total-P	104	104	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P418270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350231	Color (true)	2.50	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P418271

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350235	Color (true)	2.19	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349714	Turbidity	5.40	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349966	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418489

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349786	Ammonia-N	0.235	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349824	Ammonia-N	1.83	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418739

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349475	Ammonia-N	1.72	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351352	Ammonia-N	0.835	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418442

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349546	Kjeldahl Nitrogen	3.28	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349475	Kjeldahl Nitrogen	1.87	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2348028	Kjeldahl Nitrogen	2.70	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418644

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349796	Kjeldahl Nitrogen	0.961	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418379

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349576	NO2NO3-N	0.211	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349791	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349824	NO2NO3-N	0.501	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349717	Total-P	0.152	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349789	Total-P	0.541	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349551	Total-P	0.610	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418713

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2351352	Total-P	0.0867	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114157

Included Lab Sample IDs: 2349783, 2349784, 2349785

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.9	99.4	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A114165

Included Lab Sample IDs: 2349769, 2349770, 2349771, 2349772, 2349773, 2349774, 2349775, 2349776, 2349777, 2349778, 2349779, 2349780, 2349781, 2349782, 2349797

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

Reference Method: DEP SOP: NU-094-1

Run ID: A114167

Included Lab Sample IDs: 2349769, 2349770, 2349771, 2349772, 2349773, 2349774, 2349775, 2349776, 2349777, 2349778, 2349779, 2349780, 2349781, 2349782, 2349797

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.4	99.5	P/P	90 - 110
Color (true)	99.9	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114209

Included Lab Sample IDs: 2349783, 2349784, 2349785, 2349786, 2349787, 2349788, 2349789, 2349790, 2349791, 2349792, 2349793, 2349794, 2349795, 2349796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.0	P/P	90 - 110
NO2NO3-N	98.5	98.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114252

Included Lab Sample IDs: 2349786, 2349790, 2349796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.0	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A114268

Included Lab Sample IDs: 2349798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114298

Included Lab Sample IDs: 2349783, 2349784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.9	96.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114304

Included Lab Sample IDs: 2349789, 2349790, 2349791, 2349792, 2349793, 2349794, 2349798

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114314

Included Lab Sample IDs: 2349787, 2349788, 2349789, 2349791, 2349792, 2349793, 2349794, 2349795, 2349798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.3	96.1	P/P	90 - 110
Kjeldahl Nitrogen	96.1	94.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114343

Included Lab Sample IDs: 2349798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114348

Included Lab Sample IDs: 2349783, 2349784, 2349785, 2349787, 2349788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.8	P/P	90 - 110
Total-P	98.8	98.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114376

Included Lab Sample IDs: 2349788, 2349789, 2349791, 2349792, 2349793, 2349794, 2349795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.6	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A114393

Included Lab Sample IDs: 2349785, 2349786, 2349790, 2349796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.0	98.8	P/P	90 - 110
Kjeldahl Nitrogen	98.8	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A114435

Included Lab Sample IDs: 2349786, 2349795, 2349796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	99.0	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114517

Included Lab Sample IDs: 2349787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	96.9	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
DEP SOP: NU-094-1	Color (true)	100			2.50	
	Color (true)	98.8			2.19	
EPA 180.1 Rev. 2.0	Turbidity	96.5			5.40	
EPA 350.1 Rev. 2.0	Ammonia-N	100	102	102		0.0
	Ammonia-N	98.4	106	107		0.235
	Ammonia-N	100	97.4	99.4		1.83
	Ammonia-N	98.2	105	107		1.72
EPA 351.2 Rev. 2.0	Ammonia-N	94.4	98.6	97.6		0.835
	Kjeldahl Nitrogen	101	105	100		3.28
	Kjeldahl Nitrogen	95.7	105	103		1.87
	Kjeldahl Nitrogen	99.7	103	106		2.70
EPA 353.2 Rev. 2.0	Kjeldahl Nitrogen	102	99.2	100		0.961
	NO2NO3-N	98.5	94.2			0.211
	NO2NO3-N	97.0	98.1	98.1		0.0
	NO2NO3-N	98.5	99.5	100		0.501
EPA 365.1 Rev. 2.0	Total-P	108	108	108		0.152
	Total-P	107	103	104		0.541
	Total-P	102	102	102		0.610
	Total-P	103	104	104		0.0867

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2349769, 2349770, 2349771, 2349772, 2349773, 2349774, 2349775, 2349776, 2349777, 2349778, 2349779, 2349780, 2349781, 2349782, 2349797
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2349769, 2349770, 2349771, 2349772, 2349773, 2349774, 2349775, 2349776, 2349777, 2349778, 2349779, 2349780, 2349781, 2349782, 2349797
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2349783, 2349784, 2349785, 2349786, 2349787, 2349788, 2349789, 2349790, 2349791, 2349792, 2349793, 2349794, 2349795, 2349796, 2349798
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2349783, 2349784, 2349785, 2349786, 2349787, 2349788, 2349789, 2349790, 2349791, 2349792, 2349793, 2349794, 2349795, 2349796, 2349798
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2349783, 2349784, 2349785, 2349786, 2349787, 2349788, 2349789, 2349790, 2349791, 2349792, 2349793, 2349794, 2349795, 2349796, 2349798
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2349783, 2349784, 2349785, 2349786, 2349787, 2349788, 2349789, 2349790, 2349791, 2349792, 2349793, 2349794, 2349795, 2349796, 2349798
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2349769, 2349770, 2349771, 2349772, 2349773, 2349774, 2349775, 2349776, 2349777, 2349778, 2349779, 2349780, 2349781, 2349782, 2349797

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	08/17/2022			08/17/2022 16:05	Anna M. Plaviak	2349769
	08/17/2022			08/17/2022 16:06	Anna M. Plaviak	2349770, 2349771
	08/17/2022			08/17/2022 16:07	Anna M. Plaviak	2349772
	08/17/2022			08/17/2022 16:08	Anna M. Plaviak	2349773
	08/17/2022			08/17/2022 16:09	Anna M. Plaviak	2349774
	08/17/2022			08/17/2022 16:14	Anna M. Plaviak	2349775
	08/17/2022			08/17/2022 16:15	Anna M. Plaviak	2349776, 2349777
	08/17/2022			08/17/2022 16:16	Anna M. Plaviak	2349778
	08/17/2022			08/17/2022 16:17	Anna M. Plaviak	2349779, 2349780
	08/17/2022			08/17/2022 16:18	Anna M. Plaviak	2349781
	08/17/2022			08/17/2022 16:19	Anna M. Plaviak	2349782
	08/17/2022			08/17/2022 16:20	Anna M. Plaviak	2349797
EPA 180.1 Rev. 2.0	08/17/2022			08/17/2022 14:38	Khloe J Berg	2349769
	08/17/2022			08/17/2022 14:39	Khloe J Berg	2349770
	08/17/2022			08/17/2022 14:40	Khloe J Berg	2349771
	08/17/2022			08/17/2022 14:41	Khloe J Berg	2349772
	08/17/2022			08/17/2022 14:44	Khloe J Berg	2349773, 2349774
	08/17/2022			08/17/2022 14:47	Khloe J Berg	2349775
	08/17/2022			08/17/2022 14:48	Khloe J Berg	2349776, 2349777
	08/17/2022			08/17/2022 14:50	Khloe J Berg	2349778, 2349779
	08/17/2022			08/17/2022 14:52	Khloe J Berg	2349780
	08/17/2022			08/17/2022 14:54	Khloe J Berg	2349781
	08/17/2022			08/17/2022 14:55	Khloe J Berg	2349782
	08/17/2022			08/17/2022 14:56	Khloe J Berg	2349797
EPA 350.1 Rev. 2.0	08/17/2022			08/17/2022 12:55	Ping Hua	2349783
	08/17/2022			08/17/2022 12:57	Ping Hua	2349784
	08/17/2022			08/17/2022 12:58	Ping Hua	2349785
	08/17/2022			08/22/2022 15:13	Judith K. Clark	2349786
	08/17/2022			08/22/2022 15:14	Judith K. Clark	2349790
	08/17/2022			08/22/2022 15:17	Judith K. Clark	2349796
	08/17/2022			08/25/2022 10:25	Judith K. Clark	2349798
	08/17/2022			08/26/2022 11:14	Judith K. Clark	2349788
	08/17/2022			08/26/2022 11:16	Judith K. Clark	2349789
	08/17/2022			08/26/2022 11:17	Judith K. Clark	2349791
	08/17/2022			08/26/2022 11:18	Judith K. Clark	2349792
	08/17/2022			08/26/2022 11:20	Judith K. Clark	2349793
EPA 351.2 Rev. 2.0	08/17/2022			08/26/2022 11:21	Judith K. Clark	2349794
	08/17/2022			08/26/2022 11:22	Judith K. Clark	2349795
	08/17/2022			09/02/2022 10:52	Ping Hua	2349787
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 15:59	Samantha L Bates	2349798

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 351.2 Rev. 2.0	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:13	Samantha L Bates	2349787
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:15	Samantha L Bates	2349788
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:17	Samantha L Bates	2349789
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:18	Samantha L Bates	2349791
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:20	Samantha L Bates	2349792
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:22	Samantha L Bates	2349793
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:23	Samantha L Bates	2349794
	08/17/2022	08/22/2022 16:54	Samantha L Bates	08/24/2022 16:25	Samantha L Bates	2349795
	08/17/2022	08/23/2022 16:31	Samantha L Bates	08/24/2022 11:08	Samantha L Bates	2349783
	08/17/2022	08/23/2022 16:31	Samantha L Bates	08/24/2022 11:10	Samantha L Bates	2349784
	08/17/2022	08/25/2022 14:20	Alexandra J Mattheus	08/26/2022 13:40	Alexandra J Mattheus	2349785
	08/17/2022	08/25/2022 14:20	Alexandra J Mattheus	08/26/2022 13:42	Alexandra J Mattheus	2349786
	08/17/2022	08/25/2022 14:20	Alexandra J Mattheus	08/26/2022 13:47	Alexandra J Mattheus	2349790
	08/17/2022	08/25/2022 14:20	Alexandra J Mattheus	08/26/2022 13:49	Alexandra J Mattheus	2349796
EPA 353.2 Rev. 2.0	08/17/2022			08/19/2022 11:24	Beverly Y. Sanders	2349783
	08/17/2022			08/19/2022 11:25	Beverly Y. Sanders	2349784
	08/17/2022			08/19/2022 11:26	Beverly Y. Sanders	2349785
	08/17/2022			08/19/2022 11:27	Beverly Y. Sanders	2349786
	08/17/2022			08/19/2022 11:28	Beverly Y. Sanders	2349787
	08/17/2022			08/19/2022 11:30	Beverly Y. Sanders	2349788
	08/17/2022			08/19/2022 11:31	Beverly Y. Sanders	2349789
	08/17/2022			08/19/2022 11:32	Beverly Y. Sanders	2349790
	08/17/2022			08/19/2022 11:39	Beverly Y. Sanders	2349791
	08/17/2022			08/19/2022 11:45	Beverly Y. Sanders	2349792
	08/17/2022			08/19/2022 11:46	Beverly Y. Sanders	2349793
	08/17/2022			08/19/2022 11:47	Beverly Y. Sanders	2349794
	08/17/2022			08/19/2022 11:48	Beverly Y. Sanders	2349795
	08/17/2022			08/19/2022 11:50	Beverly Y. Sanders	2349796
	08/17/2022			08/23/2022 10:14	Beverly Y. Sanders	2349798
EPA 365.1 Rev. 2.0	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 15:39	James L Waggeberby	2349798
	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 15:53	James L Waggeberby	2349789
	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 15:54	James L Waggeberby	2349790
	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 15:55	James L Waggeberby	2349791
	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 15:56	James L Waggeberby	2349792
	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 15:57	James L Waggeberby	2349793
	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 15:58	James L Waggeberby	2349794
	08/17/2022	08/24/2022 15:20	Simonne.V. Calhoun	08/25/2022 14:04	James L Waggeberby	2349783
	08/17/2022	08/24/2022 15:20	Simonne.V. Calhoun	08/25/2022 14:05	James L Waggeberby	2349784
	08/17/2022	08/24/2022 15:20	Simonne.V. Calhoun	08/25/2022 14:06	James L Waggeberby	2349785
	08/17/2022	08/24/2022 15:20	Simonne.V. Calhoun	08/25/2022 14:07	James L Waggeberby	2349787

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	08/17/2022	08/24/2022 15:20	Simonne.V. Calhoun	08/25/2022 15:25	James L Waggeberby	2349788
	08/17/2022	08/26/2022 08:28	Simonne.V. Calhoun	08/30/2022 14:51	Simonne.V. Calhoun	2349786
	08/17/2022	08/26/2022 08:28	Simonne.V. Calhoun	08/30/2022 14:52	Simonne.V. Calhoun	2349795, 2349796
SM 2540 D-2011	08/17/2022			08/19/2022 15:07	Yijie Li	2349769, 2349770, 2349771, 2349772, 2349773, 2349774, 2349775, 2349776, 2349777, 2349778, 2349779, 2349780, 2349781, 2349782, 2349797