Chemical Analysis Report

NW-DIST-2023-08-15-01

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

Event Description: **Project GreenShores Quarterly Sampling**
Request ID: **RQ-2023-08-14-02**
Customer: **NW-DIST**
Project ID: **DISTRICT**

Send Reports to:
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160 Government Center
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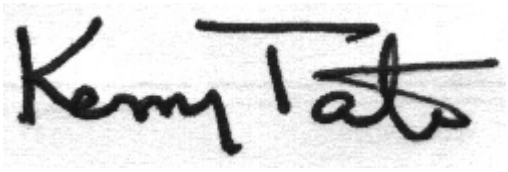
Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 11-SEP-2023 10:55



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: 08/14/2023 10:26**

Field ID: 1 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430946	DEP SOP: NU-094-1	Color (true)	7.7		PCU	P433863	
	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P433877	
	SM 2540 D-2015	TSS	12	A	mg/L	P434270	
2430960	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.44		mg N/L	P434082	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P433901	

Sample Location: Midpoint between Bay bridge and Muscogee Wharf **Collection Date/Time: 08/14/2023 10:37**

Field ID: 2 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430947	DEP SOP: NU-094-1	Color (true)	6.1		PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P433877	
	SM 2540 D-2015	TSS	4	I	mg/L	P434270	
2430961	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34	I	mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P433901	

Ref. Method and Comment:
DEP SOP: NU-094-1: 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: 08/14/2023 10:45**

Field ID: 3 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430948	DEP SOP: NU-094-1	Color (true)	5.8	I A	PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P433877	
	SM 2540 D-2015	TSS	8	I	mg/L	P434270	
2430962	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.38	I	mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P433901	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: South of primary stormdrain **Collection Date/Time: 08/14/2023 10:57**

Field ID: 4 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430949	DEP SOP: NU-094-1	Color (true)	5.2	I	PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P433877	
	SM 2540 D-2015	TSS	7	I	mg/L	P434270	
2430963	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40	I	mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: End of Chase Street **Collection Date/Time: 08/14/2023 11:12**

Field ID: 5 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430950	DEP SOP: NU-094-1	Color (true)	5.1	I	PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P433877	
	SM 2540 D-2015	TSS	7	I	mg/L	P434270	
2430964	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39	I	mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: 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: 08/14/2023 11:23**

Field ID: 6 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430951	DEP SOP: NU-094-1	Color (true)	6.4		PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P433877	
	SM 2540 D-2015	TSS	7	I	mg/L	P434270	
2430965	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39	I	mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Midpoint between bridge and port spoil pond **Collection Date/Time: 08/14/2023 11:30**

Field ID: 7 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430952	DEP SOP: NU-094-1	Color (true)	6.2		PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P433877	
	SM 2540 D-2015	TSS	8	I	mg/L	P434270	
2430966	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37	I	mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: West of primary stormdrain **Collection Date/Time: 08/14/2023 11:02**

Field ID: 8 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430953	DEP SOP: NU-094-1	Color (true)	5.3	I	PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P433877	
	SM 2540 D-2015	TSS	11		mg/L	P434270	
2430967	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P434314	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.018		mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.022		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: West of Hawkshaw Lagoon **Collection Date/Time: 08/14/2023 11:58**

Field ID: 9 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430954	DEP SOP: NU-094-1	Color (true)	5.9	I	PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P433877	
	SM 2540 D-2015	TSS	10	I	mg/L	P434270	
2430968	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P434315	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.007	I	mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.020		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: South of Bayfront stormdrain **Collection Date/Time: 08/14/2023 11:52**

Field ID: 10 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430955	DEP SOP: NU-094-1	Color (true)	5.8	I	PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P433877	
	SM 2540 D-2015	TSS	9	I	mg/L	P434270	
2430969	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P434315	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37	I	mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.020		mg N/L	P434439	
	EPA 365.1 Rev. 2.0	Total-P	0.021		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Seville Marina inlet **Collection Date/Time: 08/14/2023 11:47**

Field ID: 11 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430956	DEP SOP: NU-094-1	Color (true)	7.3		PCU	P433864	
	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P433877	
	SM 2540 D-2015	TSS	9	I	mg/L	P434270	
2430970	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P434315	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P434457	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P434440	
	EPA 365.1 Rev. 2.0	Total-P	0.023		mg P/L	P433902	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: East of port spoil pond **Collection Date/Time: 08/14/2023 11:39**

Field ID: 12 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430957	DEP SOP: NU-094-1	Color (true)	5.6	I	PCU	P433865	
	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P433877	
	SM 2540 D-2015	TSS	9	I	mg/L	P434270	
2430971	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P434315	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P434458	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P434440	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P433902	

Sample Location: Hawkshaw Lagoon at memorial bridge **Collection Date/Time: 08/14/2023 12:15**

Field ID: 13 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430958	DEP SOP: NU-094-1	Color (true)	18	A	PCU	P433865	
	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P433877	
	SM 2540 D-2015	TSS	7	I	mg/L	P434270	
2430972	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P434315	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P434458	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P434440	
	EPA 365.1 Rev. 2.0	Total-P	0.025		mg P/L	P433902	

Sample Location: 150ft. South of Hawkshaw Lagoon East stormdrain

Collection Date/Time: 08/14/2023 12:23

Field ID: 14

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430959	DEP SOP: NU-094-1	Color (true)	7.1		PCU	P433865	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P433877	
	SM 2540 D-2015	TSS	3	I	mg/L	P434270	
2430973	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P434315	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.52		mg N/L	P434458	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.010		mg N/L	P434440	
	EPA 365.1 Rev. 2.0	Total-P	0.023		mg P/L	P434272	

Sample Location: East end of primary stormdrain **Collection Date/Time: 08/14/2023 10:48**

Field ID: 3 (FB) Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430974	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P433865	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P433877	
	SM 2540 D-2015	TSS	2	U	mg/L	P434268	
2430975	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P434317	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P434319	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P434563	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P433905	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P433863

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P433864

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P433865

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433877

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434314

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434315

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434317

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434082

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434319

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: P434457

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434458

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434439

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434440

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434563

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433901

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433902

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433905

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434272

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 D-2015
Batch ID: P434268

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P434270

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: P433863

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P433864

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P433865

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433877

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434314

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: P434315

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434317

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: P434082

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: P434319

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434457

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.3		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434458

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434439

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434440

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434563

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433901

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433902

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433905

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434272

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P434268

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 2540 D-2015
Batch ID: P434270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	100		P	85 - 106

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434314

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430960	Ammonia-N	99.6	99.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434315

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430968	Ammonia-N	101	99.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430901	Ammonia-N	99.2	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430862	Kjeldahl Nitrogen	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434319

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430998	Kjeldahl Nitrogen	105	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434457

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430967	Kjeldahl Nitrogen	97.8	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434458

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430973	Kjeldahl Nitrogen	95.3	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434439

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430960	NO2NO3-N	98.7	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434440

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430970	NO2NO3-N	102	103	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434563

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430999	NO2NO3-N	95.5	95.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433901

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430863	Total-P	96.2	94.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433902

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430965	Total-P	98.4	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433905

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430900	Total-P	105	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434272

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431289	Total-P	104	105	P/P	90 - 110

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P433863

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430892	Color (true)	3.40	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P433865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430958	Color (true)	3.61	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430893	Turbidity	7.35	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434314

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430960	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434315

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430968	Ammonia-N	0.884	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430901	Ammonia-N	0.214	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430862	Kjeldahl Nitrogen	1.10	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434319

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430998	Kjeldahl Nitrogen	2.33	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434457

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430967	Kjeldahl Nitrogen	1.58	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P434458

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430973	Kjeldahl Nitrogen	1.70	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434439

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430960	NO2NO3-N	1.91	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430970	NO2NO3-N	0.922	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434563

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430999	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433901

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430863	Total-P	1.41	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433902

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430965	Total-P	0.406	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433905

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430900	Total-P	0.775	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431289	Total-P	0.607	Spike	P	0 - 20

Reference Method: SM 2540 D-2015
Batch ID: P434270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430946	TSS	3.28	Sample	P	0 - 10

* 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: A121044
Included Lab Sample IDs: 2430946, 2430947, 2430948, 2430949, 2430950, 2430951, 2430952, 2430953, 2430954, 2430955, 2430956, 2430957, 2430958, 2430959, 2430974

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 110
Color (true)	101	101	P/P	90 - 110
Color (true)	101	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A121048
Included Lab Sample IDs: 2430946, 2430947, 2430948, 2430949, 2430950, 2430951, 2430952, 2430953, 2430954, 2430955, 2430956, 2430957, 2430958, 2430959, 2430974

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A121102
Included Lab Sample IDs: 2430960, 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430975

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	99.0	P/P	90 - 110
Total-P	99.0	99.5	P/P	90 - 110
Total-P	99.5	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121184
Included Lab Sample IDs: 2430960

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.3	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A121231
Included Lab Sample IDs: 2430960, 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430973, 2430975

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.9	P/P	90 - 110
Ammonia-N	102	102	P/P	90 - 110
Ammonia-N	99.9	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121247
Included Lab Sample IDs: 2430975

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.9	98.0	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A121256
Included Lab Sample IDs: 2430973

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A121291
Included Lab Sample IDs: 2430960, 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121368
Included Lab Sample IDs: 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	100	101	P/P	90 - 110
Kjeldahl Nitrogen	101	101	P/P	90 - 110
Kjeldahl Nitrogen	101	98.6	P/P	90 - 110

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	100				3.40	
	Color (true)	101					
	Color (true)	101				3.61	
EPA 180.1 Rev. 2.0	Turbidity	98.5				7.35	
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	99.6	99.6			0.0
	Ammonia-N	98.8	101	99.8			0.884
	Ammonia-N	97.8	99.2	98.8			0.214
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	102	101			1.10
	Kjeldahl Nitrogen	105	105	108			2.33
	Kjeldahl Nitrogen	99.3	97.8	99.5			1.58
	Kjeldahl Nitrogen	99.5	95.3	97.2			1.70
EPA 353.2 Rev. 2.0	NO2NO3-N	101	98.7	101			1.91
	NO2NO3-N	102	102	103			0.922
	NO2NO3-N	101	95.5	95.0			0.494
EPA 365.1 Rev. 2.0	Total-P	100	96.2	94.8			1.41
	Total-P	101	98.4	98.8			0.406
	Total-P	100	105	106			0.775
	Total-P	106	104	105			0.607
SM 2540 D-2015	TSS	95.3					
	TSS	100				3.28	

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2430946, 2430947, 2430948, 2430949, 2430950, 2430951, 2430952, 2430953, 2430954, 2430955, 2430956, 2430957, 2430958, 2430959, 2430974
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2430946, 2430947, 2430948, 2430949, 2430950, 2430951, 2430952, 2430953, 2430954, 2430955, 2430956, 2430957, 2430958, 2430959, 2430974
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2430960, 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430973, 2430975
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2430960, 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430973, 2430975
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2430960, 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430973, 2430975
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2430960, 2430961, 2430962, 2430963, 2430964, 2430965, 2430966, 2430967, 2430968, 2430969, 2430970, 2430971, 2430972, 2430973, 2430975
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2430946, 2430947, 2430948, 2430949, 2430950, 2430951, 2430952, 2430953, 2430954, 2430955, 2430956, 2430957, 2430958, 2430959, 2430974

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	08/15/2023			08/15/2023 14:25	Samantha L Bates	2430946
	08/15/2023			08/15/2023 14:28	Samantha L Bates	2430947
	08/15/2023			08/15/2023 14:30	Samantha L Bates	2430948
	08/15/2023			08/15/2023 14:31	Samantha L Bates	2430949, 2430950
	08/15/2023			08/15/2023 14:32	Samantha L Bates	2430951
	08/15/2023			08/15/2023 14:33	Samantha L Bates	2430952
	08/15/2023			08/15/2023 14:34	Samantha L Bates	2430953, 2430954
	08/15/2023			08/15/2023 14:35	Samantha L Bates	2430955
	08/15/2023			08/15/2023 14:36	Samantha L Bates	2430956
	08/15/2023			08/15/2023 14:40	Samantha L Bates	2430957
	08/15/2023			08/15/2023 14:41	Samantha L Bates	2430958
	08/15/2023			08/15/2023 14:42	Samantha L Bates	2430959
	08/15/2023			08/15/2023 14:43	Samantha L Bates	2430974
EPA 180.1 Rev. 2.0	08/15/2023			08/15/2023 14:34	Chandler E Cox	2430946, 2430947
	08/15/2023			08/15/2023 14:36	Chandler E Cox	2430948, 2430949
	08/15/2023			08/15/2023 14:37	Chandler E Cox	2430950, 2430951
	08/15/2023			08/15/2023 14:39	Chandler E Cox	2430952, 2430953
	08/15/2023			08/15/2023 14:40	Chandler E Cox	2430954, 2430955
	08/15/2023			08/15/2023 14:41	Chandler E Cox	2430956, 2430957
	08/15/2023			08/15/2023 14:42	Chandler E Cox	2430958, 2430959
	08/15/2023			08/15/2023 14:43	Chandler E Cox	2430974
EPA 350.1 Rev. 2.0	08/15/2023			08/24/2023 12:02	Ping Hua	2430960
	08/15/2023			08/24/2023 12:05	Ping Hua	2430961
	08/15/2023			08/24/2023 12:07	Ping Hua	2430962
	08/15/2023			08/24/2023 12:08	Ping Hua	2430963
	08/15/2023			08/24/2023 12:09	Ping Hua	2430964
	08/15/2023			08/24/2023 12:11	Ping Hua	2430965
	08/15/2023			08/24/2023 12:12	Ping Hua	2430966
	08/15/2023			08/24/2023 12:14	Ping Hua	2430967
	08/15/2023			08/24/2023 12:28	Ping Hua	2430968
	08/15/2023			08/24/2023 12:36	Ping Hua	2430969
	08/15/2023			08/24/2023 12:38	Ping Hua	2430970
	08/15/2023			08/24/2023 12:39	Ping Hua	2430971
	08/15/2023			08/24/2023 12:40	Ping Hua	2430972
	08/15/2023			08/24/2023 12:42	Ping Hua	2430973
	08/15/2023			08/24/2023 13:30	Ping Hua	2430975
EPA 351.2 Rev. 2.0	08/15/2023	08/21/2023 14:13	Simonne.V. Calhoun	08/22/2023 17:37	Samantha L Bates	2430960
	08/15/2023	08/24/2023 12:32	Dana G. Hughes	08/25/2023 10:58	Samantha L Bates	2430975
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 09:43	Samantha L Bates	2430961
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 09:45	Samantha L Bates	2430962

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	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 09:49	Samantha L Bates	2430963
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 09:51	Samantha L Bates	2430964
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 09:53	Samantha L Bates	2430965
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 09:54	Samantha L Bates	2430966
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 09:56	Samantha L Bates	2430967
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 10:01	Samantha L Bates	2430968
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 10:02	Samantha L Bates	2430969
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 10:04	Samantha L Bates	2430970
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 10:12	Samantha L Bates	2430971
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 10:14	Samantha L Bates	2430972
	08/15/2023	09/01/2023 13:37	Simonne.V. Calhoun	09/06/2023 10:15	Samantha L Bates	2430973
EPA 353.2 Rev. 2.0	08/15/2023			08/28/2023 13:54	Anna M. Plaviak	2430960
	08/15/2023			08/28/2023 14:00	Anna M. Plaviak	2430961
	08/15/2023			08/28/2023 14:01	Anna M. Plaviak	2430962
	08/15/2023			08/28/2023 14:02	Anna M. Plaviak	2430963
	08/15/2023			08/28/2023 14:03	Anna M. Plaviak	2430964
	08/15/2023			08/28/2023 14:05	Anna M. Plaviak	2430965
	08/15/2023			08/28/2023 14:06	Anna M. Plaviak	2430966
	08/15/2023			08/28/2023 14:07	Anna M. Plaviak	2430967
	08/15/2023			08/28/2023 14:08	Anna M. Plaviak	2430968
	08/15/2023			08/28/2023 14:09	Anna M. Plaviak	2430969
	08/15/2023			08/28/2023 14:16	Anna M. Plaviak	2430970
	08/15/2023			08/28/2023 14:22	Anna M. Plaviak	2430971
	08/15/2023			08/28/2023 14:23	Anna M. Plaviak	2430972
	08/15/2023			08/28/2023 14:25	Anna M. Plaviak	2430973
	08/15/2023			09/01/2023 10:54	Anna M. Plaviak	2430975
EPA 365.1 Rev. 2.0	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:14	James L Waggerby	2430960
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:15	James L Waggerby	2430961
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:16	James L Waggerby	2430962
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:18	James L Waggerby	2430965
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:19	James L Waggerby	2430963
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:20	James L Waggerby	2430964
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:21	James L Waggerby	2430966
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:22	James L Waggerby	2430967
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:23	James L Waggerby	2430968
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:31	James L Waggerby	2430969
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:32	James L Waggerby	2430970
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:33	James L Waggerby	2430971
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:34	James L Waggerby	2430972
	08/15/2023	08/16/2023 16:02	Adam P Silver	08/17/2023 17:53	James L Waggerby	2430975

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	08/15/2023	08/24/2023 14:28	Alexis Price	08/25/2023 12:22	James L Waggerby	2430973
SM 2540 D-2015	08/15/2023			08/18/2023 16:04	Yijie Li	2430946, 2430947, 2430948, 2430949, 2430950, 2430951, 2430952, 2430953, 2430954, 2430955, 2430956, 2430957, 2430958, 2430959, 2430974