

Chemical Analysis Report

SO-DIST-2024-01-09-01

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

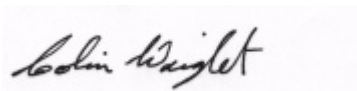
Event Description: **SCCF ALGAL DYNAMICS STUDY**
Request ID: **RQ-2023-12-04-49**
Customer: **SO-DIST**
Project ID: **DISCRTNARY**

Send Reports to:
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FLDEP South District Office
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Certified by: Colin Wright, Program Administrator

Date Certified: 22-JAN-2024 12:01

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light blue rectangular background.

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: 26.71393, -81.56266

Collection Date/Time: 01/08/2024 08:35

Field ID: CLEW 04

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459780	EPA 350.1 Rev. 2.0	Ammonia-N	0.076		mg N/L	P439897	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P439784	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P439958	
	EPA 365.1 Rev. 2.0	Total-P	0.086		mg P/L	P439809	
2459789	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.078		mg N/L	P439942	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.94		mg N/L	P439784	
2459798	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.061		mg P/L	P439717	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: 26.69315, 81.79630

Collection Date/Time: 01/08/2024 10:50

Field ID: ORANGE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459781	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P439897	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.97		mg N/L	P439784	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P439953	
	EPA 365.1 Rev. 2.0	Total-P	0.072		mg P/L	P439810	
2459790	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.033		mg N/L	P439942	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.80		mg N/L	P439784	
2459799	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P439717	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: 26.70324, 81.80525

Collection Date/Time: 01/08/2024 11:25

Field ID: POPASH

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459782	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P439897	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.86		mg N/L	P439784	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.028		mg N/L	P439953	
	EPA 365.1 Rev. 2.0	Total-P	0.095		mg P/L	P439810	
2459791	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.027		mg N/L	P439942	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.84		mg N/L	P439784	
2459800	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.039		mg P/L	P439717	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: 26.65737, 81.89425

Collection Date/Time: 01/08/2024 12:25

Field ID: HANCOCK

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459783	EPA 350.1 Rev. 2.0	Ammonia-N	0.057		mg N/L	P439897	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P439787	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P439953	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P439810	
2459792	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.057		mg N/L	P439942	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.64		mg N/L	P439787	
2459801	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P439717	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: 26.64467, -81.87899

Collection Date/Time: 01/08/2024 12:45

Field ID: CLEW07

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459784	EPA 350.1 Rev. 2.0	Ammonia-N	0.035		mg N/L	P439897	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.92		mg N/L	P439787	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P439953	
	EPA 365.1 Rev. 2.0	Total-P	0.078		mg P/L	P439810	
2459793	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.037		mg N/L	P439942	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.85		mg N/L	P439787	
2459802	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.056		mg P/L	P439717	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: CLEW04

Collection Date/Time: 01/08/2024 08:50

Field ID: FB_01082024

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459807	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P439899	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P439853	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P439953	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P439810	
2459808	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.002	U	mg N/L	P439942	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.080	U	mg N/L	P439787	
2459809	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P439717	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: 26.57761, -81.89881

Collection Date/Time: 01/08/2024 10:00

Field ID: WHISKEY

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459785	EPA 350.1 Rev. 2.0	Ammonia-N	0.14		mg N/L	P439898	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P439786	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.083		mg N/L	P440049	
	EPA 365.1 Rev. 2.0	Total-P	0.085		mg P/L	P439807	
2459794	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.14		mg N/L	P439904	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.73		mg N/L	P439786	
2459803	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.053		mg P/L	P439719	

Sample Location: 26.54335, -81.94011

Collection Date/Time: 01/08/2024 10:35

Field ID: CLEW09

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459786	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P439898	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.74		mg N/L	P439788	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P440049	
	EPA 365.1 Rev. 2.0	Total-P	0.070		mg P/L	P439807	
2459795	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.030		mg N/L	P439904	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.69		mg N/L	P439788	
2459804	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.054		mg P/L	P439719	

Sample Location: 26.52328, -82.00864

Collection Date/Time: 01/08/2024 11:10

Field ID: CLEW10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459787	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P439898	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P439788	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.089		mg N/L	P440049	
	EPA 365.1 Rev. 2.0	Total-P	0.058		mg P/L	P439807	
2459796	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.029		mg N/L	P439904	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.64		mg N/L	P439788	
2459805	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.044		mg P/L	P439719	

Sample Location: 26.47219, -82.01621

Collection Date/Time: 01/08/2024 11:38

Field ID: CLEW11

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2459788	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P439898	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39	I	mg N/L	P439788	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011		mg N/L	P440050	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P439807	
2459797	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.024		mg N/L	P439904	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.34	I	mg N/L	P439788	
2459806	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.020		mg P/L	P439719	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439897

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439898

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439899

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439904

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439942

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439784

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439786

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439787

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439788

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: P439853

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439784

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439786

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439787

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439788

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439953

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439958

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440049

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440050

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439807

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439809

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439810

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P439717

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P439719

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439897

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439899

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439904

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439784

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: P439786

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439787

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439788

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: P439853

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439784

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439786

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439787

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439788

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439953

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439958

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440049

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440050

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	107		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439807

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439809

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439810

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P439717

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P439719

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.7		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439897

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459589	Ammonia-N	97.4	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459917	Ammonia-N	98.2	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459845	Ammonia-N	95.8	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439904

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2460564	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459790	Ammonia-N	98.0	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439784

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459789	Kjeldahl Nitrogen	102	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459738	Kjeldahl Nitrogen	103	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439787

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459792	Kjeldahl Nitrogen	107	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459795	Kjeldahl Nitrogen	107	109	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439853

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459907	Kjeldahl Nitrogen	106	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439784

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459789	Kjeldahl Nitrogen	102	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459738	Kjeldahl Nitrogen	103	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439787

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459792	Kjeldahl Nitrogen	107	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459795	Kjeldahl Nitrogen	107	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439953

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459781	NO2NO3-N	96.0	95.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439958

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459530	NO2NO3-N	95.5	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440049

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459732	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459788	NO2NO3-N	106	108	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439807

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459737	Total-P	97.1	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439809

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459588	Total-P	104	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439810

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459783	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P439719

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2459804	O-Phosphate-P	99.8	97.3	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459589	Ammonia-N	1.01	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459917	Ammonia-N	0.621	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P439899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459845	Ammonia-N	1.82	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439904

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2460564	Ammonia-N	0.0	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P439942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459790	Ammonia-N	1.09	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439784

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459789	Kjeldahl Nitrogen	1.19	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459738	Kjeldahl Nitrogen	1.59	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459792	Kjeldahl Nitrogen	2.86	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459795	Kjeldahl Nitrogen	1.96	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P439853

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459907	Kjeldahl Nitrogen	0.922	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439784

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459789	Kjeldahl Nitrogen	1.19	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459738	Kjeldahl Nitrogen	1.59	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459792	Kjeldahl Nitrogen	2.86	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P439788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459795	Kjeldahl Nitrogen	1.96	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459781	NO2NO3-N	0.567	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P439958

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459530	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440049

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459732	NO2NO3-N	0.389	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459788	NO2NO3-N	1.77	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459737	Total-P	0.197	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439809

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459588	Total-P	2.50	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P439810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459783	Total-P	0.282	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P439717

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459801	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P439719

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2459804	O-Phosphate-P	1.64	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A123553

Included Lab Sample IDs: 2459798, 2459799, 2459800, 2459801, 2459802, 2459803, 2459804, 2459805, 2459806, 2459809

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.3	97.7	P/P	90 - 110
O-Phosphate-P	98.1	98.1	P/P	90 - 110
O-Phosphate-P	98.6	98.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A123607

Included Lab Sample IDs: 2459780, 2459781, 2459782, 2459783, 2459784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.9	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A123612

Included Lab Sample IDs: 2459785, 2459786, 2459787, 2459788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	99.2	P/P	90 - 110
Kjeldahl Nitrogen	105	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved

Run ID: A123612

Included Lab Sample IDs: 2459794, 2459795, 2459796, 2459797

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	99.2	P/P	90 - 110
Kjeldahl Nitrogen	105	107	P/P	90 - 110
Kjeldahl Nitrogen	99.2	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A123613

Included Lab Sample IDs: 2459785, 2459786, 2459787, 2459788, 2459807

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	101	P/P	90 - 110
Total-P	100	102	P/P	90 - 110
Total-P	101	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A123616

Included Lab Sample IDs: 2459780, 2459781, 2459782, 2459783, 2459784, 2459785, 2459786, 2459787, 2459788, 2459807

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	99.9	P/P	90 - 110
Ammonia-N	99.9	100	P/P	90 - 110
Ammonia-N	99.9	99.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved

Run ID: A123616

Included Lab Sample IDs: 2459794, 2459795, 2459796, 2459797

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Run ID: A123616
Included Lab Sample IDs: 2459794, 2459795, 2459796, 2459797

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A123619
Included Lab Sample IDs: 2459780, 2459781, 2459782, 2459783, 2459784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.2	104	P/P	90 - 110
Kjeldahl Nitrogen	98.9	101	P/P	90 - 110
Kjeldahl Nitrogen	99.3	98.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Run ID: A123619
Included Lab Sample IDs: 2459789, 2459790, 2459791, 2459792, 2459793, 2459808

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	97.4	P/P	90 - 110
Kjeldahl Nitrogen	96.2	104	P/P	90 - 110
Kjeldahl Nitrogen	98.9	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A123630
Included Lab Sample IDs: 2459807

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Run ID: A123631
Included Lab Sample IDs: 2459789, 2459790, 2459791, 2459792, 2459793, 2459808

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	97.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A123638
Included Lab Sample IDs: 2459780, 2459781, 2459782, 2459783, 2459784, 2459807

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.5	96.5	P/P	90 - 110
NO2NO3-N	98.5	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A123683
Included Lab Sample IDs: 2459785, 2459786, 2459787, 2459788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	108	108	P/P	90 - 110
NO2NO3-N	108	108	P/P	90 - 110

Quality Assurance Report

Calibration Verification

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

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

Where they are different, both control limits are provided.

Quality Assurance Report

Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
			LCS	SMP	MS	
EPA 350.1 Rev. 2.0	Ammonia-N	95.4	97.4	98.6		1.01
	Ammonia-N	95.4	98.2	99.0		0.621
	Ammonia-N	96.0	95.8	97.8		1.82
EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	96.0	102	102		0.0
	Ammonia-N	94.0	98.0	99.8		1.09
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	102	104		1.19
	Kjeldahl Nitrogen	106	103	101		1.59
	Kjeldahl Nitrogen	103	107	103		2.86
	Kjeldahl Nitrogen	105	107	109		1.96
EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	103	106	105		0.922
	Kjeldahl Nitrogen	104	102	104		1.19
	Kjeldahl Nitrogen	106	103	101		1.59
	Kjeldahl Nitrogen	103	107	103		2.86
EPA 353.2 Rev. 2.0	Kjeldahl Nitrogen	105	107	109		1.96
	NO2NO3-N	96.5	96.0	95.0		0.567
	NO2NO3-N	96.5	95.5	95.5		0.0
	NO2NO3-N	106	104	104		0.389
EPA 365.1 Rev. 2.0	NO2NO3-N	107	106	108		1.77
	Total-P	106	97.1	97.3		0.197
	Total-P	104	104	107		2.50
	Total-P	108	107	107		0.282
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.8				0.0
	O-Phosphate-P	98.7	99.8	97.3		1.64

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2459780, 2459781, 2459782, 2459783, 2459784, 2459785, 2459786, 2459787, 2459788, 2459807
EPA 350.1 Rev. 2.0 dissolved	Ammonia, dissolved, in filtered, aqueous matrices as mg N/L	2459789, 2459790, 2459791, 2459792, 2459793, 2459794, 2459795, 2459796, 2459797, 2459808
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2459780, 2459781, 2459782, 2459783, 2459784, 2459785, 2459786, 2459787, 2459788, 2459807
EPA 351.2 Rev. 2.0 dissolved	Total Kjeldahl Nitrogen, dissolved, in filtered, aqueous matrices	2459789, 2459790, 2459791, 2459792, 2459793, 2459794, 2459795, 2459796, 2459797, 2459808
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2459780, 2459781, 2459782, 2459783, 2459784, 2459785, 2459786, 2459787, 2459788, 2459807
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2459780, 2459781, 2459782, 2459783, 2459784, 2459785, 2459786, 2459787, 2459788, 2459807
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2459798, 2459799, 2459800, 2459801, 2459802, 2459803, 2459804, 2459805, 2459806, 2459809

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 350.1 Rev. 2.0	01/09/2024			01/12/2024 11:13	Khloe J Berg	2459780
	01/09/2024			01/12/2024 11:15	Khloe J Berg	2459781
	01/09/2024			01/12/2024 11:16	Khloe J Berg	2459782
	01/09/2024			01/12/2024 11:17	Khloe J Berg	2459783
	01/09/2024			01/12/2024 11:19	Khloe J Berg	2459784
	01/09/2024			01/12/2024 11:31	Khloe J Berg	2459785
	01/09/2024			01/12/2024 11:35	Khloe J Berg	2459786
	01/09/2024			01/12/2024 11:36	Khloe J Berg	2459787
	01/09/2024			01/12/2024 11:37	Khloe J Berg	2459788
	01/09/2024			01/12/2024 12:01	Khloe J Berg	2459807
EPA 350.1 Rev. 2.0 dissolved	01/09/2024			01/12/2024 14:20	Khloe J Berg	2459794
	01/09/2024			01/12/2024 14:21	Khloe J Berg	2459795
	01/09/2024			01/12/2024 14:23	Khloe J Berg	2459796
	01/09/2024			01/12/2024 14:24	Khloe J Berg	2459797
	01/09/2024			01/16/2024 13:32	Khloe J Berg	2459789
	01/09/2024			01/16/2024 13:36	Khloe J Berg	2459790
	01/09/2024			01/16/2024 13:37	Khloe J Berg	2459791
	01/09/2024			01/16/2024 13:38	Khloe J Berg	2459792
	01/09/2024			01/16/2024 13:40	Khloe J Berg	2459793
	01/09/2024			01/16/2024 13:41	Khloe J Berg	2459808
EPA 351.2 Rev. 2.0	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 11:46	Ping Hua	2459786
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 11:48	Ping Hua	2459787
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 11:50	Ping Hua	2459788
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 12:30	Ping Hua	2459785
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 15:37	Ping Hua	2459783
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 15:39	Ping Hua	2459784
	01/09/2024	01/11/2024 17:29	Simonne.V. Calhoun	01/12/2024 16:42	Ping Hua	2459780
	01/09/2024	01/11/2024 17:29	Simonne.V. Calhoun	01/12/2024 16:43	Ping Hua	2459781
	01/09/2024	01/11/2024 17:29	Simonne.V. Calhoun	01/12/2024 16:48	Ping Hua	2459782
	01/09/2024	01/12/2024 13:04	Simonne.V. Calhoun	01/16/2024 10:54	Ping Hua	2459807
EPA 351.2 Rev. 2.0 dissolved	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 11:51	Ping Hua	2459795
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 11:56	Ping Hua	2459796
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 12:01	Ping Hua	2459797
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 12:32	Ping Hua	2459794
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 15:41	Ping Hua	2459792
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 15:45	Ping Hua	2459793
	01/09/2024	01/11/2024 17:23	Simonne.V. Calhoun	01/12/2024 15:50	Ping Hua	2459808
	01/09/2024	01/11/2024 17:29	Simonne.V. Calhoun	01/12/2024 16:50	Ping Hua	2459789
	01/09/2024	01/11/2024 17:29	Simonne.V. Calhoun	01/12/2024 16:55	Ping Hua	2459790
	01/09/2024	01/11/2024 17:29	Simonne.V. Calhoun	01/12/2024 16:56	Ping Hua	2459791

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 353.2 Rev. 2.0	01/09/2024			01/16/2024 12:26	Fadila Guebre	2459781
	01/09/2024			01/16/2024 12:32	Fadila Guebre	2459782
	01/09/2024			01/16/2024 12:33	Fadila Guebre	2459783
	01/09/2024			01/16/2024 12:34	Fadila Guebre	2459784
	01/09/2024			01/16/2024 12:35	Fadila Guebre	2459807
	01/09/2024			01/16/2024 14:31	Fadila Guebre	2459780
	01/09/2024			01/17/2024 14:11	Fadila Guebre	2459785
	01/09/2024			01/17/2024 14:12	Fadila Guebre	2459786
	01/09/2024			01/17/2024 14:14	Fadila Guebre	2459787
	01/09/2024			01/17/2024 14:21	Fadila Guebre	2459788
EPA 365.1 Rev. 2.0	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 12:14	Elise M. Gillis	2459780
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 12:17	Elise M. Gillis	2459783
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 12:19	Elise M. Gillis	2459781
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 12:20	Elise M. Gillis	2459782
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 12:21	Elise M. Gillis	2459784
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 13:37	Elise M. Gillis	2459785
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 13:38	Elise M. Gillis	2459786
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 13:39	Elise M. Gillis	2459787
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 13:47	Elise M. Gillis	2459788
	01/09/2024	01/11/2024 12:54	Adam P Silver	01/12/2024 14:12	Elise M. Gillis	2459807
EPA 365.1 Rev. 2.0 dissolved	01/09/2024			01/10/2024 06:53	James L Waggeberby	2459801
	01/09/2024			01/10/2024 06:59	James L Waggeberby	2459798
	01/09/2024			01/10/2024 07:04	James L Waggeberby	2459799
	01/09/2024			01/10/2024 07:05	James L Waggeberby	2459800
	01/09/2024			01/10/2024 07:06	James L Waggeberby	2459802, 2459809
	01/09/2024			01/10/2024 07:32	James L Waggeberby	2459804
	01/09/2024			01/10/2024 07:35	James L Waggeberby	2459803, 2459805
	01/09/2024			01/10/2024 07:36	James L Waggeberby	2459806