

Chemical Analysis Report

SO-DIST-2023-11-07-03

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

Event Description: **SCCF ALGAL STUDY**
Request ID: **RQ-2023-10-23-39**
Customer: **SO-DIST**
Project ID: **DISCRTNARY**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 314
Fort Myers, FL 33901-3381
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Certified by: Colin Wright, Program Administrator

Date Certified: 04-DEC-2023 14:26

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray 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: 11/06/2023 08:30

Field ID: CLEW 04

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449492	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P437841	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P437560	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.27		mg N/L	P437974	
	EPA 365.1 Rev. 2.0	Total-P	0.097		mg P/L	P437712	
2449501	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.028		mg N/L	P437847	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	1.3		mg N/L	P437854	
2449510	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.080		mg P/L	P437478	

Sample Location: 26.69315, 81.79630

Collection Date/Time: 11/06/2023 11:00

Field ID: ORANGE

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449493	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P437841	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P437560	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P437975	
	EPA 365.1 Rev. 2.0	Total-P	0.082		mg P/L	P437712	
2449502	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.024		mg N/L	P437847	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	1.2		mg N/L	P437854	
2449511	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.069		mg P/L	P437479	

Sample Location: 26.70324, 81.80525

Collection Date/Time: 11/06/2023 11:35

Field ID: POPASH

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449494	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P438234	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.94		mg N/L	P437560	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.21		mg N/L	P437975	
	EPA 365.1 Rev. 2.0	Total-P	0.093		mg P/L	P438172	
2449503	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.021		mg N/L	P437847	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	1.1		mg N/L	P437854	
2449512	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.065		mg P/L	P437479	

Sample Location: 26.65737, 81.89425

Collection Date/Time: 11/06/2023 12:25

Field ID: HANCOCK				Matrix: W-SURF-SLT				
Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2449495	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P437983		
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P437559		
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P437835		
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P437708		
2449504	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.030		mg N/L	P437844		
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.94		mg N/L	P437675	MS	
2449513	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.10		mg P/L	P437480		

Sample Location: 26.64467, -81.87899

Collection Date/Time: 11/06/2023 12:55

Field ID: CLEW07

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449496	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P437983	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P438390	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P437835	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P437709	
2449505	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.020		mg N/L	P437844	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	1.0		mg N/L	P438294	
2449514	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.088		mg P/L	P437480	

Sample Location: 26.57761, 81.89881

Collection Date/Time: 11/06/2023 10:11

Field ID: WHISKEY

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449497	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P437982	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P437559	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P438077	
	EPA 365.1 Rev. 2.0	Total-P	0.097		mg P/L	P437709	
2449506	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.032		mg N/L	P438067	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.79		mg N/L	P437675	MS
2449515	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.078		mg P/L	P437479	

Sample Location: 26.54335, -81.94011

Collection Date/Time: 11/06/2023 10:45

Field ID: CLEW 09

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449498	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P437982	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P437559	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.21		mg N/L	P438077	
	EPA 365.1 Rev. 2.0	Total-P	0.092		mg P/L	P437709	
2449507	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.024		mg N/L	P438067	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.63	J	mg N/L	P437675	MS
2449516	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.078		mg P/L	P437479	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0 dissolved: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: 26.52328, -82.00864

Collection Date/Time: 11/06/2023 11:20

Field ID: CLEW 10

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449499	EPA 350.1 Rev. 2.0	Ammonia-N	0.036		mg N/L	P437982	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P437559	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P438077	
	EPA 365.1 Rev. 2.0	Total-P	0.070		mg P/L	P437709	
2449508	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.036		mg N/L	P438067	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.52		mg N/L	P437675	MS
2449517	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.055		mg P/L	P437479	

Sample Location: 26.47219, -82.01621

Collection Date/Time: 11/06/2023 11:53

Field ID: CLEW 11

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449500	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P437982	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P437559	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.053		mg N/L	P438077	
	EPA 365.1 Rev. 2.0	Total-P	0.053		mg P/L	P437709	
2449509	EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	0.036		mg N/L	P438067	
	EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	0.46		mg N/L	P437675	MS
2449518	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.037		mg P/L	P437479	

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437841

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437982

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437983

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437844

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437847

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P438067

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437559

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437560

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: P438390

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437675

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437854

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P438294

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437835

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437974

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438077

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437708

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: P437709

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437712

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438172

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437478

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437479

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437480

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: P437841

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: P437982

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: P437983

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437844

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437847

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

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P438067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437559

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437560

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.5		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438390

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437675

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

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437854

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: P438294

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437835

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: P437974

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

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: P438077

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437708

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437709

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437712

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438172

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437478

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437479

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437480

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449421	Ammonia-N	99.0	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437982

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449497	Ammonia-N	97.6	99.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437983

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449495	Ammonia-N	100	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449691	Ammonia-N	98.6	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449817	Ammonia-N	98.0	96.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437847

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449501	Ammonia-N	96.6	97.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P438067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449506	Ammonia-N	97.4	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437559

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449438	Kjeldahl Nitrogen	96.3	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449421	Kjeldahl Nitrogen	97.5	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438390

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453739	Kjeldahl Nitrogen	103	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449507	Kjeldahl Nitrogen	112	113	F/F	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437854

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449503	Kjeldahl Nitrogen	99.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P438294

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452510	Kjeldahl Nitrogen	99.6	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437835

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449356	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437974

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449272	NO2NO3-N	99.0	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449493	NO2NO3-N	100		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438077

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2448111	NO2NO3-N	97.3	97.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449358	Total-P	96.1	96.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437709

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449730	Total-P	94.0	94.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449095	Total-P	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438172

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2448898	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449097	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437479

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449516	O-Phosphate-P	95.8	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449514	O-Phosphate-P	98.5	99.4	P/P	90 - 110

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449421	Ammonia-N	1.16	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449497	Ammonia-N	1.10	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437983

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449495	Ammonia-N	0.720	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449691	Ammonia-N	1.38	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449817	Ammonia-N	0.806	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P437847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449501	Ammonia-N	0.394	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0 dissolved
Batch ID: P438067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449506	Ammonia-N	0.369	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437559

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449438	Kjeldahl Nitrogen	6.49	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449421	Kjeldahl Nitrogen	3.62	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438390

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453739	Kjeldahl Nitrogen	1.56	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449507	Kjeldahl Nitrogen	0.269	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P437854

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449503	Kjeldahl Nitrogen	0.451	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0 dissolved
Batch ID: P438294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452510	Kjeldahl Nitrogen	0.212	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437835

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449356	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449272	NO2NO3-N	0.669	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437975

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449493	NO2NO3-N	3.11	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2448111	NO2NO3-N	0.482	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449358	Total-P	0.623	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437709

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449730	Total-P	0.689	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449095	Total-P	1.18	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2448898	Total-P	0.801	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449097	O-Phosphate-P	0.791	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437479

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449516	O-Phosphate-P	0.973	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449514	O-Phosphate-P	0.481	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A122602

Included Lab Sample IDs: 2449510, 2449511, 2449512, 2449513, 2449514, 2449515, 2449516, 2449517, 2449518

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.9	P/P	90 - 110
O-Phosphate-P	99.1	99.3	P/P	90 - 110
O-Phosphate-P	99.3	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122689

Included Lab Sample IDs: 2449495, 2449497, 2449498, 2449499, 2449500

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.4	93.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122697

Included Lab Sample IDs: 2449492, 2449493, 2449494

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	96.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved

Run ID: A122713

Included Lab Sample IDs: 2449504, 2449506, 2449507, 2449508, 2449509

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122714

Included Lab Sample IDs: 2449492, 2449493, 2449495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.6	99.4	P/P	90 - 110
Total-P	99.4	99.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122741

Included Lab Sample IDs: 2449495, 2449496

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122742

Included Lab Sample IDs: 2449496, 2449497, 2449498, 2449499, 2449500

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122744

Included Lab Sample IDs: 2449492, 2449493

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	97.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved

Run ID: A122744

Included Lab Sample IDs: 2449501, 2449502, 2449503, 2449504, 2449505

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.1	98.2	P/P	90 - 110
Ammonia-N	97.2	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved

Run ID: A122798

Included Lab Sample IDs: 2449501, 2449502, 2449503

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122800

Included Lab Sample IDs: 2449492, 2449493, 2449494

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122806

Included Lab Sample IDs: 2449495, 2449496, 2449497, 2449498, 2449499, 2449500

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	99.0	P/P	90 - 110
Ammonia-N	99.5	98.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0 dissolved

Run ID: A122831

Included Lab Sample IDs: 2449506, 2449507, 2449508, 2449509

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	99.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122837

Included Lab Sample IDs: 2449497, 2449498, 2449499, 2449500

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	98.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122902

Included Lab Sample IDs: 2449494

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122914

Included Lab Sample IDs: 2449494

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0 dissolved

Run ID: A122958

Included Lab Sample IDs: 2449505

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A123001

Included Lab Sample IDs: 2449496

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	108	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 350.1 Rev. 2.0	Ammonia-N	98.4	99.0	101			1.16
	Ammonia-N	98.8	97.6	99.4			1.10
	Ammonia-N	99.6	100	102			0.720
	Ammonia-N	94.2	98.6	101			1.38
EPA 350.1 Rev. 2.0 dissolved	Ammonia-N	96.4	98.0	96.6			0.806
	Ammonia-N	97.4	96.6	97.2			0.394
	Ammonia-N	94.2	97.4	98.0			0.369
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	96.3	104			6.49
	Kjeldahl Nitrogen	93.5	97.5	103			3.62
	Kjeldahl Nitrogen	109	103	105			1.56
EPA 351.2 Rev. 2.0 dissolved	Kjeldahl Nitrogen	102	112	113			0.269
	Kjeldahl Nitrogen	104	99.4	100			0.451
	Kjeldahl Nitrogen	99.3	99.6	99.3			0.212
EPA 353.2 Rev. 2.0	NO2NO3-N	102	104	104			0.0
	NO2NO3-N	99.5	99.0	98.0			0.669
	NO2NO3-N	102	100				3.11
	NO2NO3-N	99.5	97.3	97.8			0.482
EPA 365.1 Rev. 2.0	Total-P	103	96.1	96.7			0.623
	Total-P	103	94.0	94.7			0.689
	Total-P	98.6	100	102			1.18
	Total-P	104	102	102			0.801
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.3	101	102			0.791
	O-Phosphate-P	100	95.8	97.5			0.973
	O-Phosphate-P	103	98.5	99.4			0.481

Reference Method Descriptions

Method	Description	Associated Samples
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2449492, 2449493, 2449494, 2449495, 2449496, 2449497, 2449498, 2449499, 2449500
EPA 350.1 Rev. 2.0 dissolved	Ammonia, dissolved, in filtered, aqueous matrices as mg N/L	2449501, 2449502, 2449503, 2449504, 2449505, 2449506, 2449507, 2449508, 2449509
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2449492, 2449493, 2449494, 2449495, 2449496, 2449497, 2449498, 2449499, 2449500
EPA 351.2 Rev. 2.0 dissolved	Total Kjeldahl Nitrogen, dissolved, in filtered, aqueous matrices	2449501, 2449502, 2449503, 2449504, 2449505, 2449506, 2449507, 2449508, 2449509
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2449492, 2449493, 2449494, 2449495, 2449496, 2449497, 2449498, 2449499, 2449500
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2449492, 2449493, 2449494, 2449495, 2449496, 2449497, 2449498, 2449499, 2449500
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2449510, 2449511, 2449512, 2449513, 2449514, 2449515, 2449516, 2449517, 2449518

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	11/07/2023			11/15/2023 11:48	Ping Hua	2449492
	11/07/2023			11/15/2023 11:49	Ping Hua	2449493
	11/07/2023			11/17/2023 14:05	Khloe J Berg	2449497
	11/07/2023			11/17/2023 14:10	Khloe J Berg	2449498
	11/07/2023			11/17/2023 14:11	Khloe J Berg	2449499
	11/07/2023			11/17/2023 14:13	Khloe J Berg	2449500
	11/07/2023			11/17/2023 14:31	Khloe J Berg	2449495
	11/07/2023			11/17/2023 14:35	Khloe J Berg	2449496
	11/07/2023			11/28/2023 11:42	Khloe J Berg	2449494
	11/07/2023			11/15/2023 13:26	Ping Hua	2449504
EPA 350.1 Rev. 2.0 dissolved	11/07/2023			11/15/2023 13:28	Ping Hua	2449505
	11/07/2023			11/15/2023 14:21	Ping Hua	2449501
	11/07/2023			11/15/2023 14:25	Ping Hua	2449502
	11/07/2023			11/15/2023 14:27	Ping Hua	2449503
	11/07/2023			11/20/2023 11:53	Khloe J Berg	2449506
	11/07/2023			11/20/2023 11:57	Khloe J Berg	2449507
	11/07/2023			11/20/2023 11:58	Khloe J Berg	2449508
	11/07/2023			11/20/2023 11:59	Khloe J Berg	2449509
	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 10:37	Samantha L Bates	2449495
	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 10:40	Samantha L Bates	2449497
EPA 351.2 Rev. 2.0	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 10:42	Samantha L Bates	2449498
	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 10:44	Samantha L Bates	2449499
	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 10:45	Samantha L Bates	2449500
	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 14:34	Samantha L Bates	2449492
	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 14:36	Samantha L Bates	2449493
	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 14:37	Samantha L Bates	2449494
	11/07/2023	12/01/2023 12:09	Simonne.V. Calhoun	12/04/2023 09:50	Samantha L Bates	2449496
	11/07/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 17:48	Samantha L Bates	2449504
	11/07/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 17:52	Samantha L Bates	2449506
	11/07/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 17:53	Samantha L Bates	2449507
EPA 351.2 Rev. 2.0 dissolved	11/07/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 17:58	Samantha L Bates	2449508
	11/07/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 18:03	Samantha L Bates	2449509
	11/07/2023	11/16/2023 10:44	Simonne.V. Calhoun	11/17/2023 12:27	Ping Hua	2449501
	11/07/2023	11/16/2023 10:44	Simonne.V. Calhoun	11/17/2023 12:28	Ping Hua	2449502
	11/07/2023	11/16/2023 10:44	Simonne.V. Calhoun	11/17/2023 12:30	Ping Hua	2449503
	11/07/2023	11/16/2023 10:44	Simonne.V. Calhoun	11/17/2023 12:30	Ping Hua	2449503
	11/07/2023	11/29/2023 14:15	Simonne.V. Calhoun	11/30/2023 11:06	Ping Hua	2449505
	11/07/2023			11/15/2023 11:22	Anna M. Plaviak	2449495
	11/07/2023			11/15/2023 11:23	Anna M. Plaviak	2449496
	11/07/2023			11/17/2023 11:43	Fadila Guebre	2449492
EPA 353.2 Rev. 2.0	11/07/2023			11/17/2023 11:55	Fadila Guebre	2449493

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	11/07/2023			11/17/2023 12:01	Fadila Guebre	2449494
	11/07/2023			11/20/2023 14:24	Fadila Guebre	2449497
	11/07/2023			11/20/2023 14:25	Fadila Guebre	2449498
	11/07/2023			11/20/2023 14:26	Fadila Guebre	2449499
	11/07/2023			11/20/2023 14:27	Fadila Guebre	2449500
EPA 365.1 Rev. 2.0	11/07/2023	11/14/2023 15:38	Adam P Silver	11/14/2023 18:13	James L Waggeberby	2449495
	11/07/2023	11/14/2023 15:38	Adam P Silver	11/14/2023 19:10	James L Waggeberby	2449492, 2449493
	11/07/2023	11/14/2023 15:38	Adam P Silver	11/15/2023 11:09	James L Waggeberby	2449496
	11/07/2023	11/14/2023 15:38	Adam P Silver	11/15/2023 11:10	James L Waggeberby	2449497
	11/07/2023	11/14/2023 15:38	Adam P Silver	11/15/2023 11:11	James L Waggeberby	2449498
	11/07/2023	11/14/2023 15:38	Adam P Silver	11/15/2023 11:12	James L Waggeberby	2449499
	11/07/2023	11/14/2023 15:38	Adam P Silver	11/15/2023 11:13	James L Waggeberby	2449500
EPA 365.1 Rev. 2.0 dissolved	11/07/2023	11/27/2023 15:29	Adam P Silver	11/28/2023 09:57	James L Waggeberby	2449494
	11/07/2023			11/07/2023 14:46	Elise M. Gillis	2449510
	11/07/2023			11/07/2023 14:53	Elise M. Gillis	2449516
	11/07/2023			11/07/2023 14:55	Elise M. Gillis	2449511
	11/07/2023			11/07/2023 14:56	Elise M. Gillis	2449512
	11/07/2023			11/07/2023 14:57	Elise M. Gillis	2449515
	11/07/2023			11/07/2023 14:58	Elise M. Gillis	2449517
	11/07/2023			11/07/2023 14:59	Elise M. Gillis	2449518
	11/07/2023			11/07/2023 15:06	Elise M. Gillis	2449514
	11/07/2023			11/07/2023 15:08	Elise M. Gillis	2449513