

Chemical Analysis Report

SW-DIST-2023-07-13-01

Florida DEP Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

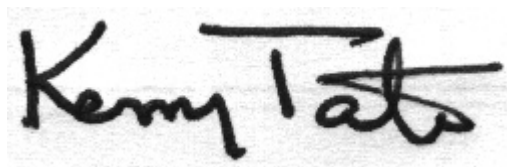
Event Description: **Run 2**
Request ID: **RQ-2023-07-03-06**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 28-JUL-2023 11:40

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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: Sparkman Lake at Center

Collection Date/Time: 07/12/2023 13:10

Field ID: G4SW0114

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2423767	DEP SOP: NU-094-1	Color (true)	220		PCU	P432437	
	EPA 180.1 Rev. 2.0	Turbidity	4.2		NTU	P432432	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P432672	
		Sulfate	2.5		mg SO4/L	P432675	
	SM 2320 B-2011	Total Alkalinity	21		mg CaCO3/L	P432542	
	SM 2540 C-2015	TDS	117		mg/L	P433062	
	SM 2540 D-2015	TSS	5	I	mg/L	P433041	
	SM 4500-F- C-2011	Fluoride	0.10		mg F/L	P432544	
2423770	EPA 350.1 Rev. 2.0	Ammonia-N	0.30		mg N/L	P432772	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P432463	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011		mg N/L	P432622	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P432556	
	SM 5310 B-2011	Organic Carbon	30		mg C/L	P432602	

Ref. Method and Comment:

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

Sample Location: Lake Lindsay at Center

Collection Date/Time: 07/12/2023 14:00

Field ID: G4SW0124

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2423768	DEP SOP: NU-094-1	Color (true)	38	A	PCU	P432434	
	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P432432	
	EPA 300.0 Rev. 2.1	Chloride	6.6		mg Cl/L	P432672	
		Sulfate	0.20	U	mg SO4/L	P432675	
	SM 2320 B-2011	Total Alkalinity	9.0		mg CaCO3/L	P432542	
	SM 2540 C-2015	TDS	36		mg/L	P433062	
	SM 2540 D-2015	TSS	4	I	mg/L	P433041	
	SM 4500-F- C-2011	Fluoride	0.056	I	mg F/L	P432544	
2423771	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P432772	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.80		mg N/L	P432463	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P432622	
	EPA 365.1 Rev. 2.0	Total-P	0.050		mg P/L	P432556	
	SM 5310 B-2011	Organic Carbon	9.2		mg C/L	P432602	

Ref. Method and Comment:

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

Sample Location: McKethan Lake

Collection Date/Time: 07/12/2023 14:35

Field ID: G4SW0021

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2423769	DEP SOP: NU-094-1	Color (true)	57		PCU	P432437	
	EPA 180.1 Rev. 2.0	Turbidity	13		NTU	P432432	
	EPA 300.0 Rev. 2.1	Chloride	4.8		mg Cl/L	P432672	
		Sulfate	1.1		mg SO4/L	P432675	
	SM 2320 B-2011	Total Alkalinity	4.0		mg CaCO3/L	P432542	
	SM 2540 C-2015	TDS	70		mg/L	P433062	
	SM 2540 D-2015	TSS	28	I	mg/L	P433041	
	SM 4500-F- C-2011	Fluoride	0.056	I	mg F/L	P432544	
2423772	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P432642	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.1		mg N/L	P432463	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.028		mg N/L	P432622	
	EPA 365.1 Rev. 2.0	Total-P	0.21		mg P/L	P432556	
	SM 5310 B-2011	Organic Carbon	23		mg C/L	P432602	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The PQL was elevated because of sample matrix interference.

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P432434

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P432437

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432432

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432672

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432675

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432642

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432772

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432463

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432622

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: P432556

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

Reference Method: SM 2320 B-2011
Batch ID: P432542

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2015
Batch ID: P433062

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P433041

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P432544

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P432602

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P432434

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.7		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P432437

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432432

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432672

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432675

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432642

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432772

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432463

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: P432622

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432556

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

Reference Method: SM 2320 B-2011
Batch ID: P432542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.7		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P433062

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

Reference Method: SM 2540 D-2015
Batch ID: P433041

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	103		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P432544

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P432602

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432672

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423564	Chloride	106		P	90 - 110
2423697	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423564	Sulfate	100		P	90 - 110
2423697	Sulfate	93.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423771	Ammonia-N	93.6	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423805	Kjeldahl Nitrogen	109	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423771	NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432556

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423699	Total-P	102	101	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P432544

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423694	Fluoride	101	103	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P432602

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2423687	Organic Carbon	93.2	95.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P432434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423768	Color (true)	1.11	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P432437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423726	Color (true)	2.11	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432432

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423694	Turbidity	2.82	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432672

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423564	Chloride	1.43	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423564	Sulfate	1.39	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423728	Ammonia-N	1.30	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423771	Ammonia-N	3.52	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423805	Kjeldahl Nitrogen	4.36	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423771	NO2NO3-N	0.504	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432556

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423699	Total-P	0.168	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P432542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423694	Total Alkalinity	1.33	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P433062

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423686	TDS	2.17	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P432544

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423694	Fluoride	1.51	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P432602

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2423687	Organic Carbon	1.86	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120353

Included Lab Sample IDs: 2423767, 2423768, 2423769

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

Reference Method: DEP SOP: NU-094-1

Run ID: A120354

Included Lab Sample IDs: 2423767, 2423768, 2423769

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	102	P/P	90 - 110
Color (true)	99.6	101	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A120412

Included Lab Sample IDs: 2423767, 2423768, 2423769

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	94.5	96.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A120412

Included Lab Sample IDs: 2423767, 2423768, 2423769

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

Reference Method: SM 5310 B-2011

Run ID: A120444

Included Lab Sample IDs: 2423770, 2423771, 2423772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	96.4	P/P	90 - 110
Organic Carbon	95.6	96.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A120446

Included Lab Sample IDs: 2423770, 2423772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	104	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A120452

Included Lab Sample IDs: 2423770, 2423771, 2423772

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A120453

Included Lab Sample IDs: 2423772

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

Run ID: A120453

Included Lab Sample IDs: 2423772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.7	98.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A120475

Included Lab Sample IDs: 2423770, 2423771, 2423772

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.0	106	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A120479

Included Lab Sample IDs: 2423767, 2423768, 2423769

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A120490

Included Lab Sample IDs: 2423771

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A120518

Included Lab Sample IDs: 2423770, 2423771

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	97.4	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)	99.7				1.11	
	Color (true)	102				2.11	
EPA 180.1 Rev. 2.0	Turbidity	99.6				2.82	
EPA 300.0 Rev. 2.1	Chloride	103	102	106		1.43	
	Sulfate	99.6	100	93.1		1.39	
EPA 350.1 Rev. 2.0	Ammonia-N	94.6					1.30
	Ammonia-N	95.8	93.6	97.6			3.52
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	109	104			4.36
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	99.5	99.0			0.504
EPA 365.1 Rev. 2.0	Total-P	100	102	101			0.168
SM 2320 B-2011	Total Alkalinity	97.7				1.33	
SM 2540 C-2015	TDS	96.5				2.17	
SM 2540 D-2015	TSS	103					
SM 4500-F- C-2011	Fluoride	101	101	103			1.51
SM 5310 B-2011	Organic Carbon	93.0	93.2	95.5			1.86

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2423767, 2423768, 2423769
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2423767, 2423768, 2423769
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2423767, 2423768, 2423769
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2423767, 2423768, 2423769
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2423770, 2423771, 2423772
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2423770, 2423771, 2423772
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2423770, 2423771, 2423772
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2423770, 2423771, 2423772
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2423767, 2423768, 2423769
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2423767, 2423768, 2423769
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2423767, 2423768, 2423769
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2423767, 2423768, 2423769
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2423770, 2423771, 2423772

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	07/13/2023			07/13/2023 14:32	Samantha L Bates	2423768
	07/13/2023			07/13/2023 15:01	Samantha L Bates	2423767
	07/13/2023			07/13/2023 15:02	Samantha L Bates	2423769
EPA 180.1 Rev. 2.0	07/13/2023			07/13/2023 13:12	Alexis Price	2423767
	07/13/2023			07/13/2023 13:13	Alexis Price	2423768
	07/13/2023			07/13/2023 13:14	Alexis Price	2423769
EPA 300.0 Rev. 2.1	07/13/2023			07/18/2023 07:37	James L Waggeberby	2423767
	07/13/2023			07/18/2023 07:53	James L Waggeberby	2423768
	07/13/2023			07/18/2023 08:08	James L Waggeberby	2423769
EPA 350.1 Rev. 2.0	07/13/2023			07/18/2023 13:30	Khloe J Berg	2423772
	07/13/2023			07/20/2023 11:47	Ping Hua	2423771
	07/13/2023			07/20/2023 11:52	Ping Hua	2423770
EPA 351.2 Rev. 2.0	07/13/2023	07/14/2023 12:31	Simonne.V. Calhoun	07/18/2023 18:12	Samantha L Bates	2423770
	07/13/2023	07/14/2023 12:31	Simonne.V. Calhoun	07/18/2023 18:13	Samantha L Bates	2423771
	07/13/2023	07/14/2023 12:31	Simonne.V. Calhoun	07/18/2023 18:15	Samantha L Bates	2423772
EPA 353.2 Rev. 2.0	07/13/2023			07/18/2023 09:06	Beverly Y. Sanders	2423771
	07/13/2023			07/18/2023 09:12	Beverly Y. Sanders	2423770
	07/13/2023			07/18/2023 09:13	Beverly Y. Sanders	2423772
EPA 365.1 Rev. 2.0	07/13/2023	07/17/2023 13:00	Alexis Price	07/18/2023 10:05	Simonne.V. Calhoun	2423770
	07/13/2023	07/17/2023 13:00	Alexis Price	07/18/2023 10:07	Simonne.V. Calhoun	2423772
	07/13/2023	07/17/2023 13:00	Alexis Price	07/19/2023 12:11	Simonne.V. Calhoun	2423771
SM 2320 B-2011	07/13/2023			07/15/2023 04:15	Dale L. Simmons	2423767
	07/13/2023			07/15/2023 04:27	Dale L. Simmons	2423768
	07/13/2023			07/15/2023 04:38	Dale L. Simmons	2423769
SM 2540 C-2015	07/13/2023			07/18/2023 16:04	Yijie Li	2423767, 2423768, 2423769
SM 2540 D-2015	07/13/2023			07/18/2023 16:04	Yijie Li	2423767, 2423768, 2423769
SM 4500-F- C-2011	07/13/2023			07/15/2023 04:15	Dale L. Simmons	2423767
	07/13/2023			07/15/2023 04:27	Dale L. Simmons	2423768
	07/13/2023			07/15/2023 04:38	Dale L. Simmons	2423769
SM 5310 B-2011	07/13/2023			07/17/2023 15:54	Elise M. Gillis	2423772
	07/13/2023			07/17/2023 20:52	Elise M. Gillis	2423770
	07/13/2023			07/17/2023 21:08	Elise M. Gillis	2423771