

Chemical Analysis Report

CEN-DIST-2022-04-20-02

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **BMAP - Sweetwater, Salt and Long**

Request ID: **RQ-2022-04-18-24**

Customer: **CEN-DIST**

Project ID: **BMAP**

Send Reports to:

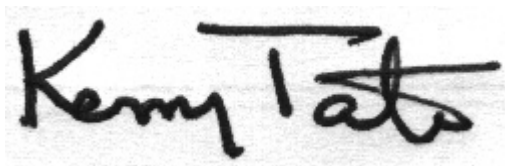
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 13-MAY-2022 08:50

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first 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: Salt Creek @ Packard Ave

Collection Date/Time: 04/19/2022 12:05

Field ID: G2CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2320681	DEP SOP: NU-094-1	Color (true)**	180		PCU	P412747	
	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P412645	
	EPA 300.0 Rev. 2.1	Chloride	1.1E+03		mg Cl/L	P413117	
		Sulfate	160		mg SO4/L	P413120	
	SM 2320 B-2011	Total Alkalinity	126		mg CaCO3/L	P413183	
	SM 2540 C-2011	TDS	2.05E+03		mg/L	P413194	
	SM 2540 D-2011	TSS	3	I	mg/L	P413197	
	SM 4500-F- C-2011	Fluoride	0.14		mg F/L	P413188	
2320683	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P413066	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P413130	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P412841	
	EPA 365.1 Rev. 2.0	Total-P	0.28		mg P/L	P412895	
	SM 5310 B-2011	Organic Carbon	20		mg C/L	P412814	
2320685	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.23		mg P/L	P412647	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Sweetwater Creek at Florida Avenue

Collection Date/Time: 04/19/2022 12:14

Field ID: G2CE0123

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2320682	DEP SOP: NU-094-1	Color (true)**	82		PCU	P412745	
	EPA 180.1 Rev. 2.0	Turbidity	3.7		NTU	P412645	
	EPA 300.0 Rev. 2.1	Chloride	320		mg Cl/L	P413492	
		Sulfate	47		mg SO4/L	P413120	
	SM 2320 B-2011	Total Alkalinity	138		mg CaCO3/L	P413183	
	SM 2540 C-2011	TDS	728		mg/L	P413194	
	SM 2540 D-2011	TSS	4	I	mg/L	P413197	
	SM 4500-F- C-2011	Fluoride	0.19		mg F/L	P413188	
2320684	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P413066	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P413130	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.1		mg N/L	P412841	
	EPA 365.1 Rev. 2.0	Total-P	0.47		mg P/L	P412895	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P412814	
2320686	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.40		mg P/L	P412647	

Ref. Method and Comment:

SM 2540 C-2011: The reported result is consistent with the conductivity measured in the laboratory, 1409 umhos/cm.

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P412745

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P412747

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412645

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413117

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413120

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413492

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413066

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413130

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412841

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: P412895

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P412647

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

Reference Method: SM 2320 B-2011
Batch ID: P413183

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

Reference Method: SM 2540 C-2011
Batch ID: P413194

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P413197

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P413188

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P412814

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: P412745

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.8		P	85 - 115

Reference Method: DEP SOP: NU-094-1
Batch ID: P412747

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.2		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412645

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413117

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413492

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413066

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413130

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412841

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.5		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412895

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: P412647

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

Reference Method: SM 2320 B-2011
Batch ID: P413183

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.9		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P413188

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P412814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320637	Chloride	98.1		P	90 - 110
2320700	Chloride	98.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320637	Sulfate	92.3		P	90 - 110
2320700	Sulfate	97.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413492

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2322944	Chloride	97.6		P	90 - 110
2323001	Chloride	97.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320765	Ammonia-N	100	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413130

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320368	Kjeldahl Nitrogen	102	99.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320661	NO2NO3-N	95.5	95.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320661	Total-P	107	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P412647

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320480	O-Phosphate-P	99.2	99.8	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P413188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2321325	Fluoride	103	102	P/P	92 - 107

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P412814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2320368	Organic Carbon	94.1	95.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P412745

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320400	Color (true)	0.665	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P412747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320848	Color (true)	2.16	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412645

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320654	Turbidity	9.10	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320637	Chloride	1.55	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320637	Sulfate	0.337	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P413492

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2322944	Chloride	0.760	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P413066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320765	Ammonia-N	5.60	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P413130

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320368	Kjeldahl Nitrogen	2.10	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P412841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320661	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P412895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320661	Total-P	0.487	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P412647

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320480	O-Phosphate-P	0.603	Spike	P	0 - 20

Reference Method: SM 2320 B-2011

Batch ID: P413183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321325	Total Alkalinity	0.129	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011

Batch ID: P413194

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320637	TDS	3.20	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P413188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2321325	Fluoride	0.960	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011

Batch ID: P412814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2320368	Organic Carbon	1.44	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: A111579

Included Lab Sample IDs: 2320681, 2320682

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A111580

Included Lab Sample IDs: 2320685, 2320686

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.2	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A111623

Included Lab Sample IDs: 2320682

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115

Reference Method: DEP SOP: NU-094-1

Run ID: A111624

Included Lab Sample IDs: 2320681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	102	P/P	85 - 115

Reference Method: SM 5310 B-2011

Run ID: A111659

Included Lab Sample IDs: 2320683, 2320684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.2	97.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A111666

Included Lab Sample IDs: 2320683, 2320684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.5	96.5	P/P	90 - 110
NO2NO3-N	98.5	97.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A111715

Included Lab Sample IDs: 2320681

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.0	99.6	P/P	90 - 110
Sulfate	99.2	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A111765

Included Lab Sample IDs: 2320683, 2320684

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: A111765

Included Lab Sample IDs: 2320683, 2320684

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.2	97.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A111826

Included Lab Sample IDs: 2320681, 2320682

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.5	97.5	P/P	90 - 110
Total Alkalinity	99.0	97.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A111826

Included Lab Sample IDs: 2320681, 2320682

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A111860

Included Lab Sample IDs: 2320683, 2320684

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A111911

Included Lab Sample IDs: 2320683, 2320684

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A111962

Included Lab Sample IDs: 2320682

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.9	98.5	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
DEP SOP: NU-094-1	Color (true)	99.8			0.665	
	Color (true)	99.2			2.16	
EPA 180.1 Rev. 2.0	Turbidity	96.1			9.10	
EPA 300.0 Rev. 2.1	Chloride	98.6	98.1	98.4	1.55	
	Chloride	98.9	97.6	97.4	0.760	
	Sulfate	98.1	92.3	97.2	0.337	
EPA 350.1 Rev. 2.0	Ammonia-N	98.0	100	107		5.60
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	102	99.4		2.10
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	95.5	95.5		0.0
EPA 365.1 Rev. 2.0	Total-P	104	107	108		0.487
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	99.2	99.8		0.603
SM 2320 B-2011	Total Alkalinity	95.9			0.129	
SM 2540 C-2011	TDS				3.20	
SM 4500-F- C-2011	Fluoride	102	103	102		0.960
SM 5310 B-2011	Organic Carbon	94.0	94.1	95.7		1.44

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2320681, 2320682
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2320681, 2320682
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2320681, 2320682
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2320681, 2320682
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2320683, 2320684
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2320683, 2320684
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2320683, 2320684
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2320683, 2320684
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2320685, 2320686
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2320681, 2320682
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2320681, 2320682
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2320681, 2320682
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2320681, 2320682
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2320683, 2320684

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	04/20/2022			04/20/2022 12:30	Blanca Fach	2320682
	04/20/2022			04/20/2022 16:31	Blanca Fach	2320681
EPA 180.1 Rev. 2.0	04/20/2022			04/20/2022 13:35	Anna M. Plaviak	2320681
	04/20/2022			04/20/2022 13:36	Anna M. Plaviak	2320682
EPA 300.0 Rev. 2.1	04/20/2022			04/27/2022 13:45	James L Waggeberby	2320681
	04/20/2022			04/27/2022 13:57	James L Waggeberby	2320682
	04/20/2022			05/05/2022 16:06	Anna M. Plaviak	2320682
EPA 350.1 Rev. 2.0	04/20/2022			04/28/2022 13:32	Judith K. Clark	2320683
	04/20/2022			04/28/2022 13:46	Judith K. Clark	2320684
EPA 351.2 Rev. 2.0	04/20/2022	05/02/2022 16:54	Samantha L Bates	05/04/2022 13:15	Samantha L Bates	2320683
	04/20/2022	05/02/2022 16:54	Samantha L Bates	05/04/2022 13:17	Samantha L Bates	2320684
EPA 353.2 Rev. 2.0	04/20/2022			04/25/2022 11:24	Beverly Y. Sanders	2320683
	04/20/2022			04/25/2022 11:58	Beverly Y. Sanders	2320684
EPA 365.1 Rev. 2.0	04/20/2022	04/27/2022 15:50	Simonne.V. Calhoun	04/29/2022 12:34	Sarah A Nixon	2320683
	04/20/2022	04/27/2022 15:50	Simonne.V. Calhoun	04/29/2022 12:35	Sarah A Nixon	2320684
EPA 365.1 Rev. 2.0 dissolved	04/20/2022			04/20/2022 16:09	Nathaniel J Jones	2320685
	04/20/2022			04/20/2022 16:13	Nathaniel J Jones	2320686
SM 2320 B-2011	04/20/2022			04/30/2022 14:10	Dale L. Simmons	2320682
	04/20/2022			04/30/2022 15:39	Dale L. Simmons	2320681
SM 2540 C-2011	04/20/2022			04/22/2022 15:36	Yijie Li	2320681, 2320682
SM 2540 D-2011	04/20/2022			04/22/2022 15:36	Yijie Li	2320681, 2320682
SM 4500-F- C-2011	04/20/2022			04/30/2022 14:10	Dale L. Simmons	2320682
	04/20/2022			04/30/2022 15:39	Dale L. Simmons	2320681
SM 5310 B-2011	04/20/2022			04/22/2022 22:23	Khloe J Berg	2320683
	04/20/2022			04/22/2022 22:37	Khloe J Berg	2320684