

Chemical Analysis Report

CEN-DIST-2022-01-12-02

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

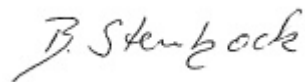
Event Description: **BMAP - Sweetwater and Salt**
Request ID: **RQ-2022-01-10-16**
Customer: **CEN-DIST**
Project ID: **BMAP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 04-FEB-2022 14:04



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: 01/11/2022 09:34

Field ID: G2CE0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2299021	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P408460	
	EPA 300.0 Rev. 2.1	Chloride	1.1E+03		mg Cl/L	P409265	
		Sulfate	140		mg SO4/L	P409268	
	SM 2120 B-2011	Color (true)**	200		PCU	P408448	
	SM 2320 B-2011	Total Alkalinity	127		mg CaCO3/L	P408539	
	SM 2540 C-2011	TDS	2.13E+03		mg/L	P408873	
	SM 2540 D-2011	TSS	2	I	mg/L	P408773	
	SM 4500 F-C-2011	Fluoride	0.13		mg F/L	P408542	
2299023	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P408830	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P408624	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P408600	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P408480	MS
	SM 5310 B-2011	Organic Carbon	23		mg C/L	P408584	
2299025	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.16		mg P/L	P408454	

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: 01/11/2022 10:04

Field ID: G2CE0123

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2299022	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P408460	
	EPA 300.0 Rev. 2.1	Chloride	340		mg Cl/L	P409115	
		Sulfate	44		mg SO4/L	P409118	
	SM 2120 B-2011	Color (true)**	75	A	PCU	P408448	
	SM 2320 B-2011	Total Alkalinity	134		mg CaCO3/L	P408539	
	SM 2540 C-2011	TDS	808		mg/L	P408873	
	SM 2540 D-2011	TSS	10		mg/L	P408773	
	SM 4500 F-C-2011	Fluoride	0.18		mg F/L	P408542	
2299024	EPA 350.1 Rev. 2.0	Ammonia-N	0.16		mg N/L	P408830	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.92		mg N/L	P408624	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.63		mg N/L	P408600	
	EPA 365.1 Rev. 2.0	Total-P	0.27		mg P/L	P408480	MS
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P408584	
2299026	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.22		mg P/L	P408454	

Ref. Method and Comment:

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: EPA 180.1 Rev. 2.0
Batch ID: P408460

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409115

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409118

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409265

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409268

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408830

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408624

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408600

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P408480

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 dissolved
Batch ID: P408454

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

Reference Method: SM 2120 B-2011
Batch ID: P408448

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P408539

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

Reference Method: SM 2540 C-2011
Batch ID: P408873

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P408773

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P408542

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P408584

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409115

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409265

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409268

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408830

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408600

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P408480

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P408454

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B-2011
Batch ID: P408448

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.0		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P408539

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.7		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P408542

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P408584

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409115

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299011	Chloride	99.8		P	90 - 110
2299037	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409118

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299011	Sulfate	94.2		P	90 - 110
2299037	Sulfate	96.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409265

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299450	Chloride	99.6		P	90 - 110
2300492	Chloride	96.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409268

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299450	Sulfate	95.3		P	90 - 110
2300492	Sulfate	95.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408830

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299219	Ammonia-N	98.4	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299315	Kjeldahl Nitrogen	96.1	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298925	NO2NO3-N	106	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P408480

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298926	Total-P	111	113	F/F	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P408454

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P408454

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2299016	O-Phosphate-P	90.4	91.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P408542

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298602	Fluoride	99.0	99.7	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P408584

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2298654	Organic Carbon	101	103	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P408460

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299014	Turbidity	1.12	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299011	Chloride	1.07	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299011	Sulfate	0.906	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409265

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299450	Chloride	1.01	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409268

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299450	Sulfate	0.876	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P408830

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299219	Ammonia-N	0.444	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P408624

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299315	Kjeldahl Nitrogen	4.79	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P408600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298925	NO2NO3-N	0.621	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P408480

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298926	Total-P	1.33	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P408454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299016	O-Phosphate-P	1.21	Spike	P	0 - 20

Reference Method: SM 2120 B-2011

Batch ID: P408448

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299022	Color (true)	1.94	Sample	P	0 - 20

Reference Method: SM 2320 B-2011

Batch ID: P408539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298602	Total Alkalinity	1.59	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011

Batch ID: P408873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2299081	TDS	5.45	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011

Batch ID: P408542

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298602	Fluoride	0.531	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011

Batch ID: P408584

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2298654	Organic Carbon	1.17	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B-2011

Run ID: A109826

Included Lab Sample IDs: 2299021, 2299022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	85 - 115
Color (true)	102	103	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A109828

Included Lab Sample IDs: 2299025, 2299026

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	98.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A109829

Included Lab Sample IDs: 2299021, 2299022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: SM 2320 B-2011

Run ID: A109873

Included Lab Sample IDs: 2299021, 2299022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	98.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A109873

Included Lab Sample IDs: 2299021, 2299022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	103	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A109902

Included Lab Sample IDs: 2299023, 2299024

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	95.7	P/P	90 - 110
Organic Carbon	94.8	95.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109906

Included Lab Sample IDs: 2299023, 2299024

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109945

Included Lab Sample IDs: 2299023, 2299024

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A109945

Included Lab Sample IDs: 2299023, 2299024

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109948

Included Lab Sample IDs: 2299023, 2299024

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	104	P/P	90 - 110
Total-P	104	103	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A110040

Included Lab Sample IDs: 2299022

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	103	P/P	90 - 110
Sulfate	98.7	99.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A110154

Included Lab Sample IDs: 2299021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	98.6	P/P	90 - 110
Sulfate	98.5	98.7	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
EPA 180.1 Rev. 2.0	Turbidity				1.12	
EPA 300.0 Rev. 2.1	Chloride	100	99.8	102	1.07	
	Chloride	99.2	99.6	96.4	1.01	
	Sulfate	96.6	94.2	96.3	0.906	
	Sulfate	97.4	95.3	95.6	0.876	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6	98.4	99.2		0.444
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.9	96.1	101		4.79
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	106	106	104		0.621
EPA 365.1 Rev. 2.0	Total-P	109	111	113		1.33
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8	90.4	91.5		1.21
SM 2120 B-2011	Color (true)	99.0			1.94	
SM 2320 B-2011	Total Alkalinity	97.7			1.59	
SM 2540 C-2011	TDS				5.45	
SM 4500 F-C-2011	Fluoride	100	99.0	99.7		0.531
SM 5310 B-2011	Organic Carbon	95.2	101	103		1.17

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2299021, 2299022
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2299021, 2299022
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2299021, 2299022
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2299023, 2299024
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2299023, 2299024
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2299023, 2299024
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2299023, 2299024
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2299025, 2299026
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2299021, 2299022
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2299021, 2299022
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2299021, 2299022
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2299021, 2299022
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2299021, 2299022
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2299023, 2299024

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	01/12/2022			01/12/2022 16:21	Khloe J Berg	2299021, 2299022
EPA 300.0 Rev. 2.1	01/12/2022			01/27/2022 18:08	Roberta Tatti	2299022
	01/12/2022			01/31/2022 20:45	James L Waggeberby	2299021
EPA 350.1 Rev. 2.0	01/12/2022			01/21/2022 12:11	Ping Hua	2299023
	01/12/2022			01/21/2022 12:12	Ping Hua	2299024
EPA 351.2 Rev. 2.0	01/12/2022	01/19/2022 11:00	Samantha L Bates	01/20/2022 12:47	Alexandra J Mattheus	2299023
	01/12/2022	01/19/2022 11:00	Samantha L Bates	01/20/2022 12:49	Alexandra J Mattheus	2299024
EPA 353.2 Rev. 2.0	01/12/2022			01/18/2022 10:11	Beverly Y. Sanders	2299023
	01/12/2022			01/18/2022 10:12	Beverly Y. Sanders	2299024
EPA 365.1 Rev. 2.0	01/12/2022	01/14/2022 16:50	Simonne.V. Calhoun	01/18/2022 12:24	Shengyu Ding	2299023
	01/12/2022	01/14/2022 16:50	Simonne.V. Calhoun	01/18/2022 12:27	Shengyu Ding	2299024
EPA 365.1 Rev. 2.0 dissolved	01/12/2022			01/12/2022 15:47	James L Waggeberby	2299025
	01/12/2022			01/12/2022 15:50	James L Waggeberby	2299026
SM 2120 B-2011	01/12/2022			01/12/2022 15:14	Blanca Fach	2299022
	01/12/2022			01/12/2022 15:49	Blanca Fach	2299021
SM 2320 B-2011	01/12/2022			01/14/2022 07:34	Dale L. Simmons	2299022
	01/12/2022			01/14/2022 08:27	Dale L. Simmons	2299021
SM 2540 C-2011	01/12/2022			01/13/2022 14:02	Yijie Li	2299021, 2299022
SM 2540 D-2011	01/12/2022			01/13/2022 14:02	Yijie Li	2299021, 2299022
SM 4500 F-C-2011	01/12/2022			01/14/2022 07:34	Dale L. Simmons	2299022
	01/12/2022			01/14/2022 08:27	Dale L. Simmons	2299021
SM 5310 B-2011	01/12/2022			01/14/2022 17:14	Khloe J Berg	2299024
	01/12/2022			01/14/2022 22:34	Khloe J Berg	2299023