Chemical Analysis Report

CEN-DIST-2023-01-25-01

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

Event Description: **Run 14**
Request ID: **RQ-2023-01-23-25**
Customer: **CEN-DIST**
Project ID: **SMP**

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FL Dept. of Environmental Protection
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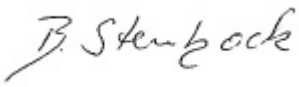
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 14-FEB-2023 16:38



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: Double Run Spring Run DS of Double Run Rd **Collection Date/Time: 01/24/2023 10:11**

Field ID: G1CE0122 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382908	DEP SOP: NU-094-1	Color (true)	21	A	PCU	P424985	
	EPA 180.1 Rev. 2.0	Turbidity	0.15	I	NTU	P424988	
	EPA 300.0 Rev. 2.1	Chloride	10	A	mg Cl/L	P425654	
		Sulfate	16	A	mg SO4/L	P425658	
	SM 2320 B-2011	Total Alkalinity	49		mg CaCO3/L	P425395	
	SM 2540 C-2015	TDS	131		mg/L	P425427	
	SM 2540 D-2015	TSS	2	U	mg/L	P425333	
	SM 4500-F- C-2011	Fluoride	0.051	I	mg F/L	P425399	RPD
2382911	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P425608	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.15	I	mg N/L	P425065	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.9		mg N/L	P425257	
	EPA 365.1 Rev. 2.0	Total-P	0.018		mg P/L	P425170	
	SM 5310 B-2011	Organic Carbon	3.1		mg C/L	P425162	

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: Blue Springs (Lake County) @ Weir **Collection Date/Time: 01/24/2023 10:44**

Field ID: G1CE0024 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382909	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P424984	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P424988	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P425654	
		Sulfate	9.2		mg SO4/L	P425658	
	SM 2320 B-2011	Total Alkalinity	102	A	mg CaCO3/L	P425395	
	SM 2540 C-2015	TDS	154		mg/L	P425427	
	SM 2540 D-2015	TSS	2	I	mg/L	P425333	
	SM 4500-F- C-2011	Fluoride	0.086	I J	mg F/L	P425399	RPD
2382912	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P425531	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P425065	
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.7		mg N/L	P425257	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P425170	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P425162	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: HOLIDAY SPRING ABOVE PUMP HOUSE **Collection Date/Time: 01/24/2023 12:41**

Field ID: G1CE0029 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382910	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P424984	
	EPA 180.1 Rev. 2.0	Turbidity	0.20	I	NTU	P424988	
	EPA 300.0 Rev. 2.1	Chloride	13		mg Cl/L	P425654	
		Sulfate	13		mg SO4/L	P425658	
	SM 2320 B-2011	Total Alkalinity	108		mg CaCO3/L	P425395	
	SM 2540 C-2015	TDS	171		mg/L	P425427	
	SM 2540 D-2015	TSS	2	U	mg/L	P425333	
	SM 4500-F- C-2011	Fluoride	0.099	I	mg F/L	P425399	RPD
2382913	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P425531	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P425065	
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.7		mg N/L	P425257	
	EPA 365.1 Rev. 2.0	Total-P	0.040		mg P/L	P425170	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P425162	

Ref. Method and Comment:
SM 2540 D-2015: 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: P424984

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P424985

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424988

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425654

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425658

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425531

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425608

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425065

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425257

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: P425170

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

Reference Method: SM 2320 B-2011
Batch ID: P425395

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-2015
Batch ID: P425427

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P425333

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P425162

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: P424984

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.9		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P424985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424988

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425654

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425658

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425531

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425608

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	105		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425170

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

Reference Method: SM 2320 B-2011
Batch ID: P425395

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.0		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P425427

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

Reference Method: SM 2540 D-2015
Batch ID: P425333

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	101		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P425162

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425654

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382908	Chloride	97.1		P	90 - 110
2383026	Chloride	90.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425658

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382908	Sulfate	94.3		P	90 - 110
2383026	Sulfate	90.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425531

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382912	Ammonia-N	97.6	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425608

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382769	Ammonia-N	95.4	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382921	Kjeldahl Nitrogen	96.2	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425257

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382891	NO2NO3-N	103	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425170

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382911	Total-P	105	106	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382909	Fluoride	103	100	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P425162

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382890	Organic Carbon	104		P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P424984

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382841	Color (true)	1.99	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P424985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382908	Color (true)	0.628	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382684	Turbidity	2.88	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382908	Chloride	0.313	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425658

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382908	Sulfate	0.230	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425531

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382912	Ammonia-N	3.82	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425608

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382769	Ammonia-N	1.13	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382921	Kjeldahl Nitrogen	0.999	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382891	NO2NO3-N	1.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425170

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382911	Total-P	1.37	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P425395

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382909	Total Alkalinity	0.110	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P425427

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382577	TDS	5.08	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382909	Fluoride	1.95	Spike	F	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P425162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382890	Organic Carbon	1.01	Spike	P	0 - 20

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

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A117094
Included Lab Sample IDs: 2382908, 2382909, 2382910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	102	P/P	90 - 110
Color (true)	103	102	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A117097
Included Lab Sample IDs: 2382908, 2382909, 2382910

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

Reference Method: SM 5310 B-2011
Run ID: A117165
Included Lab Sample IDs: 2382911, 2382912, 2382913

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.2	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A117175
Included Lab Sample IDs: 2382911, 2382912, 2382913

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	95.4	P/P	90 - 110
Kjeldahl Nitrogen	95.4	97.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A117205
Included Lab Sample IDs: 2382911, 2382912, 2382913

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	107	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A117206
Included Lab Sample IDs: 2382911, 2382912, 2382913

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	98.2	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A117270
Included Lab Sample IDs: 2382908, 2382909, 2382910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.1	96.8	P/P	90 - 110
Total Alkalinity	96.8	95.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500-F- C-2011
Run ID: A117270
Included Lab Sample IDs: 2382908, 2382909, 2382910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	104	P/P	90 - 110
Fluoride	104	105	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A117317
Included Lab Sample IDs: 2382908, 2382909, 2382910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	93.3	98.1	P/P	90 - 110
Sulfate	93.0	96.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A117326
Included Lab Sample IDs: 2382912, 2382913

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	96.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A117354
Included Lab Sample IDs: 2382911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	97.9	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)	99.9				1.99	
	Color (true)	100				0.628	
EPA 180.1 Rev. 2.0	Turbidity	102				2.88	
EPA 300.0 Rev. 2.1	Chloride	98.2	97.1	90.3		0.313	
	Sulfate	96.6	94.3	90.2		0.230	
EPA 350.1 Rev. 2.0	Ammonia-N	95.2	97.6	101			3.82
	Ammonia-N	95.6	95.4	96.8			1.13
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.2	96.2	97.5			0.999
EPA 353.2 Rev. 2.0	NO2NO3-N	105	103	105			1.31
EPA 365.1 Rev. 2.0	Total-P	103	105	106			1.37
SM 2320 B-2011	Total Alkalinity	97.0				0.110	
SM 2540 C-2015	TDS	97.4				5.08	
SM 2540 D-2015	TSS	101					
SM 4500-F- C-2011	Fluoride	101	103	100			1.95
SM 5310 B-2011	Organic Carbon	95.6	104				1.01

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2382908, 2382909, 2382910
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2382908, 2382909, 2382910
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2382908, 2382909, 2382910
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2382908, 2382909, 2382910
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2382911, 2382912, 2382913
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2382911, 2382912, 2382913
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2382911, 2382912, 2382913
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2382911, 2382912, 2382913
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2382908, 2382909, 2382910
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2382908, 2382909, 2382910
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2382908, 2382909, 2382910
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2382908, 2382909, 2382910
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2382911, 2382912, 2382913

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	01/25/2023			01/25/2023 14:48	Anna M. Plaviak	2382909, 2382910
	01/25/2023			01/25/2023 14:52	Anna M. Plaviak	2382908
EPA 180.1 Rev. 2.0	01/25/2023			01/25/2023 13:57	Khloe J Berg	2382908
	01/25/2023			01/25/2023 13:58	Khloe J Berg	2382909
	01/25/2023			01/25/2023 14:00	Khloe J Berg	2382910
EPA 300.0 Rev. 2.1	01/25/2023			02/08/2023 12:10	Anna M. Plaviak	2382908
	01/25/2023			02/08/2023 14:11	Anna M. Plaviak	2382909
	01/25/2023			02/08/2023 14:26	Anna M. Plaviak	2382910
EPA 350.1 Rev. 2.0	01/25/2023			02/08/2023 11:19	Ping Hua	2382912
	01/25/2023			02/08/2023 11:24	Ping Hua	2382913
	01/25/2023			02/09/2023 11:26	Ping Hua	2382911
EPA 351.2 Rev. 2.0	01/25/2023	01/27/2023 11:20	Simonne.V. Calhoun	01/31/2023 10:23	Samantha L Bates	2382911
	01/25/2023	01/27/2023 11:20	Simonne.V. Calhoun	01/31/2023 10:24	Samantha L Bates	2382912
	01/25/2023	01/27/2023 11:20	Simonne.V. Calhoun	01/31/2023 10:29	Samantha L Bates	2382913
EPA 353.2 Rev. 2.0	01/25/2023			02/01/2023 12:04	Beverly Y. Sanders	2382911
	01/25/2023			02/01/2023 12:06	Beverly Y. Sanders	2382912
	01/25/2023			02/01/2023 12:07	Beverly Y. Sanders	2382913
EPA 365.1 Rev. 2.0	01/25/2023	01/31/2023 13:47	Adam P Silver	02/01/2023 13:28	James L Waggerby	2382911
	01/25/2023	01/31/2023 13:47	Adam P Silver	02/01/2023 13:30	James L Waggerby	2382912
	01/25/2023	01/31/2023 13:47	Adam P Silver	02/01/2023 13:31	James L Waggerby	2382913
SM 2320 B-2011	01/25/2023			02/03/2023 00:00	Dale L. Simmons	2382909
	01/25/2023			02/03/2023 04:13	Dale L. Simmons	2382908
	01/25/2023			02/03/2023 04:28	Dale L. Simmons	2382910
SM 2540 C-2015	01/25/2023			01/27/2023 16:11	Yijie Li	2382908, 2382909, 2382910
SM 2540 D-2015	01/25/2023			01/27/2023 16:11	Yijie Li	2382908, 2382909, 2382910
SM 4500-F- C-2011	01/25/2023			02/02/2023 23:48	Dale L. Simmons	2382909
	01/25/2023			02/03/2023 04:13	Dale L. Simmons	2382908
	01/25/2023			02/03/2023 04:28	Dale L. Simmons	2382910
SM 5310 B-2011	01/25/2023			01/30/2023 19:28	Khloe J Berg	2382911
	01/25/2023			01/30/2023 19:41	Khloe J Berg	2382912
	01/25/2023			01/30/2023 19:54	Khloe J Berg	2382913