

Chemical Analysis Report

SO-DIST-2023-12-01-02

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

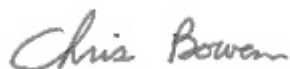
Event Description: **2023 SMP : P Riv**
Request ID: **RQ-2023-11-13-44**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
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FLDEP South District Office
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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 15-DEC-2023 14:47



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: Peace River Estuary at Harbour Heights

Collection Date/Time: 11/29/2023 08:55

Field ID: G3SD0148

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2454084	EPA 300.0 Rev. 2.1	Chloride	4.5E+03		mg Cl/L	P438810	
		Sulfate	670		mg SO4/L	P438814	
	SM 2320 B-2011	Total Alkalinity	86	A	mg CaCO3/L	P438549	
	SM 2540 C-2015	TDS	7.79E+03		mg/L	P438848	
	SM 2540 D-2015	TSS	23		mg/L	P438775	
	SM 4500-F- C-2011	Fluoride	0.76		mg F/L	P438552	
2454085	EPA 350.1 Rev. 2.0	Ammonia-N	0.043		mg N/L	P438711	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P438528	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P438598	
	EPA 365.1 Rev. 2.0	Total-P	0.62		mg P/L	P438832	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P438532	

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: Peace River above Horse Creek 2

Collection Date/Time: 11/29/2023 10:10

Field ID: G3SD0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2454086	EPA 300.0 Rev. 2.1	Chloride	34		mg Cl/L	P438810	
		Sulfate	62		mg SO4/L	P438814	
	SM 2320 B-2011	Total Alkalinity	78		mg CaCO3/L	P438548	
	SM 2540 C-2015	TDS	276	A	mg/L	P438848	
	SM 2540 D-2015	TSS	3	IA	mg/L	P438775	
	SM 4500-F- C-2011	Fluoride	0.58		mg F/L	P438551	
2454087	EPA 350.1 Rev. 2.0	Ammonia-N	0.045		mg N/L	P438710	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P438521	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.88		mg N/L	P438506	
	EPA 365.1 Rev. 2.0	Total-P	0.80		mg P/L	P438578	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P438532	

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: EPA 300.0 Rev. 2.1
Batch ID: P438810

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438814

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438710

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438711

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438528

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438506

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438598

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438578

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438832

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

Reference Method: SM 2320 B-2011
Batch ID: P438548

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

Reference Method: SM 2320 B-2011
Batch ID: P438549

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

Reference Method: SM 2540 C-2015
Batch ID: P438848

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P438775

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P438552

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P438532

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: P438810

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438710

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438711

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438528

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438506

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438598

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438578

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438832

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

Reference Method: SM 2320 B-2011
Batch ID: P438548

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.7		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P438549

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.7		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P438848

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	96.4		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P438775

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	102		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

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

Reference Method: SM 4500-F- C-2011
Batch ID: P438552

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P438532

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: P438810

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454116	Chloride	101		P	90 - 110
2454156	Chloride	98.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454116	Sulfate	99.4		P	90 - 110
2454156	Sulfate	95.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438710

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454540	Ammonia-N	97.8	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438711

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454301	Ammonia-N	96.0	98.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454056	Kjeldahl Nitrogen	108	109	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454422	Kjeldahl Nitrogen	105	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452867	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438598

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453742	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454043	Total-P	104	107	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438832

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454923	Total-P	98.8	99.0	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453938	Fluoride	102	102	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P438552

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454084	Fluoride	103	99.8	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P438532

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453721	Organic Carbon	96.6	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438810

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454116	Chloride	0.861	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454116	Sulfate	0.0679	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438710

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454540	Ammonia-N	2.60	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438711

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454301	Ammonia-N	1.78	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454056	Kjeldahl Nitrogen	1.27	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454422	Kjeldahl Nitrogen	2.45	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452867	NO2NO3-N	0.489	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438598

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453742	NO2NO3-N	0.980	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454043	Total-P	2.66	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454923	Total-P	0.101	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P438548

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453938	Total Alkalinity	2.51	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P438549

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454084	Total Alkalinity	0.552	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P438848

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454086	TDS	9.07	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453938	Fluoride	0.490	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P438552

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454084	Fluoride	1.43	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P438532

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453721	Organic Carbon	0.817	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A123029

Included Lab Sample IDs: 2454087

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

Reference Method: SM 5310 B-2011

Run ID: A123034

Included Lab Sample IDs: 2454085, 2454087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	96.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A123047

Included Lab Sample IDs: 2454084, 2454086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.3	98.1	P/P	90 - 110
Total Alkalinity	97.6	95.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A123047

Included Lab Sample IDs: 2454084, 2454086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	103	P/P	90 - 110
Fluoride	104	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A123063

Included Lab Sample IDs: 2454085

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A123078

Included Lab Sample IDs: 2454085

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A123082

Included Lab Sample IDs: 2454087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A123101

Included Lab Sample IDs: 2454087

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: A123101

Included Lab Sample IDs: 2454087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	109	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A123103

Included Lab Sample IDs: 2454085, 2454087

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	100	P/P	90 - 110
Ammonia-N	99.0	98.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A123118

Included Lab Sample IDs: 2454084, 2454086

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	99.5	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A123196

Included Lab Sample IDs: 2454085

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	103	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 300.0 Rev. 2.1	Chloride	100	101	98.5		0.861	
	Sulfate	99.4	99.4	95.6		0.0679	
EPA 350.1 Rev. 2.0	Ammonia-N	99.2	97.8	101			2.60
	Ammonia-N	96.8	96.0	98.4			1.78
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	110	108	109			1.27
	Kjeldahl Nitrogen	102	105	102			2.45
EPA 353.2 Rev. 2.0	NO2NO3-N	100	102	102			0.489
	NO2NO3-N	99.5	102	102			0.980
EPA 365.1 Rev. 2.0	Total-P	105	104	107			2.66
	Total-P	105	98.8	99.0			0.101
SM 2320 B-2011	Total Alkalinity	95.7				2.51	
	Total Alkalinity	98.7				0.552	
SM 2540 C-2015	TDS	96.4				9.07	
SM 2540 D-2015	TSS	102					
SM 4500-F- C-2011	Fluoride	101	102	102			0.490
	Fluoride	102	103	99.8			1.43
SM 5310 B-2011	Organic Carbon	95.6	96.6	95.6			0.817

Reference Method Descriptions

Method	Description	Associated Samples
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2454084, 2454086
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2454084, 2454086
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2454085, 2454087
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2454085, 2454087
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2454085, 2454087
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2454085, 2454087
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2454084, 2454086
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2454084, 2454086
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2454084, 2454086
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2454084, 2454086
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2454085, 2454087

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 300.0 Rev. 2.1	12/01/2023			12/08/2023 18:52	Anna M. Plaviak	2454084
	12/01/2023			12/08/2023 19:07	Anna M. Plaviak	2454086
EPA 350.1 Rev. 2.0	12/01/2023			12/08/2023 11:41	Khloe J Berg	2454087
	12/01/2023			12/08/2023 12:06	Khloe J Berg	2454085
EPA 351.2 Rev. 2.0	12/01/2023	12/06/2023 09:38	Simonne.V. Calhoun	12/07/2023 11:05	Ping Hua	2454085
	12/01/2023	12/06/2023 11:57	Simonne.V. Calhoun	12/07/2023 16:45	Ping Hua	2454087
EPA 353.2 Rev. 2.0	12/01/2023			12/05/2023 14:50	Fadila Guebre	2454087
	12/01/2023			12/06/2023 14:03	Fadila Guebre	2454085
EPA 365.1 Rev. 2.0	12/01/2023	12/06/2023 13:01	Adam P Silver	12/07/2023 11:23	Chandler E Cox	2454087
	12/01/2023	12/12/2023 14:15	Adam P Silver	12/13/2023 12:39	Simonne.V. Calhoun	2454085
SM 2320 B-2011	12/01/2023			12/05/2023 20:19	Chandler E Cox	2454086
	12/01/2023			12/05/2023 22:56	Chandler E Cox	2454084
SM 2540 C-2015	12/01/2023			12/05/2023 16:11	Yijie Li	2454084, 2454086
SM 2540 D-2015	12/01/2023			12/05/2023 16:11	Yijie Li	2454084, 2454086
SM 4500-F- C-2011	12/01/2023			12/05/2023 20:19	Chandler E Cox	2454086
	12/01/2023			12/06/2023 01:54	Chandler E Cox	2454084
SM 5310 B-2011	12/01/2023			12/05/2023 21:36	Kenneth H Lee	2454085
	12/01/2023			12/05/2023 21:58	Kenneth H Lee	2454087