Chemical Analysis Report

CEN-DIST-2020-09-23-02

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

Event Description: **Unnamed Ditches 2939 / Unnamed Ditches 2940**
Request ID: **RQ-2020-09-07-44**
Customer: **CEN-DIST**
Project ID: **SMP**

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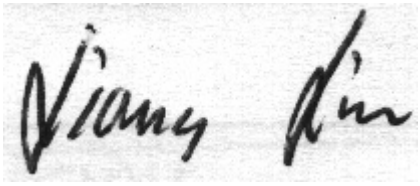
Date Certified: 08-OCT-2020 15:11



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: Unnamed Ditch @ 30m West Of Riverside Dr **Collection Date/Time: 09/22/2020 11:34**

Field ID: G5CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2197669	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P387752	
	EPA 300.0 Rev. 2.1	Chloride	59		mg Cl/L	P388030	
		Sulfate	16		mg SO4/L	P388032	
	SM 2120 B-2011	Color (true)	80		PCU	P387763	
	SM 2320 B-2011	Total Alkalinity	192		mg CaCO3/L	P387828	
	SM 2540 C-2011	TDS	329		mg/L	P388196	
	SM 2540 D-2011	TSS	9	I	mg/L	P388199	
	SM 4500 F-C-2011	Fluoride	0.20		mg F/L	P387943	
2197670	EPA 350.1 Rev. 2.0	Ammonia-N	0.22		mg N/L	P387889	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P388103	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.55		mg N/L	P387788	
	EPA 365.1 Rev. 2.0	Total-P	0.31		mg P/L	P387966	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P387981	
2197671	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.25		mg P/L	P387759	

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: Unnamed Ditch @ 30m From Boy Scout Camp Rd **Collection Date/Time: 09/22/2020 12:33**

Field ID: G5CE0121 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2197672	EPA 180.1 Rev. 2.0	Turbidity	5.1		NTU	P387752	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P388030	
		Sulfate	0.92		mg SO4/L	P388032	
	SM 2120 B-2011	Color (true)	650		PCU	P387763	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P387828	
	SM 2540 C-2011	TDS	124		mg/L	P388197	
	SM 2540 D-2011	TSS	10		mg/L	P388200	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P387943	
2197673	EPA 350.1 Rev. 2.0	Ammonia-N	0.01		mg N/L	P387889	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P388255	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P387788	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P387966	
	SM 5310 B-2011	Organic Carbon	51		mg C/L	P387981	
2197674	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.094		mg P/L	P387761	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P387752

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388030

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388032

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387889

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388103

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388255

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387788

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387966

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387759

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387761

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

Reference Method: SM 2120 B-2011
Batch ID: P387763

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P387828

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

Reference Method: SM 2540 C-2011
Batch ID: P388196

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P388197

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P388199

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P388200

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P387943

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P387981

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: P388030

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388032

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387889

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.7		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388103

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388255

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387788

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387966

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387759

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387761

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2120 B-2011
Batch ID: P387763

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.4		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P387828

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P387943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P387981

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.5		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388030

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197327	Chloride	103		P	90 - 110
2197587	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388032

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197327	Sulfate	100		P	90 - 110
2197587	Sulfate	98.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387889

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197899	Ammonia-N	94.1	96.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2198678	Kjeldahl Nitrogen	102	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2198685	Kjeldahl Nitrogen	107	110	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197667	NO2NO3-N	97.5	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387966

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197656	Total-P	106	109	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387759

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197562	O-Phosphate-P	98.7	99.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387761

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197719	O-Phosphate-P	99.8	98.3	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P387943

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197717	Fluoride	100	100	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P387981

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2197588	Organic Carbon	94.9	98.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P387752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197634	Turbidity	3.50	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197327	Chloride	0.509	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P388032

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197327	Sulfate	0.774	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P387889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197899	Ammonia-N	1.24	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2198678	Kjeldahl Nitrogen	1.93	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P388255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2198685	Kjeldahl Nitrogen	1.65	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P387788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197667	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P387966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197656	Total-P	3.25	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387759

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197562	O-Phosphate-P	0.485	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P387761

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197719	O-Phosphate-P	1.16	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P387763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197592	Color (true)	0.446	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P387828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197717	Total Alkalinity	0.488	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P388196

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197560	TDS	4.18	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P388197

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197862	TDS	2.11	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P388200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197862	TSS	2.41	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P387943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197717	Fluoride	0.0	Spike	P	0 - 2.8

Quality Assurance Report
Precision

Reference Method: SM 5310 B-2011
Batch ID: P387981

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2197588	Organic Carbon	2.99	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: A101160
Included Lab Sample IDs: 2197669, 2197672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A101162
Included Lab Sample IDs: 2197671, 2197674

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

Reference Method: SM 2120 B-2011
Run ID: A101163
Included Lab Sample IDs: 2197669, 2197672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.1	99.4	P/P	90 - 115
Color (true)	99.4	99.7	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A101175
Included Lab Sample IDs: 2197670, 2197673

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

Reference Method: SM 2320 B-2011
Run ID: A101193
Included Lab Sample IDs: 2197669, 2197672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.7	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A101210
Included Lab Sample IDs: 2197670, 2197673

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	98.7	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A101239
Included Lab Sample IDs: 2197669, 2197672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	101	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A101262
Included Lab Sample IDs: 2197670, 2197673

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A101262
Included Lab Sample IDs: 2197670, 2197673

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.4	99.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A101281
Included Lab Sample IDs: 2197669, 2197672

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Sulfate	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A101308
Included Lab Sample IDs: 2197670, 2197673

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A101338
Included Lab Sample IDs: 2197670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.1	96.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A101403
Included Lab Sample IDs: 2197673

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	101	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
EPA 180.1 Rev. 2.0	Turbidity					3.50	
EPA 300.0 Rev. 2.1	Chloride	101	103	104		0.509	
	Sulfate	98.8	100	98.4		0.774	
EPA 350.1 Rev. 2.0	Ammonia-N	98.7	94.1	96.0			1.24
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	102	106			1.93
	Kjeldahl Nitrogen	108	107	110			1.65
EPA 353.2 Rev. 2.0	NO2NO3-N	98.5	97.5	97.5			0.0
EPA 365.1 Rev. 2.0	Total-P	108	106	109			3.25
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5	98.7	99.3			0.485
	O-Phosphate-P	100	99.8	98.3			1.16
SM 2120 B-2011	Color (true)	98.4				0.446	
SM 2320 B-2011	Total Alkalinity	101				0.488	
SM 2540 C-2011	TDS					4.18	
	TDS					2.11	
SM 2540 D-2011	TSS					2.41	
SM 4500 F-C-2011	Fluoride	100	100	100			0.0
SM 5310 B-2011	Organic Carbon	97.5	94.9	98.6			2.99

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2197669, 2197672
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2197669, 2197672
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2197669, 2197672
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2197670, 2197673
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2197670, 2197673
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2197670, 2197673
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2197670, 2197673
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2197671, 2197674
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2197669, 2197672
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2197669, 2197672
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2197669, 2197672
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2197669, 2197672
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2197669, 2197672
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2197670, 2197673

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	09/23/2020			09/23/2020 15:04	Yen Ta	2197669, 2197672
EPA 300.0 Rev. 2.1	09/23/2020			09/30/2020 03:18	Elliott Rodriguez	2197669
	09/23/2020			09/30/2020 03:32	Elliott Rodriguez	2197672
EPA 350.1 Rev. 2.0	09/23/2020			09/26/2020 15:53	Ping Hua	2197670
	09/23/2020			09/26/2020 15:54	Ping Hua	2197673
EPA 351.2 Rev. 2.0	09/23/2020	10/01/2020 13:30	David Boose	10/02/2020 11:57	Elliott Rodriguez	2197670
	09/23/2020	10/06/2020 11:20	David Boose	10/07/2020 11:12	Elliott Rodriguez	2197673
EPA 353.2 Rev. 2.0	09/23/2020			09/24/2020 10:41	Beverly Y. Sanders	2197670
	09/23/2020			09/24/2020 10:42	Beverly Y. Sanders	2197673
EPA 365.1 Rev. 2.0	09/23/2020	09/29/2020 12:36	Yen Ta	09/30/2020 14:19	Benjamin T. Nordmann	2197670
	09/23/2020	09/29/2020 12:36	Yen Ta	09/30/2020 14:20	Benjamin T. Nordmann	2197673
EPA 365.1 Rev. 2.0 dissolved	09/23/2020			09/23/2020 15:42	Virginia P. Brown	2197671
	09/23/2020			09/23/2020 15:58	Virginia P. Brown	2197674
SM 2120 B-2011	09/23/2020			09/23/2020 16:47	Benjamin T. Nordmann	2197669
	09/23/2020			09/23/2020 16:56	Benjamin T. Nordmann	2197672
SM 2320 B-2011	09/23/2020			09/24/2020 18:43	Dale L. Simmons	2197669
	09/23/2020			09/24/2020 18:52	Dale L. Simmons	2197672
SM 2540 C-2011	09/23/2020			09/28/2020 15:25	Yijie Li	2197669, 2197672
SM 2540 D-2011	09/23/2020			09/28/2020 15:25	Yijie Li	2197669, 2197672
SM 4500 F-C-2011	09/23/2020			09/25/2020 21:23	Dale L. Simmons	2197669
	09/23/2020			09/25/2020 21:28	Dale L. Simmons	2197672
SM 5310 B-2011	09/23/2020			09/29/2020 12:05	David Boose	2197670
	09/23/2020			09/29/2020 12:19	David Boose	2197673