

Chemical Analysis Report

SO-DIST-2020-08-05-01

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

Event Description: **2020 SMP : Canals**
Request ID: **RQ-2020-08-03-54**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 26-AUG-2020 14:54

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored background.

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: C-139 Annex @ Deer Fence Canal Rd

Collection Date/Time: 08/04/2020 11:35

Field ID: G1SD0076

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2188586	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P385691	
	EPA 300.0 Rev. 2.1	Chloride	43		mg Cl/L	P385890	
		Sulfate	16		mg SO4/L	P385895	
	SM 2120 B-2011	Color (true)	150		PCU	P385688	
	SM 2320 B-2011	Total Alkalinity	222		mg CaCO3/L	P385770	
	SM 2540 C-2011	TDS	361		mg/L	P386160	
	SM 2540 D-2011	TSS	3	I	mg/L	P386005	
	SM 4500 F-C-2011	Fluoride	0.28		mg F/L	P385773	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.13		mg N/L	P385802	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P385878	
2188589	EPA 353.2 Rev. 2.0	NO2NO3-N	0.031		mg N/L	P385719	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P385824	
	SM 5310 B-2011	Organic Carbon	24		mg C/L	P385775	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.14		mg P/L	P385695	
	dissolved						

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: C-19 @ US 27

Collection Date/Time: 08/04/2020 10:10

Field ID: G3SD0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2188587	EPA 180.1 Rev. 2.0	Turbidity	4.2		NTU	P385691	
	EPA 300.0 Rev. 2.1	Chloride	44		mg Cl/L	P385890	
		Sulfate	19		mg SO4/L	P385895	
	SM 2120 B-2011	Color (true)	150		PCU	P385688	
	SM 2320 B-2011	Total Alkalinity	177		mg CaCO3/L	P385770	
	SM 2540 C-2011	TDS	333		mg/L	P386160	
	SM 2540 D-2011	TSS	6	I	mg/L	P386005	
	SM 4500 F-C-2011	Fluoride	0.30		mg F/L	P385773	
2188590	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P385802	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.9		mg N/L	P385878	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P385720	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P385824	
	SM 5310 B-2011	Organic Carbon	24		mg C/L	P385775	
2188593	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.072		mg P/L	P385695	

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: C-19 Canal

Collection Date/Time: 08/04/2020 10:35

Field ID: G3SD0162

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2188588	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P385691	
	EPA 300.0 Rev. 2.1	Chloride	80		mg Cl/L	P385890	
		Sulfate	50		mg SO4/L	P385895	
	SM 2120 B-2011	Color (true)	170		PCU	P385688	
	SM 2320 B-2011	Total Alkalinity	190		mg CaCO3/L	P385770	
	SM 2540 C-2011	TDS	473		mg/L	P386160	
	SM 2540 D-2011	TSS	2	I	mg/L	P386005	
	SM 4500 F-C-2011	Fluoride	0.25		mg F/L	P385773	
2188591	EPA 350.1 Rev. 2.0	Ammonia-N	0.042		mg N/L	P385802	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P385878	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.44		mg N/L	P385720	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P385824	
	SM 5310 B-2011	Organic Carbon	26		mg C/L	P385775	
2188594	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.15		mg P/L	P385695	

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: P385691

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385890

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385895

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385802

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385878

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385719

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385720

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385824

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385695

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P385688

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P385770

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

Reference Method: SM 2540 C-2011
Batch ID: P386160

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P386005

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P385773

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P385775

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: P385890

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385895

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385802

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385878

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385719

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385720

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: P385824

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385695

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

Reference Method: SM 2120 B-2011
Batch ID: P385688

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P385770

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P385773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P385775

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385890

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188563	Chloride	101		P	90 - 110
2188897	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188563	Sulfate	102		P	90 - 110
2188897	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188546	Ammonia-N	96.8	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188549	Kjeldahl Nitrogen	108	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385719

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188504	NO2NO3-N	96.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188590	NO2NO3-N	97.0	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385824

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188589	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385695

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188550	O-Phosphate-P	98.1	97.9	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P385773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188548	Fluoride	102	101	P/P	94 - 107

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P385775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188398	Organic Carbon	98.9	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188545	Turbidity	2.29	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385890

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188563	Chloride	0.540	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188563	Sulfate	0.438	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188546	Ammonia-N	1.09	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188549	Kjeldahl Nitrogen	0.858	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385719

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188504	NO2NO3-N	0.364	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188590	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385824

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188589	Total-P	0.0337	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P385695

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188550	O-Phosphate-P	0.204	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
 Batch ID: P385688

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188563	Color (true)	1.41	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P385770

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188548	Total Alkalinity	2.08	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
 Batch ID: P386160

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188548	TDS	7.11	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P385773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188548	Fluoride	0.902	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P385775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188398	Organic Carbon	1.90	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: A100296

Included Lab Sample IDs: 2188586, 2188587, 2188588

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	103	P/P	90 - 115
Color (true)	103	104	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100297

Included Lab Sample IDs: 2188586, 2188587, 2188588

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A100298

Included Lab Sample IDs: 2188592, 2188593, 2188594

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	97.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A100311

Included Lab Sample IDs: 2188589, 2188590, 2188591

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	100	P/P	90 - 110
NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A100341

Included Lab Sample IDs: 2188586, 2188587, 2188588

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	97.2	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A100341

Included Lab Sample IDs: 2188586, 2188587, 2188588

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A100342

Included Lab Sample IDs: 2188589, 2188590, 2188591

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100352

Included Lab Sample IDs: 2188589, 2188590, 2188591

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100352

Included Lab Sample IDs: 2188589, 2188590, 2188591

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	98.8	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100386

Included Lab Sample IDs: 2188586, 2188587, 2188588

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A100396

Included Lab Sample IDs: 2188589, 2188590, 2188591

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	102	P/P	90 - 110
Total-P	102	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A100416

Included Lab Sample IDs: 2188589, 2188590, 2188591

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.7	92.6	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				2.29	
EPA 300.0 Rev. 2.1	Chloride	102	101	103	0.540	
	Sulfate	104	102	103	0.438	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	96.8	98.0		1.09
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	108	107		0.858
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	96.0			0.364
	NO ₂ NO ₃ -N	99.5	97.0	97.0		0.0
EPA 365.1 Rev. 2.0	Total-P	99.9	102	102		0.0337
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	98.1	97.9		0.204
SM 2120 B-2011	Color (true)	102			1.41	
SM 2320 B-2011	Total Alkalinity	103			2.08	
SM 2540 C-2011	TDS				7.11	
SM 4500 F-C-2011	Fluoride	102	102	101		0.902
SM 5310 B-2011	Organic Carbon	98.6	98.9	101		1.90

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2188586, 2188587, 2188588
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2188586, 2188587, 2188588
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2188586, 2188587, 2188588
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2188589, 2188590, 2188591
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2188589, 2188590, 2188591
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2188589, 2188590, 2188591
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2188589, 2188590, 2188591
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2188592, 2188593, 2188594
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2188586, 2188587, 2188588
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2188586, 2188587, 2188588
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2188586, 2188587, 2188588
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2188586, 2188587, 2188588
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2188586, 2188587, 2188588
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2188589, 2188590, 2188591

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	08/05/2020			08/05/2020 15:58	Blanca Fach	2188586, 2188587, 2188588
EPA 300.0 Rev. 2.1	08/05/2020			08/08/2020 12:44	Julia Storbeck	2188586
	08/05/2020			08/08/2020 12:57	Julia Storbeck	2188587
	08/05/2020			08/08/2020 13:09	Julia Storbeck	2188588
EPA 350.1 Rev. 2.0	08/05/2020			08/08/2020 14:00	Ping Hua	2188589
	08/05/2020			08/08/2020 14:01	Ping Hua	2188590
	08/05/2020			08/08/2020 14:02	Ping Hua	2188591
EPA 351.2 Rev. 2.0	08/05/2020	08/11/2020 09:50	Sima Feizi	08/12/2020 12:51	Jhamieka S. Greenwood	2188589
	08/05/2020	08/11/2020 09:50	Sima Feizi	08/12/2020 12:53	Jhamieka S. Greenwood	2188590
	08/05/2020	08/11/2020 09:50	Sima Feizi	08/12/2020 12:54	Jhamieka S. Greenwood	2188591
EPA 353.2 Rev. 2.0	08/05/2020			08/06/2020 10:29	Beverly Y. Sanders	2188589
	08/05/2020			08/06/2020 10:36	Beverly Y. Sanders	2188590
	08/05/2020			08/06/2020 10:49	Beverly Y. Sanders	2188591
EPA 365.1 Rev. 2.0	08/05/2020	08/10/2020 11:00	Shengyu Wang	08/11/2020 12:13	Benjamin T. Nordmann	2188589
	08/05/2020	08/10/2020 11:00	Shengyu Wang	08/11/2020 12:18	Benjamin T. Nordmann	2188590
	08/05/2020	08/10/2020 11:00	Shengyu Wang	08/11/2020 12:19	Benjamin T. Nordmann	2188591
EPA 365.1 Rev. 2.0 dissolved	08/05/2020			08/05/2020 16:23	Virginia P. Brown	2188592
	08/05/2020			08/05/2020 16:24	Virginia P. Brown	2188593
	08/05/2020			08/05/2020 16:25	Virginia P. Brown	2188594
SM 2120 B-2011	08/05/2020			08/05/2020 15:51	Benjamin T. Nordmann	2188586
	08/05/2020			08/05/2020 16:01	Benjamin T. Nordmann	2188587
	08/05/2020			08/05/2020 16:02	Benjamin T. Nordmann	2188588
SM 2320 B-2011	08/05/2020			08/06/2020 19:12	Dale L. Simmons	2188586
	08/05/2020			08/06/2020 19:26	Dale L. Simmons	2188587
	08/05/2020			08/06/2020 19:40	Dale L. Simmons	2188588
SM 2540 C-2011	08/05/2020			08/10/2020 13:50	Yijie Li	2188586, 2188587, 2188588
SM 2540 D-2011	08/05/2020			08/10/2020 13:50	Yijie Li	2188586, 2188587, 2188588
SM 4500 F-C-2011	08/05/2020			08/06/2020 19:12	Dale L. Simmons	2188586
	08/05/2020			08/06/2020 19:26	Dale L. Simmons	2188587
	08/05/2020			08/06/2020 19:40	Dale L. Simmons	2188588
SM 5310 B-2011	08/05/2020			08/06/2020 23:20	David Boose	2188589
	08/05/2020			08/06/2020 23:32	David Boose	2188590
	08/05/2020			08/06/2020 23:46	David Boose	2188591