Chemical Analysis Report

SO-DIST-2020-06-19-01

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

Event Description: **2020 SMP : Small Highlands**
Request ID: **RQ-2020-04-06-36**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
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FLDEP South District Office
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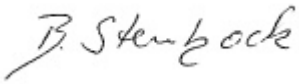
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 07-JUL-2020 13:06



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: Lake Denton @ Center **Collection Date/Time: 06/18/2020 10:45**

Field ID: G4SD0180 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2177783	EPA 180.1 Rev. 2.0	Turbidity	0.30		NTU	P383460	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P383738	
		Sulfate	45		mg SO4/L	P383741	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P383463	
	SM 2320 B-2011	Total Alkalinity	39	A	mg CaCO3/L	P383552	
	SM 2540 C-2011	TDS	155		mg/L	P383858	
	SM 2540 D-2011	TSS	2	U	mg/L	P383821	
	SM 4500 F-C-2011	Fluoride	0.22		mg F/L	P383556	
2177784	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P383477	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26		mg N/L	P383545	
	EPA 353.2 Rev. 2.0	NO2NO3-N	2.5		mg N/L	P383495	
	EPA 365.1 Rev. 2.0	Total-P	0.004	I	mg P/L	P383508	
	SM 5310 B-2011	Organic Carbon	1.7		mg C/L	P383708	
2177785	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P383488	

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: Lake Damon @ Middle **Collection Date/Time: 06/18/2020 11:50**

Field ID: FB_06182020 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2177786	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P383460	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P383738	
		Sulfate	0.20	U	mg SO4/L	P383741	
	SM 2120 B-2011	Color (true)	2.5	U	PCU	P383463	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P383552	
	SM 2540 C-2011	TDS	15	U	mg/L	P383857	
	SM 2540 D-2011	TSS	2	U	mg/L	P383820	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P383556	
2177787	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P383477	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P383565	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P383495	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P383668	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P383708	
2177788	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P383488	

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: P383460

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383738

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383741

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383477

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383545

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383565

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P383495

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383508

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383668

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383488

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

Reference Method: SM 2120 B-2011
Batch ID: P383463

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P383552

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

Reference Method: SM 2540 C-2011
Batch ID: P383857

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2011
Batch ID: P383858

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P383820

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P383821

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P383556

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P383708

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: P383738

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383741

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383477

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383545

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: P383565

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: P383495

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383508

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383668

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	97.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383488

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	93.4		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2120 B-2011
Batch ID: P383463

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.8		P	85 - 115

Reference Method: SM 2320 B-2011
Batch ID: P383552

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.2		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P383556

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P383708

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383738

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177725	Chloride	103		P	90 - 110
2177789	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383741

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177725	Sulfate	103		P	90 - 110
2177789	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177784	Ammonia-N	104	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383545

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177784	Kjeldahl Nitrogen	97.2	98.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383565

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177824	Kjeldahl Nitrogen	95.1	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P383495

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177754	NO2NO3-N	96.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383508

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177733	Total-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383668

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2178029	Total-P	99.6	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383488

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177728	O-Phosphate-P	90.5	92.3	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P383556

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177783	Fluoride	99.4	97.9	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P383708

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2177691	Organic Carbon	96.0	98.1	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P383460

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177753	Turbidity	16.9	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383738

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177725	Chloride	0.216	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P383741

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177725	Sulfate	0.110	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P383477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177784	Ammonia-N	0.236	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177784	Kjeldahl Nitrogen	0.931	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P383565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177824	Kjeldahl Nitrogen	6.96	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P383495

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177754	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383508

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177733	Total-P	0.216	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P383668

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2178029	Total-P	0.888	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P383488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177728	O-Phosphate-P	1.69	Spike	P	0 - 20

Reference Method: SM 2120 B-2011
Batch ID: P383463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177752	Color (true)	1.78	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P383552

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177783	Total Alkalinity	1.13	Sample	P	0 - 8.1

Reference Method: SM 2540 C-2011
Batch ID: P383857

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177708	TDS	8.07	Sample	P	0 - 10

Reference Method: SM 2540 C-2011
Batch ID: P383858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177731	TDS	5.21	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P383556

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177783	Fluoride	0.965	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P383708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2177691	Organic Carbon	1.28	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 180.1 Rev. 2.0
Run ID: A99430
Included Lab Sample IDs: 2177783, 2177786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105

Reference Method: SM 2120 B-2011
Run ID: A99431
Included Lab Sample IDs: 2177783, 2177786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.5	100	P/P	90 - 115

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A99435
Included Lab Sample IDs: 2177784, 2177787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	106	P/P	90 - 110
Ammonia-N	105	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A99440
Included Lab Sample IDs: 2177785, 2177788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	90.5	90.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A99442
Included Lab Sample IDs: 2177784, 2177787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	102	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A99462
Included Lab Sample IDs: 2177783, 2177786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.7	99.2	P/P	90 - 110
Total Alkalinity	99.2	97.6	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A99462
Included Lab Sample IDs: 2177783, 2177786

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A99483
Included Lab Sample IDs: 2177784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	93.8	93.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A99488
Included Lab Sample IDs: 2177784, 2177787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.1	95.3	P/P	90 - 110
Kjeldahl Nitrogen	96.1	95.1	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A99535
Included Lab Sample IDs: 2177784, 2177787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.1	98.1	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A99546
Included Lab Sample IDs: 2177783, 2177786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.2	100	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A99586
Included Lab Sample IDs: 2177787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.0	95.8	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					16.9	
EPA 300.0 Rev. 2.1	Chloride	102	103	103		0.216	
	Sulfate	103	103	102		0.110	
EPA 350.1 Rev. 2.0	Ammonia-N	104	104	104			0.236
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	105	97.2	98.3			0.931
	Kjeldahl Nitrogen	102	95.1	106			6.96
EPA 353.2 Rev. 2.0	NO2NO3-N	100	96.0				0.0
EPA 365.1 Rev. 2.0	Total-P	105	104	104			0.216
	Total-P	97.3	99.6	100			0.888
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	93.4	90.5	92.3			1.69
SM 2120 B-2011	Color (true)	98.8				1.78	
SM 2320 B-2011	Total Alkalinity	99.2				1.13	
SM 2540 C-2011	TDS					8.07	
	TDS					5.21	
SM 4500 F-C-2011	Fluoride	97.1	99.4	97.9			0.965
SM 5310 B-2011	Organic Carbon	96.1	96.0	98.1			1.28

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2177783, 2177786
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2177783, 2177786
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2177783, 2177786
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2177784, 2177787
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2177784, 2177787
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2177784, 2177787
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2177784, 2177787
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2177785, 2177788
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2177783, 2177786
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2177783, 2177786
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2177783, 2177786
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2177783, 2177786
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2177783, 2177786
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2177784, 2177787

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	06/19/2020			06/19/2020 15:56	Yen Ta	2177783, 2177786
EPA 300.0 Rev. 2.1	06/19/2020			06/24/2020 08:19	Elliott Rodriguez	2177783
	06/19/2020			06/24/2020 08:32	Elliott Rodriguez	2177786
EPA 350.1 Rev. 2.0	06/19/2020			06/21/2020 12:15	Ping Hua	2177784
	06/19/2020			06/21/2020 12:38	Ping Hua	2177787
EPA 351.2 Rev. 2.0	06/19/2020	06/23/2020 10:10	Sima Feizi	06/24/2020 10:31	Jhamieka S. Greenwood	2177784
	06/19/2020	06/23/2020 10:10	Sima Feizi	06/24/2020 11:02	Jhamieka S. Greenwood	2177787
EPA 353.2 Rev. 2.0	06/19/2020			06/22/2020 10:16	Beverly Y. Sanders	2177784
	06/19/2020			06/22/2020 10:17	Beverly Y. Sanders	2177787
EPA 365.1 Rev. 2.0	06/19/2020	06/22/2020 14:35	Yen Ta	06/24/2020 08:29	Lipi Saha	2177784
	06/19/2020	06/25/2020 11:41	Yen Ta	06/30/2020 08:03	Lipi Saha	2177787
EPA 365.1 Rev. 2.0 dissolved	06/19/2020			06/19/2020 17:40	Carlos Miranda	2177785
	06/19/2020			06/19/2020 17:41	Carlos Miranda	2177788
SM 2120 B-2011	06/19/2020			06/19/2020 17:09	Benjamin T. Nordmann	2177783
	06/19/2020			06/19/2020 17:10	Benjamin T. Nordmann	2177786
SM 2320 B-2011	06/19/2020			06/22/2020 23:58	Dale L. Simmons	2177783
	06/19/2020			06/23/2020 03:21	Dale L. Simmons	2177786
SM 2540 C-2011	06/19/2020			06/24/2020 13:02	Yijie Li	2177783, 2177786
SM 2540 D-2011	06/19/2020			06/24/2020 13:02	Yijie Li	2177783, 2177786
SM 4500 F-C-2011	06/19/2020			06/22/2020 23:49	Dale L. Simmons	2177783
	06/19/2020			06/23/2020 03:21	Dale L. Simmons	2177786
SM 5310 B-2011	06/19/2020			06/25/2020 20:10	David Boose	2177784
	06/19/2020			06/25/2020 20:22	David Boose	2177787