Chemical Analysis Report

NE-DIST-2018-06-15-02

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

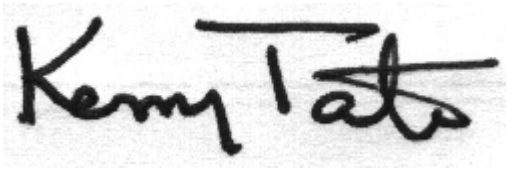
Event Description: **Suw 3 SCIs**
Request ID: **RQ-2018-06-04-33**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 09-JUL-2018 11:04



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 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: Rocky Creek at 156th Av. **Collection Date/Time: 06/14/2018 11:35**

Field ID: G1NE0020 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2001172	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P346998	
	EPA 300.0 Rev. 2.1	Chloride	9.7		mg Cl/L	P347396	
		Sulfate	0.66		mg SO4/L	P347399	
	SM 2120 B	Color (true)	690		PCU	P346992	
	SM 2320 B-97	Total Alkalinity	8.5		mg CaCO3/L	P347266	RPD
	SM 2540 C-97	TDS	104		mg/L	P347483	
	SM 2540 D-97	TSS	3	I	mg/L	P347504	
	SM 4500 F-C-97	Fluoride	0.077	I	mg F/L	P347270	
2001174	EPA 350.1 Rev. 2.0	Ammonia-N	0.027		mg N/L	P347348	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P347654	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.030		mg N/L	P347309	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P347256	
	SM 5310 B-00	Organic Carbon	50		mg C/L	P347526	
2001176	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.091		mg P/L	P346996	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Five Mile Cr. At SW 150th Blvd **Collection Date/Time: 06/14/2018 12:10**

Field ID: G1NE0919 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2001173	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P346998	
	EPA 300.0 Rev. 2.1	Chloride	8.6		mg Cl/L	P347396	
		Sulfate	0.23	I	mg SO4/L	P347399	
	SM 2120 B	Color (true)	520		PCU	P346992	
	SM 2320 B-97	Total Alkalinity	6.8		mg CaCO3/L	P347266	RPD
	SM 2540 C-97	TDS	121		mg/L	P347483	
	SM 2540 D-97	TSS	3	I	mg/L	P347504	
	SM 4500 F-C-97	Fluoride	0.062	I	mg F/L	P347270	
2001175	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P347348	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P347654	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015		mg N/L	P347309	
	EPA 365.1 Rev. 2.0	Total-P	0.076		mg P/L	P347256	
	SM 5310 B-00	Organic Carbon	51		mg C/L	P347526	
2001177	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.054		mg P/L	P346996	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P346998

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P347396

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P347399

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347348

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347654

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P347309

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P347256

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346996

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

Reference Method: SM 2120 B
Batch ID: P346992

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P347266

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

Reference Method: SM 2540 C-97
Batch ID: P347483

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P347504

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P347270

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P347526

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: P347396

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P347399

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347348

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347654

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.1		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P347309

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P347256

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346996

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

Reference Method: SM 2320 B-97
Batch ID: P347266

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P347270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.2		P	91 - 105

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P347526

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.7		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P347396

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2000771	Chloride	97.8		P	90 - 110
2001110	Chloride	96.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P347399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2000771	Sulfate	101		P	90 - 110
2001110	Sulfate	97.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2001115	Ammonia-N	101	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347654

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2001116	Kjeldahl Nitrogen	108	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P347309

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2001162	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P347256

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2001465	Total-P	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2001177	O-Phosphate-P	94.1	94.4	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P347270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2001459	Fluoride	97.7	95.8	P/P	91 - 105

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P346998

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001167	Turbidity	1.65	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P347396

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2000771	Chloride	3.48	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P347399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2000771	Sulfate	4.43	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001115	Ammonia-N	1.49	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P347654

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001116	Kjeldahl Nitrogen	8.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P347309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001162	NO2NO3-N	0.491	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P347256

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001465	Total-P	0.373	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001177	O-Phosphate-P	0.203	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2120 B
Batch ID: P346992

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001194	Color (true)	0.483	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P347266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001459	Total Alkalinity	3.83	Sample	F	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P347483

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001161	TDS	1.87	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P347270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2001459	Fluoride	1.47	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P347526

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2000125	Organic Carbon	0.857	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Calibration Verification

Reference Method: SM 2120 B
Run ID: A84624
Included Lab Sample IDs: 2001172, 2001173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.6	99.8	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A84628
Included Lab Sample IDs: 2001176, 2001177

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	99.7	P/P	90 - 110
O-Phosphate-P	99.7	99.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A84629
Included Lab Sample IDs: 2001172, 2001173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A84742
Included Lab Sample IDs: 2001172, 2001173

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A84747
Included Lab Sample IDs: 2001174, 2001175

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

Reference Method: SM 2320 B-97
Run ID: A84752
Included Lab Sample IDs: 2001172, 2001173

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.9	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A84752
Included Lab Sample IDs: 2001172, 2001173

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A84777
Included Lab Sample IDs: 2001174, 2001175

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A84777
Included Lab Sample IDs: 2001174, 2001175

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A84835
Included Lab Sample IDs: 2001174, 2001175

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

Reference Method: SM 5310 B-00
Run ID: A84844
Included Lab Sample IDs: 2001174, 2001175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.3	95.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A85015
Included Lab Sample IDs: 2001174, 2001175

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.0	100	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					1.65	
EPA 300.0 Rev. 2.1	Chloride	99.9	97.8	96.9		3.48	
	Sulfate	101	101	97.1		4.43	
EPA 350.1 Rev. 2.0	Ammonia-N	100	101	103			1.49
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.1	99.5	108			8.49
EPA 353.2 Rev. 2.0	NO2NO3-N	101	102	102			0.491
EPA 365.1 Rev. 2.0	Total-P	98.6	100	100			0.373
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	94.1	94.4			0.203
SM 2120 B	Color (true)					0.483	
SM 2320 B-97	Total Alkalinity	100				3.83	
SM 2540 C-97	TDS					1.87	
SM 4500 F-C-97	Fluoride	96.2	95.8	97.7			1.47
SM 5310 B-00	Organic Carbon	94.7					0.857

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2001172, 2001173
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2001172, 2001173
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2001172, 2001173
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2001174, 2001175
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2001174, 2001175
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2001174, 2001175
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2001174, 2001175
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2001176, 2001177
SM 2120 B / E31780	True Color measured at 450 nm	2001172, 2001173
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2001172, 2001173
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2001172, 2001173
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2001172, 2001173
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2001172, 2001173
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2001174, 2001175

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	06/15/2018			06/15/2018 14:08	Tanya Welborn	2001172, 2001173
EPA 300.0 Rev. 2.1	06/15/2018			06/22/2018 19:35	Lipi Saha	2001172
	06/15/2018			06/22/2018 19:47	Lipi Saha	2001173
EPA 350.1 Rev. 2.0	06/15/2018			06/22/2018 10:17	Ping Hua	2001174
	06/15/2018			06/22/2018 10:19	Ping Hua	2001175
EPA 351.2 Rev. 2.0	06/15/2018	06/28/2018 10:50	Adrian Shelby	07/03/2018 14:53	Tanya Welborn	2001174
	06/15/2018	06/28/2018 10:50	Adrian Shelby	07/03/2018 14:55	Tanya Welborn	2001175
EPA 353.2 Rev. 2.0	06/15/2018			06/21/2018 10:45	Beverly Y. Sanders	2001174
	06/15/2018			06/21/2018 10:46	Beverly Y. Sanders	2001175
EPA 365.1 Rev. 2.0	06/15/2018	06/21/2018 12:42	Sima Feizi	06/26/2018 12:49	Beverly Y. Sanders	2001174
	06/15/2018	06/21/2018 12:42	Sima Feizi	06/26/2018 12:50	Beverly Y. Sanders	2001175
EPA 365.1 Rev. 2.0 dissolved	06/15/2018			06/15/2018 14:35	Megan Treadwell	2001177
	06/15/2018			06/15/2018 14:46	Megan Treadwell	2001176
SM 2120 B	06/15/2018			06/15/2018 14:59	Tanya Welborn	2001172, 2001173
SM 2320 B-97	06/15/2018			06/20/2018 22:15	Lauren Bottorf	2001173
	06/15/2018			06/20/2018 22:57	Lauren Bottorf	2001172
SM 2540 C-97	06/15/2018			06/20/2018 15:01	Yijie Li	2001172, 2001173
SM 2540 D-97	06/15/2018			06/20/2018 15:01	Yijie Li	2001172, 2001173
SM 4500 F-C-97	06/15/2018			06/20/2018 22:15	Lauren Bottorf	2001173
	06/15/2018			06/20/2018 22:57	Lauren Bottorf	2001172
SM 5310 B-00	06/15/2018			06/25/2018 21:06	Megan Treadwell	2001174
	06/15/2018			06/25/2018 21:22	Megan Treadwell	2001175