Chemical Analysis Report

NE-DIST-2021-11-03-01

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

Event Description: **Suwannee Central**
Request ID: **RQ-2021-11-15-26**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way West
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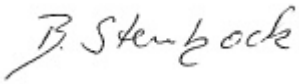
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 19-NOV-2021 18:44



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 groups are included in this report: Nutrients and Pesticides.

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: Olustee Creek at SR-18 **Collection Date/Time: 11/02/2021 11:35**

Field ID: 21030071 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2287920	EPA 180.1 Rev. 2.0	Turbidity	2.5		NTU	P405974	
	EPA 300.0 Rev. 2.1	Chloride	8.9		mg Cl/L	P406110	
		Sulfate	1.6		mg SO4/L	P406112	
	SM 2120 B-2011	Color (true)	380		PCU	P405967	
	SM 2320 B-2011	Total Alkalinity	32		mg CaCO3/L	P406171	
	SM 2540 C-2011	TDS	116		mg/L	P406360	
	SM 2540 D-2011	TSS	2	I A	mg/L	P406375	
	SM 4500 F-C-2011	Fluoride	0.23		mg F/L	P406175	
2287921	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P406400	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.93		mg N/L	P406229	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.054		mg N/L	P406129	
	EPA 365.1 Rev. 2.0	Total-P	0.51		mg P/L	P406138	
	SM 5310 B-2011	Organic Carbon	29		mg C/L	P406094	
2287922	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.42		mg P/L	P405949	
2287925	EPA 8276	Chlordane	3.0	U	ng/L	P406320	
		Toxaphene	18	U	ng/L	P406320	

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: P405974

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406110

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406112

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406400

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406229

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406129

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406138

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405949

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

Reference Method: EPA 8276
Batch ID: P406320

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2120 B-2011
Batch ID: P405967

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P406171

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

Reference Method: SM 2540 C-2011
Batch ID: P406360

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P406375

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P406175

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P406094

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: P406110

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406112

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406400

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406229

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.4		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406129

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406138

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405949

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

Reference Method: EPA 8276
Batch ID: P406320

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	115	109	P/P	56 - 117
Toxaphene	107	93.5	P/P	45 - 116

Reference Method: SM 2120 B-2011
Batch ID: P405967

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P406171

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.5		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P406175

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P406094

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406110

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287475	Chloride	98.2		P	90 - 110
2287920	Chloride	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287475	Sulfate	97.4		P	90 - 110
2287920	Sulfate	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406400

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287921	Ammonia-N	99.0	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406229

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287894	Kjeldahl Nitrogen	100	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406129

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287921	NO2NO3-N	97.1	96.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406138

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2288211	Total-P	102	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405949

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287895	O-Phosphate-P	93.9	94.6	P/P	90 - 110

Reference Method: EPA 8276
Batch ID: P406320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2288337	Chlordane	87.4	108	P/P	47 - 128
2288337	Toxaphene	91.6	92.7	P/P	11 - 163

Reference Method: SM 4500 F-C-2011
Batch ID: P406175

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287650	Fluoride	102	101	P/P	92 - 107

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P406094

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2287601	Organic Carbon	93.6	91.6	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P405974

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287638	Turbidity	1.33	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406110

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287475	Chloride	0.810	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P406112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287475	Sulfate	0.570	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P406400

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287921	Ammonia-N	0.143	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P406229

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287894	Kjeldahl Nitrogen	4.16	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P406129

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287921	NO2NO3-N	0.810	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P406138

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2288211	Total-P	2.82	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P405949

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287895	O-Phosphate-P	0.623	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P406320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2288337	Chlordane	21.0	Spike	P	0 - 30
2288337	Toxaphene	1.22	Spike	P	0 - 30
LFB	Chlordane	5.52	LCS	P	0 - 30
LFB	Toxaphene	13.5	LCS	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P405967

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287765	Color (true)	4.18	Sample	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P406171

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287650	Total Alkalinity	1.33	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P406360

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287139	TDS	4.47	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P406175

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287650	Fluoride	0.473	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P406094

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2287601	Organic Carbon	1.18	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2287925
Field Sample ID: 21030071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	81.2	P	29 - 92.0
EPA 8276	PCNB	88.8	P	43 - 134

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A106110
Included Lab Sample IDs: 2287920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Sulfate	98.7	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A108693
Included Lab Sample IDs: 2287922

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

Reference Method: SM 2120 B-2011
Run ID: A108696
Included Lab Sample IDs: 2287920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A108699
Included Lab Sample IDs: 2287920

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

Reference Method: SM 5310 B-2011
Run ID: A108767
Included Lab Sample IDs: 2287921

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.9	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A108779
Included Lab Sample IDs: 2287921

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

Reference Method: SM 2320 B-2011
Run ID: A108794
Included Lab Sample IDs: 2287920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.6	95.6	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A108794
Included Lab Sample IDs: 2287920

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A108882
Included Lab Sample IDs: 2287921

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.1	99.6	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A108904
Included Lab Sample IDs: 2287925

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.8		P	80 - 120
Toxaphene	109		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A108913
Included Lab Sample IDs: 2287921

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.8	99.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A108931
Included Lab Sample IDs: 2287921

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.8	97.3	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						1.33	
EPA 300.0 Rev. 2.1	Chloride	98.1		98.2	97.1		0.810	
	Sulfate	96.8		97.4	98.6		0.570	
EPA 350.1 Rev. 2.0	Ammonia-N	95.0		99.0	99.2			0.143
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.4		100	106			4.16
EPA 353.2 Rev. 2.0	NO2NO3-N	104		97.1	96.1			0.810
EPA 365.1 Rev. 2.0	Total-P	102		102	106			2.82
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	97.6		93.9	94.6			0.623
EPA 8276	Chlordane	115	109	87.4	108	5.52		21.0
	Toxaphene	107	93.5	91.6	92.7	13.5		1.22
SM 2120 B-2011	Color (true)	101					4.18	
SM 2320 B-2011	Total Alkalinity	99.5					1.33	
SM 2540 C-2011	TDS						4.47	
SM 4500 F-C-2011	Fluoride	102		102	101			0.473
SM 5310 B-2011	Organic Carbon	95.4		93.6	91.6			1.18

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2287920
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2287920
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2287920
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2287921
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2287921
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2287921
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2287921
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2287922
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2287925
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2287920
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2287920
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2287920
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2287920
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2287920
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2287921

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	11/03/2021			11/03/2021 15:30	Khloe J Berg	2287920
EPA 300.0 Rev. 2.1	11/03/2021			11/05/2021 16:28	Roberta Tatti	2287920
EPA 350.1 Rev. 2.0	11/03/2021			11/16/2021 14:07	Ping Hua	2287921
EPA 351.2 Rev. 2.0	11/03/2021	11/10/2021 12:27	Benjamin T. Nordmann	11/12/2021 14:30	Alexandra J Mattheus	2287921
EPA 353.2 Rev. 2.0	11/03/2021			11/08/2021 12:39	Beverly Y. Sanders	2287921
EPA 365.1 Rev. 2.0	11/03/2021	11/08/2021 16:19	Simonne.V. Calhoun	11/09/2021 17:18	Sarah A Nixon	2287921
EPA 365.1 Rev. 2.0 dissolved	11/03/2021			11/03/2021 14:16	James L Waggerby	2287922
EPA 8276	11/03/2021	11/09/2021 09:00	Julie Wi	11/14/2021 09:49	Arthur Maknenko	2287925
SM 2120 B-2011	11/03/2021			11/03/2021 16:54	Benjamin T. Nordmann	2287920
SM 2320 B-2011	11/03/2021			11/05/2021 21:37	Dale L. Simmons	2287920
SM 2540 C-2011	11/03/2021			11/05/2021 15:08	Yijie Li	2287920
SM 2540 D-2011	11/03/2021			11/05/2021 15:35	Yijie Li	2287920
SM 4500 F-C-2011	11/03/2021			11/05/2021 21:37	Dale L. Simmons	2287920
SM 5310 B-2011	11/03/2021			11/05/2021 19:06	Khloe J Berg	2287921