

Chemical Analysis Report

NE-DIST-2021-07-23-02

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

Event Description: **Vilano Boat**
Request ID: **RQ-2021-07-05-34**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
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: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 19-AUG-2021 14:05



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: St. Augustine Inlet SE of Vilano Bt Rmp

Collection Date/Time: 07/22/2021 09:20

Field ID: G5NE0587

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2264848	EPA 180.1 Rev. 2.0	Turbidity	6.2	A	NTU	P401502	
	SM 2320 B-2011	Total Alkalinity	125	A	mg CaCO3/L	P401615	
	SM 2540 D-2011	TSS	22		mg/L	P401968	
	SM 4500 F-C-2011	Fluoride	1.3		mg F/L	P401617	
2264849	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P401886	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.26	I	mg N/L	P402409	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P401580	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P401692	
	SM 5310 B-2011	Organic Carbon	1.3	I	mg C/L	P401869	
2264850	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.005	I	mg P/L	P401482	

Sample Location: Salt Run Offshore From Lighthouse

Collection Date/Time: 07/22/2021 08:55

Field ID: 27010138

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2264839	EPA 180.1 Rev. 2.0	Turbidity	8.2		NTU	P401501	
	SM 2320 B-2011	Total Alkalinity	129		mg CaCO3/L	P401615	
	SM 2540 D-2011	TSS	17	A	mg/L	P401968	
	SM 4500 F-C-2011	Fluoride	1.3		mg F/L	P401617	
2264842	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P401886	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P402409	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P401580	
	EPA 365.1 Rev. 2.0	Total-P	0.074		mg P/L	P401691	
	SM 5310 B-2011	Organic Carbon	2.3		mg C/L	P401869	
2264845	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.035		mg P/L	P401482	

Sample Location: Sombrero Creek 50m Below Fork

Collection Date/Time: 07/22/2021 10:55

Field ID: 27010054

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2264840	EPA 180.1 Rev. 2.0	Turbidity	17		NTU	P401501	
	SM 2320 B-2011	Total Alkalinity	121		mg CaCO3/L	P401615	
	SM 2540 D-2011	TSS	30		mg/L	P401968	
	SM 4500 F-C-2011	Fluoride	1.1		mg F/L	P401617	
2264843	EPA 350.1 Rev. 2.0	Ammonia-N	0.076		mg N/L	P401886	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P402409	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P401580	
	EPA 365.1 Rev. 2.0	Total-P	0.094		mg P/L	P401691	
	SM 5310 B-2011	Organic Carbon	5.9		mg C/L	P401869	
2264846	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.040		mg P/L	P401482	

Sample Location: Ximanies Cr ~1 mi Upstrm of Mouth

Collection Date/Time: 07/22/2021 10:30

Field ID: 27010968

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2264841	EPA 180.1 Rev. 2.0	Turbidity	20		NTU	P401501	
	SM 2320 B-2011	Total Alkalinity	120		mg CaCO3/L	P401615	
	SM 2540 D-2011	TSS	51		mg/L	P401968	
	SM 4500 F-C-2011	Fluoride	1.2		mg F/L	P401617	
2264844	EPA 350.1 Rev. 2.0	Ammonia-N	0.054		mg N/L	P401886	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P402409	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P401580	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P401692	
	SM 5310 B-2011	Organic Carbon	4.8		mg C/L	P401869	
2264847	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.034		mg P/L	P401482	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P401501

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P401502

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401886

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402409

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P401580

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P401691

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P401692

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P401482

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

Reference Method: SM 2320 B-2011
Batch ID: P401615

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P401968

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P401617

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P401869

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401886

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: P402409

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: P401580

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: P401691

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P401692

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P401482

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

Reference Method: SM 2320 B-2011
Batch ID: P401615

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P401617

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.8		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P401869

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2264703	Ammonia-N	94.8	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402409

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2264828	Kjeldahl Nitrogen	108	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P401580

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2264842	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P401691

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2264739	Total-P	107	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P401692

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2265083	Total-P	108	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P401482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2264660	O-Phosphate-P	101	105	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P401617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2264848	Fluoride	95.4	96.2	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P401869

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2264739	Organic Carbon	95.9	96.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P401501

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264818	Turbidity	3.21	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P401502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264848	Turbidity	3.71	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P401886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264703	Ammonia-N	1.81	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P402409

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264828	Kjeldahl Nitrogen	0.686	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P401580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264842	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P401691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264739	Total-P	0.950	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P401692

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2265083	Total-P	0.971	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P401482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264660	O-Phosphate-P	4.08	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P401615

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264848	Total Alkalinity	0.423	Sample	P	0 - 5.2

Reference Method: SM 2540 D-2011
Batch ID: P401968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264839	TSS	4.65	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P401617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264848	Fluoride	0.495	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P401869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2264739	Organic Carbon	0.351	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A106800

Included Lab Sample IDs: 2264845, 2264846, 2264847, 2264850

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.7	97.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A106805

Included Lab Sample IDs: 2264839, 2264840, 2264841, 2264848

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A106846

Included Lab Sample IDs: 2264842, 2264843, 2264844, 2264849

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	101	100	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A106865

Included Lab Sample IDs: 2264839, 2264840, 2264841, 2264848

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	104	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A106865

Included Lab Sample IDs: 2264839, 2264840, 2264841, 2264848

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A106942

Included Lab Sample IDs: 2264842, 2264843, 2264844, 2264849

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.2	P/P	90 - 110
Total-P	99.2	99.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A106995

Included Lab Sample IDs: 2264842, 2264843, 2264844, 2264849

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.0	97.3	P/P	90 - 110
Organic Carbon	97.4	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A107003

Included Lab Sample IDs: 2264842, 2264843, 2264844, 2264849

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: A107003

Included Lab Sample IDs: 2264842, 2264843, 2264844, 2264849

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.8	95.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A107273

Included Lab Sample IDs: 2264842, 2264843, 2264844, 2264849

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	102	P/P	90 - 110
Kjeldahl Nitrogen	103	101	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 180.1 Rev. 2.0	Turbidity					3.21	
	Turbidity					3.71	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	94.8	97.2			1.81
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	108	107			0.686
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	101	101			0.0
EPA 365.1 Rev. 2.0	Total-P	109	107	108			0.950
	Total-P	109	108	107			0.971
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	101	105			4.08
SM 2320 B-2011	Total Alkalinity	103				0.423	
SM 2540 D-2011	TSS					4.65	
SM 4500 F-C-2011	Fluoride	99.8	95.4	96.2			0.495
SM 5310 B-2011	Organic Carbon	97.4	95.9	96.3			0.351

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2264839, 2264840, 2264841, 2264848
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2264842, 2264843, 2264844, 2264849
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2264842, 2264843, 2264844, 2264849
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2264842, 2264843, 2264844, 2264849
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2264842, 2264843, 2264844, 2264849
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2264845, 2264846, 2264847, 2264850
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2264839, 2264840, 2264841, 2264848
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2264839, 2264840, 2264841, 2264848
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2264839, 2264840, 2264841, 2264848
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2264842, 2264843, 2264844, 2264849

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	07/23/2021			07/23/2021 16:14	Sarah A Nixon	2264839, 2264840, 2264841, 2264848
EPA 350.1 Rev. 2.0	07/23/2021			08/03/2021 12:11	Roberta Tatti	2264842
	07/23/2021			08/03/2021 12:12	Roberta Tatti	2264843
	07/23/2021			08/03/2021 12:13	Roberta Tatti	2264844
	07/23/2021			08/03/2021 12:15	Roberta Tatti	2264849
EPA 351.2 Rev. 2.0	07/23/2021	08/13/2021 13:07	Madeline Gruver	08/16/2021 14:26	Virginia P. Brown	2264842
	07/23/2021	08/13/2021 13:07	Madeline Gruver	08/16/2021 14:28	Virginia P. Brown	2264843
	07/23/2021	08/13/2021 13:07	Madeline Gruver	08/16/2021 14:33	Virginia P. Brown	2264844
	07/23/2021	08/13/2021 13:07	Madeline Gruver	08/16/2021 14:35	Virginia P. Brown	2264849
EPA 353.2 Rev. 2.0	07/23/2021			07/27/2021 11:17	Beverly Y. Sanders	2264842
	07/23/2021			07/27/2021 11:23	Beverly Y. Sanders	2264843
	07/23/2021			07/27/2021 11:24	Beverly Y. Sanders	2264844
	07/23/2021			07/27/2021 11:25	Beverly Y. Sanders	2264849
EPA 365.1 Rev. 2.0	07/23/2021	07/29/2021 12:32	Simonne.V. Calhoun	07/30/2021 12:30	Shengyu Ding	2264842
	07/23/2021	07/29/2021 12:32	Simonne.V. Calhoun	07/30/2021 12:31	Shengyu Ding	2264843
	07/23/2021	07/29/2021 12:32	Simonne.V. Calhoun	07/30/2021 12:39	Shengyu Ding	2264844
	07/23/2021	07/29/2021 12:32	Simonne.V. Calhoun	07/30/2021 12:40	Shengyu Ding	2264849
EPA 365.1 Rev. 2.0 dissolved	07/23/2021			07/23/2021 13:59	Lipi Saha	2264845
	07/23/2021			07/23/2021 14:00	Lipi Saha	2264846
	07/23/2021			07/23/2021 14:01	Lipi Saha	2264847
	07/23/2021			07/23/2021 14:02	Lipi Saha	2264850
SM 2320 B-2011	07/23/2021			07/27/2021 21:13	Dale L. Simmons	2264848
	07/23/2021			07/27/2021 21:27	Dale L. Simmons	2264839
	07/23/2021			07/27/2021 21:42	Dale L. Simmons	2264840
	07/23/2021			07/27/2021 21:57	Dale L. Simmons	2264841
SM 2540 D-2011	07/23/2021			07/27/2021 14:56	Yijie Li	2264839, 2264840, 2264841, 2264848
SM 4500 F-C-2011	07/23/2021			07/27/2021 19:46	Dale L. Simmons	2264848
	07/23/2021			07/27/2021 20:00	Dale L. Simmons	2264839
	07/23/2021			07/27/2021 20:06	Dale L. Simmons	2264840
	07/23/2021			07/27/2021 20:11	Dale L. Simmons	2264841
SM 5310 B-2011	07/23/2021			08/03/2021 00:25	Madeline Gruver	2264842
	07/23/2021			08/03/2021 01:11	Madeline Gruver	2264843
	07/23/2021			08/03/2021 01:24	Madeline Gruver	2264844
	07/23/2021			08/03/2021 01:36	Madeline Gruver	2264849