

Chemical Analysis Report

NE-DIST-2021-02-12-02

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

Event Description: **Vilano Boat 2021**
Request ID: **RQ-2021-02-08-44**
Customer: **NE-DIST**
Project ID: **SMP**

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8800 Baymeadows Way West
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Date Certified: 08-MAR-2021 10:52



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: Sombrero Creek 50M Below Fork

Collection Date/Time: 02/11/2021 13:50

Field ID: 27010054

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225061	EPA 180.1 Rev. 2.0	Turbidity	8.8		NTU	P393727	
	EPA 300.0 Rev. 2.1	Bromide	58		mg Br/L	P394011	
	SM 2320 B-2011	Total Alkalinity	112		mg CaCO3/L	P394148	
	SM 2540 D-2011	TSS	18		mg/L	P394098	
	SM 4500 F-C-2011	Fluoride	0.99		mg F/L	P393805	
2225064	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P394069	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P393897	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393809	
	EPA 365.1 Rev. 2.0	Total-P	0.055		mg P/L	P393870	
	SM 5310 B-2011	Organic Carbon	5.4		mg C/L	P394374	
2225067	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.024		mg P/L	P393732	

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: Salt Run Offshore From Lighthouse

Collection Date/Time: 02/11/2021 10:55

Field ID: 27010138

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225062	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P393727	
	EPA 300.0 Rev. 2.1	Bromide	65		mg Br/L	P394011	
	SM 2320 B-2011	Total Alkalinity	122		mg CaCO3/L	P394148	
	SM 2540 D-2011	TSS	3	U	mg/L	P394098	
	SM 4500 F-C-2011	Fluoride	1.1		mg F/L	P393805	
2225065	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P394069	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	I	mg N/L	P393897	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P393809	
	EPA 365.1 Rev. 2.0	Total-P	0.051		mg P/L	P393870	
	SM 5310 B-2011	Organic Carbon	3.3		mg C/L	P394374	
2225068	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.036		mg P/L	P393732	

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: Ximanies CR ~1Mi upstrm of Mouth

Collection Date/Time: 02/11/2021 13:15

Field ID: 27010968

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225063	EPA 180.1 Rev. 2.0	Turbidity	8.4		NTU	P393727	
	EPA 300.0 Rev. 2.1	Bromide	59		mg Br/L	P394011	
	SM 2320 B-2011	Total Alkalinity	109	A	mg CaCO3/L	P394148	
	SM 2540 D-2011	TSS	14		mg/L	P394098	
	SM 4500 F-C-2011	Fluoride	1.0		mg F/L	P393805	
2225066	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P394069	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40	I	mg N/L	P393897	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393809	
	EPA 365.1 Rev. 2.0	Total-P	0.053		mg P/L	P393870	
	SM 5310 B-2011	Organic Carbon	4.9		mg C/L	P394374	
2225069	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.022		mg P/L	P393732	

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: St. Augustine Inlet SE of Vilano Bt. Rmp

Collection Date/Time: 02/11/2021 12:15

Field ID: G5NE0587

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2225070	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P393727	
	EPA 300.0 Rev. 2.1	Bromide	67		mg Br/L	P394011	
	SM 2320 B-2011	Total Alkalinity	111		mg CaCO3/L	P394148	
	SM 2540 D-2011	TSS	5	IA	mg/L	P394099	
	SM 4500 F-C-2011	Fluoride	1.2		mg F/L	P393805	
2225071	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P394069	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.27	I	mg N/L	P393897	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P393809	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P393870	
	SM 5310 B-2011	Organic Carbon	3.0		mg C/L	P394374	
2225072	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.011		mg P/L	P393732	

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: P393727

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394011

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394069

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393897

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393809

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393870

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393732

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

Reference Method: SM 2320 B-2011
Batch ID: P394148

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

Reference Method: SM 2540 D-2011
Batch ID: P394098

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P394099

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P393805

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P394374

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: P394011

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	99.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394069

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393897

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393809

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: P393870

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393732

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: P394148

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.4		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P393805

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.7		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P394374

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 300.0 Rev. 2.1
Batch ID: P394011

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224351	Bromide	95.5	96.8	P/P	90 - 110
2225313	Bromide	97.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394069

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224758	Ammonia-N	104	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393897

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225064	Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393809

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2224818	NO2NO3-N	95.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393870

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225071	Total-P	98.9	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225068	O-Phosphate-P	100	102	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P393805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225062	Fluoride	94.6	95.3	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P394374

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2225675	Organic Carbon	97.1	96.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P393727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224983	Turbidity	3.27	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P394011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224351	Bromide	0.855	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P394069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224758	Ammonia-N	0.134	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P393897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225064	Kjeldahl Nitrogen	0.960	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P393809

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2224818	NO2NO3-N	0.201	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P393870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225071	Total-P	3.41	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P393732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225068	O-Phosphate-P	0.730	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
Batch ID: P394148

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225063	Total Alkalinity	1.05	Sample	P	0 - 8.1

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-2011
Batch ID: P393805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225062	Fluoride	0.460	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P394374

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2225675	Organic Carbon	0.737	Spike	P	0 - 20

* 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: A103563

Included Lab Sample IDs: 2225061, 2225062, 2225063, 2225070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A103565

Included Lab Sample IDs: 2225067, 2225068, 2225069, 2225072

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.6	99.2	P/P	90 - 110
O-Phosphate-P	99.8	99.6	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A103596

Included Lab Sample IDs: 2225061, 2225062, 2225063, 2225070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.5	99.5	P/P	90 - 110
Fluoride	99.5	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A103599

Included Lab Sample IDs: 2225064, 2225065, 2225066, 2225071

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A103634

Included Lab Sample IDs: 2225064, 2225065, 2225066, 2225071

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A103651

Included Lab Sample IDs: 2225061, 2225062, 2225063, 2225070

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A103666

Included Lab Sample IDs: 2225064, 2225065, 2225066, 2225071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.2	99.7	P/P	90 - 110
Kjeldahl Nitrogen	99.7	103	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A103711

Included Lab Sample IDs: 2225064, 2225065, 2225066, 2225071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	98.4	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A103741

Included Lab Sample IDs: 2225061, 2225062, 2225063, 2225070

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.7	96.2	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A103844

Included Lab Sample IDs: 2225064, 2225065, 2225066, 2225071

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.3	93.3	P/P	90 - 110
Organic Carbon	98.4	95.3	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 SMP	MS
			LCS				
EPA 180.1 Rev. 2.0	Turbidity					3.27	
EPA 300.0 Rev. 2.1	Bromide	99.3	95.5	96.8	97.9		0.855
EPA 350.1 Rev. 2.0	Ammonia-N	95.8	104	103			0.134
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	106	107			0.960
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	95.2				0.201
EPA 365.1 Rev. 2.0	Total-P	105	102	98.9			3.41
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	100	102			0.730
SM 2320 B-2011	Total Alkalinity	97.4				1.05	
SM 4500 F-C-2011	Fluoride	96.7	94.6	95.3			0.460
SM 5310 B-2011	Organic Carbon	97.4	97.1	96.3			0.737

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2225061, 2225062, 2225063, 2225070
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2225061, 2225062, 2225063, 2225070
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2225064, 2225065, 2225066, 2225071
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2225064, 2225065, 2225066, 2225071
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2225064, 2225065, 2225066, 2225071
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2225064, 2225065, 2225066, 2225071
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2225067, 2225068, 2225069, 2225072
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2225061, 2225062, 2225063, 2225070
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2225061, 2225062, 2225063, 2225070
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2225061, 2225062, 2225063, 2225070
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2225064, 2225065, 2225066, 2225071

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	02/12/2021			02/12/2021 14:02	Yen Ta	2225061, 2225062, 2225063, 2225070
EPA 300.0 Rev. 2.1	02/12/2021			02/18/2021 19:22	Lipi Saha	2225061
	02/12/2021			02/18/2021 20:17	Lipi Saha	2225062
	02/12/2021			02/18/2021 20:35	Lipi Saha	2225063
	02/12/2021			02/18/2021 20:53	Lipi Saha	2225070
EPA 350.1 Rev. 2.0	02/12/2021			02/22/2021 16:44	Ping Hua	2225064
	02/12/2021			02/22/2021 16:45	Ping Hua	2225065
	02/12/2021			02/22/2021 16:46	Ping Hua	2225066
	02/12/2021			02/22/2021 16:48	Ping Hua	2225071
EPA 351.2 Rev. 2.0	02/12/2021	02/17/2021 12:55	Yen Ta	02/18/2021 18:14	Julia Storbeck	2225064
	02/12/2021	02/17/2021 12:55	Yen Ta	02/18/2021 18:26	Julia Storbeck	2225065
	02/12/2021	02/17/2021 12:55	Yen Ta	02/18/2021 18:28	Julia Storbeck	2225066
	02/12/2021	02/17/2021 12:55	Yen Ta	02/18/2021 18:29	Julia Storbeck	2225071
EPA 353.2 Rev. 2.0	02/12/2021			02/16/2021 09:29	Beverly Y. Sanders	2225064
	02/12/2021			02/16/2021 09:30	Beverly Y. Sanders	2225065
	02/12/2021			02/16/2021 09:31	Beverly Y. Sanders	2225066
	02/12/2021			02/16/2021 09:32	Beverly Y. Sanders	2225071
EPA 365.1 Rev. 2.0	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 13:38	Shengyu Wang	2225064
	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 13:39	Shengyu Wang	2225065
	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 13:40	Shengyu Wang	2225066
	02/12/2021	02/16/2021 18:52	Madeline Gruver	02/17/2021 13:41	Shengyu Wang	2225071
EPA 365.1 Rev. 2.0 dissolved	02/12/2021			02/12/2021 16:40	Julia Storbeck	2225068
	02/12/2021			02/12/2021 16:43	Julia Storbeck	2225067
	02/12/2021			02/12/2021 16:48	Julia Storbeck	2225069
	02/12/2021			02/12/2021 16:49	Julia Storbeck	2225072
SM 2320 B-2011	02/12/2021			02/20/2021 08:47	Dale L. Simmons	2225063
	02/12/2021			02/20/2021 09:08	Dale L. Simmons	2225061
	02/12/2021			02/20/2021 09:17	Dale L. Simmons	2225062
	02/12/2021			02/20/2021 09:27	Dale L. Simmons	2225070
SM 2540 D-2011	02/12/2021			02/15/2021 14:26	Yijie Li	2225061, 2225062, 2225063, 2225070
SM 4500 F-C-2011	02/12/2021			02/16/2021 01:28	Dale L. Simmons	2225062
	02/12/2021			02/16/2021 01:52	Dale L. Simmons	2225061
	02/12/2021			02/16/2021 02:38	Dale L. Simmons	2225063
	02/12/2021			02/16/2021 02:43	Dale L. Simmons	2225070
SM 5310 B-2011	02/12/2021			03/02/2021 04:04	Touraj Touran	2225064
	02/12/2021			03/02/2021 04:52	Touraj Touran	2225065
	02/12/2021			03/02/2021 05:13	Touraj Touran	2225066
	02/12/2021			03/02/2021 05:34	Touraj Touran	2225071