

Chemical Analysis Report

SO-DIST-2020-10-21-02

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

Event Description: **Oyster Bay**
Request ID: **RQ-2020-10-19-20**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 12-NOV-2020 14:02

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first few letters of the last name.

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: Enre11 at Huston Bay

Collection Date/Time: 10/20/2020 11:10

Field ID: G5SD0026

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203790	EPA 180.1 Rev. 2.0	Turbidity	3.7		NTU	P389057	
	EPA 300.0 Rev. 2.1	Bromide	16		mg Br/L	P389809	
	SM 2320 B-2011	Total Alkalinity	149	A	mg CaCO3/L	P389231	
	SM 2540 D-2011	TSS	3	IA	mg/L	P389611	
	SM 4500 F-C-2011	Fluoride	0.37		mg F/L	P389237	
2203793	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P389202	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.76		mg N/L	P389190	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.021		mg N/L	P389073	
	EPA 365.1 Rev. 2.0	Total-P	0.025		mg P/L	P389258	
	SM 5310 B-2011	Organic Carbon	13		mg C/L	P389221	
2203796	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P389050	

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: Enre9 Lopez River

Collection Date/Time: 10/20/2020 12:05

Field ID: G5SD0093

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203791	EPA 180.1 Rev. 2.0	Turbidity	5.7		NTU	P389057	
	EPA 300.0 Rev. 2.1	Bromide	22		mg Br/L	P389809	
	SM 2320 B-2011	Total Alkalinity	151		mg CaCO3/L	P389231	
	SM 2540 D-2011	TSS	7	I	mg/L	P389612	
	SM 4500 F-C-2011	Fluoride	0.47		mg F/L	P389237	
2203794	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P389202	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.73		mg N/L	P389190	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.014		mg N/L	P389073	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P389674	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P389223	
2203797	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.009	I	mg P/L	P389050	

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: Enre10 Lopez River

Collection Date/Time: 10/20/2020 12:25

Field ID: G5SD0092

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2203792	EPA 180.1 Rev. 2.0	Turbidity	6.6		NTU	P389057	
	EPA 300.0 Rev. 2.1	Bromide	30		mg Br/L	P389809	
	SM 2320 B-2011	Total Alkalinity	155		mg CaCO3/L	P389231	
	SM 2540 D-2011	TSS	8	I	mg/L	P389612	
	SM 4500 F-C-2011	Fluoride	0.62		mg F/L	P389237	
2203795	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P389216	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P389190	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.026		mg N/L	P389073	
	EPA 365.1 Rev. 2.0	Total-P	0.035		mg P/L	P389674	
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P389223	
2203798	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.01		mg P/L	P389050	

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: P389057

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389809

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389216

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389190

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389073

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389258

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389674

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389050

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P389231

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 D-2011
Batch ID: P389611

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P389612

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P389237

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P389221

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

Reference Method: SM 5310 B-2011
Batch ID: P389223

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: P389809

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389216

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389190

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389073

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: P389258

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389674

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389050

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.9		P	90 - 110

Reference Method: SM 2320 B-2011
Batch ID: P389231

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	93 - 104

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P389237

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.6		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P389221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	100		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P389223

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389809

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2204189	Bromide	105	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203427	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389216

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203973	Ammonia-N	97.2	99.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389190

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203793	Kjeldahl Nitrogen	101	108	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389073

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203634	NO2NO3-N	98.8	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389258

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2202958	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389674

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203794	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P389050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203796	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P389237

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203790	Fluoride	104	107	P/P	94 - 107

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P389221

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203673	Organic Carbon	99.3	100	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P389223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2203634	Organic Carbon	100	99.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P389057

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203632	Turbidity	0.766	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P389809

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2204189	Bromide	2.30	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389202

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203427	Ammonia-N	1.17	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P389216

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203973	Ammonia-N	1.32	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P389190

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203793	Kjeldahl Nitrogen	5.38	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P389073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203634	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389258

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2202958	Total-P	0.894	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P389674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203794	Total-P	0.771	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P389050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203796	O-Phosphate-P	0.786	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P389231

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203790	Total Alkalinity	0.296	Sample	P	0 - 8.1

Reference Method: SM 4500 F-C-2011
 Batch ID: P389237

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203790	Fluoride	1.91	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P389221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203673	Organic Carbon	0.759	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
 Batch ID: P389223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2203634	Organic Carbon	0.751	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: A101664

Included Lab Sample IDs: 2203796, 2203797, 2203798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.8	P/P	90 - 110
O-Phosphate-P	99.8	99.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A101666

Included Lab Sample IDs: 2203790, 2203791, 2203792

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.0	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A101675

Included Lab Sample IDs: 2203793, 2203794, 2203795

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101736

Included Lab Sample IDs: 2203793, 2203794

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	98.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A101740

Included Lab Sample IDs: 2203795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	95.4	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A101747

Included Lab Sample IDs: 2203793, 2203794, 2203795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	102	P/P	90 - 110
Organic Carbon	98.5	99.4	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A101749

Included Lab Sample IDs: 2203790, 2203791, 2203792

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.9	P/P	90 - 110
Total Alkalinity	98.9	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A101749

Included Lab Sample IDs: 2203790, 2203791, 2203792

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A101768

Included Lab Sample IDs: 2203793, 2203794, 2203795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	105	P/P	90 - 110
Kjeldahl Nitrogen	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101803

Included Lab Sample IDs: 2203793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.2	95.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A101986

Included Lab Sample IDs: 2203790, 2203791, 2203792

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A101996

Included Lab Sample IDs: 2203794, 2203795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	98.5	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					0.766	
EPA 300.0 Rev. 2.1	Bromide	105	105	100			2.30
EPA 350.1 Rev. 2.0	Ammonia-N	102	102	104			1.17
	Ammonia-N	98.8	97.2	99.7			1.32
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	101	108			5.38
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.5	98.8	98.8			0.0
EPA 365.1 Rev. 2.0	Total-P	103	103	104			0.894
	Total-P	108	107	107			0.771
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.9	101	102			0.786
SM 2320 B-2011	Total Alkalinity	103				0.296	
SM 4500 F-C-2011	Fluoride	98.6	104	107			1.91
SM 5310 B-2011	Organic Carbon	100	99.3	100			0.759
	Organic Carbon	99.0	100	99.4			0.751

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2203790, 2203791, 2203792
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2203790, 2203791, 2203792
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2203793, 2203794, 2203795
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2203793, 2203794, 2203795
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2203793, 2203794, 2203795
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2203793, 2203794, 2203795
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2203796, 2203797, 2203798
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2203790, 2203791, 2203792
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2203790, 2203791, 2203792
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2203790, 2203791, 2203792
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2203793, 2203794, 2203795

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	10/21/2020			10/21/2020 17:12	Samantha Davila	2203790, 2203791, 2203792
EPA 300.0 Rev. 2.1	10/21/2020			11/04/2020 19:51	Lipi Saha	2203790
	10/21/2020			11/04/2020 20:09	Lipi Saha	2203791
	10/21/2020			11/04/2020 20:28	Lipi Saha	2203792
EPA 350.1 Rev. 2.0	10/21/2020			10/24/2020 17:35	Ping Hua	2203793
	10/21/2020			10/24/2020 17:36	Ping Hua	2203794
	10/21/2020			10/25/2020 14:36	Ping Hua	2203795
EPA 351.2 Rev. 2.0	10/21/2020	10/23/2020 14:03	David Boose	10/26/2020 10:34	Elliott Rodriguez	2203793
	10/21/2020	10/23/2020 14:03	David Boose	10/26/2020 10:45	Elliott Rodriguez	2203794
	10/21/2020	10/23/2020 14:03	David Boose	10/26/2020 10:47	Elliott Rodriguez	2203795
EPA 353.2 Rev. 2.0	10/21/2020			10/22/2020 09:47	Beverly Y. Sanders	2203793
	10/21/2020			10/22/2020 09:48	Beverly Y. Sanders	2203794
	10/21/2020			10/22/2020 09:49	Beverly Y. Sanders	2203795
EPA 365.1 Rev. 2.0	10/21/2020	10/26/2020 13:20	Yen Ta	10/27/2020 15:29	Shengyu Wang	2203793
	10/21/2020	11/03/2020 12:37	Yen Ta	11/05/2020 14:40	Shengyu Wang	2203794
	10/21/2020	11/03/2020 12:37	Yen Ta	11/05/2020 14:41	Shengyu Wang	2203795
EPA 365.1 Rev. 2.0 dissolved	10/21/2020			10/21/2020 16:37	Blanca Fach	2203796
	10/21/2020			10/21/2020 16:46	Blanca Fach	2203797
	10/21/2020			10/21/2020 16:47	Blanca Fach	2203798
SM 2320 B-2011	10/21/2020			10/24/2020 10:14	Samantha Davila	2203790
	10/21/2020			10/24/2020 10:53	Samantha Davila	2203791
	10/21/2020			10/24/2020 12:00	Samantha Davila	2203792
SM 2540 D-2011	10/21/2020			10/26/2020 15:36	Yijie Li	2203790, 2203791, 2203792
SM 4500 F-C-2011	10/21/2020			10/24/2020 08:14	Samantha Davila	2203790
	10/21/2020			10/24/2020 09:21	Samantha Davila	2203791
	10/21/2020			10/24/2020 09:31	Samantha Davila	2203792
SM 5310 B-2011	10/21/2020			10/23/2020 21:50	Lauren Lees	2203793
	10/21/2020			10/24/2020 06:49	Lauren Lees	2203794
	10/21/2020			10/24/2020 07:01	Lauren Lees	2203795