

Chemical Analysis Report

NW-DIST-2020-07-16-01

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

Event Description: **Twin Lakes Run**
Request ID: **RQ-2020-07-13-53**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
Attn: Cheryl Bunch

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: 07-AUG-2020 18:42



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: TWIN LAKE

Collection Date/Time: 07/15/2020 11:35

Field ID: G3NW0215

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183463	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P385090	
	EPA 300.0 Rev. 2.1	Bromide	0.061		mg Br/L	P385583	MS
	SM 2320 B-2011	Total Alkalinity	58		mg CaCO3/L	P385001	
	SM 2540 D-2011	TSS	2	U	mg/L	P384911	
	SM 4500 F-C-2011	Fluoride	0.15		mg F/L	P385004	
2183466	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P384826	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.76		mg N/L	P384983	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P384914	
	EPA 365.1 Rev. 2.0	Total-P	0.40		mg P/L	P384880	
	SM 5310 B-2011	Organic Carbon	9.7		mg C/L	P384843	
2183469	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.33		mg P/L	P384789	

Sample Location: COLEMAN LAKE

Collection Date/Time: 07/15/2020 12:05

Field ID: G3NW0216

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183464	EPA 180.1 Rev. 2.0	Turbidity	14		NTU	P385090	
	EPA 300.0 Rev. 2.1	Bromide	0.018	I	mg Br/L	P385583	MS
	SM 2320 B-2011	Total Alkalinity	53		mg CaCO3/L	P385001	
	SM 2540 D-2011	TSS	11	A	mg/L	P384911	
	SM 4500 F-C-2011	Fluoride	0.098	I	mg F/L	P385004	
2183467	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P384826	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.8		mg N/L	P384983	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P384914	
	EPA 365.1 Rev. 2.0	Total-P	0.25		mg P/L	P384880	
	SM 5310 B-2011	Organic Carbon	7.7		mg C/L	P384843	
2183470	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.076		mg P/L	P384788	

Sample Location: KELL-AIR LAKE

Collection Date/Time: 07/15/2020 11:55

Field ID: G3NW0217

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2183465	EPA 180.1 Rev. 2.0	Turbidity	14	A	NTU	P385091	
	EPA 300.0 Rev. 2.1	Bromide	0.017	I	mg Br/L	P385583	MS
	SM 2320 B-2011	Total Alkalinity	51		mg CaCO3/L	P385001	
	SM 2540 D-2011	TSS	9	I	mg/L	P384911	
	SM 4500 F-C-2011	Fluoride	0.10		mg F/L	P385004	
2183468	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P384826	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P384985	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P384914	
	EPA 365.1 Rev. 2.0	Total-P	0.17		mg P/L	P384880	
	SM 5310 B-2011	Organic Carbon	7.5		mg C/L	P384843	
2183471	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.020		mg P/L	P384788	

Ref. Method and Comment:

EPA 351.2 Rev. 2.0: 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: P385090

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385091

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385583

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384826

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384983

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384985

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P384914

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P384880

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P384788

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P384789

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

Reference Method: SM 2320 B-2011
Batch ID: P385001

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

Reference Method: SM 2540 D-2011
Batch ID: P384911

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P385004

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P384843

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: P385583

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384826

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384983

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384985

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P384914

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P384880

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P384788

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P384789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.5		P	90 - 110

Reference Method: SM 2320 B-2011
Batch ID: P385001

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P385004

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P384843

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.7		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385583

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183463	Bromide	90.8		P	90 - 110
2184296	Bromide	90.0	90.6	F/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384826

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183476	Ammonia-N	97.1	98.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384983

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183341	Kjeldahl Nitrogen	103	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P384914

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183348	NO2NO3-N	96.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P384880

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183466	Total-P	110	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P384788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183470	O-Phosphate-P	96.2	96.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P384789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183321	O-Phosphate-P	96.5	97.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Batch ID: P385004

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2184058	Fluoride	99.6	99.6	P/P	94 - 107

Reference Method: SM 5310 B-2011
Batch ID: P384843

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2183529	Organic Carbon	99.4	99.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385090

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183400	Turbidity	0.971	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183465	Turbidity	1.41	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P385583

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2184296	Bromide	0.600	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P384826

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183476	Ammonia-N	1.34	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384983

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183341	Kjeldahl Nitrogen	0.714	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P384985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183529	Kjeldahl Nitrogen	0.948	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P384914

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183348	NO2NO3-N	0.506	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P384880

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183466	Total-P	2.60	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P384788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183470	O-Phosphate-P	0.291	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P384789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183321	O-Phosphate-P	0.515	Spike	P	0 - 20

Reference Method: SM 2320 B-2011
 Batch ID: P385001

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2184058	Total Alkalinity	1.86	Sample	P	0 - 8.1

Reference Method: SM 2540 D-2011
 Batch ID: P384911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183464	TSS	3.51	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
 Batch ID: P385004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2184058	Fluoride	0.0	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
 Batch ID: P384843

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2183529	Organic Carbon	0.296	Spike	P	0 - 20

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-2011

Run ID: A100019

Included Lab Sample IDs: 2183463, 2183464, 2183465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.5	105	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A100019

Included Lab Sample IDs: 2183463, 2183464, 2183465

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A100044

Included Lab Sample IDs: 2183466, 2183467, 2183468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	98.8	P/P	90 - 110
Kjeldahl Nitrogen	108	105	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100047

Included Lab Sample IDs: 2183463, 2183464, 2183465

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100250

Included Lab Sample IDs: 2183463, 2183464, 2183465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	108	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A99941

Included Lab Sample IDs: 2183470, 2183471

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	96.5	97.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A99942

Included Lab Sample IDs: 2183469

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	97.3	96.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A99955

Included Lab Sample IDs: 2183466, 2183467, 2183468

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A99955

Included Lab Sample IDs: 2183466, 2183467, 2183468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	98.8	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A99964

Included Lab Sample IDs: 2183466, 2183467, 2183468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	103	98.3	P/P	90 - 110
Organic Carbon	98.3	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A99985

Included Lab Sample IDs: 2183466, 2183467, 2183468

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A99998

Included Lab Sample IDs: 2183466, 2183467, 2183468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.2	P/P	90 - 110
Total-P	99.2	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			Precision SMP	MS
			LCS				
EPA 180.1 Rev. 2.0	Turbidity					0.971	
	Turbidity					1.41	
EPA 300.0 Rev. 2.1	Bromide	95.0	90.0	90.6	90.8		0.600
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	97.1	98.6			1.34
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.6	103	102			0.714
	Kjeldahl Nitrogen	99.6					0.948
EPA 353.2 Rev. 2.0	NO2NO3-N	100	96.2				0.506
EPA 365.1 Rev. 2.0	Total-P	107	110	104			2.60
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.8	96.2	96.7			0.291
	O-Phosphate-P	97.5	96.5	97.1			0.515
SM 2320 B-2011	Total Alkalinity	104				1.86	
SM 2540 D-2011	TSS					3.51	
SM 4500 F-C-2011	Fluoride	102	99.6	99.6			0.0
SM 5310 B-2011	Organic Carbon	98.7	99.4	99.8			0.296

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2183463, 2183464, 2183465
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2183463, 2183464, 2183465
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2183466, 2183467, 2183468
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2183466, 2183467, 2183468
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2183466, 2183467, 2183468
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2183466, 2183467, 2183468
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2183469, 2183470, 2183471
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2183463, 2183464, 2183465
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2183463, 2183464, 2183465
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2183463, 2183464, 2183465
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2183466, 2183467, 2183468

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	07/16/2020			07/16/2020 16:02	Samantha Davila	2183463, 2183464, 2183465
EPA 300.0 Rev. 2.1	07/16/2020			07/29/2020 00:57	Julia Storbeck	2183463
	07/16/2020			07/29/2020 01:52	Julia Storbeck	2183464
	07/16/2020			07/29/2020 02:10	Julia Storbeck	2183465
EPA 350.1 Rev. 2.0	07/16/2020			07/19/2020 11:21	Ping Hua	2183466
	07/16/2020			07/19/2020 11:23	Ping Hua	2183467
	07/16/2020			07/19/2020 11:24	Ping Hua	2183468
EPA 351.2 Rev. 2.0	07/16/2020	07/22/2020 10:10	Jhamieka S. Greenwood	07/23/2020 13:45	Jhamieka S. Greenwood	2183466
	07/16/2020	07/22/2020 10:10	Jhamieka S. Greenwood	07/23/2020 13:47	Jhamieka S. Greenwood	2183467
	07/16/2020	07/22/2020 10:10	Jhamieka S. Greenwood	07/23/2020 14:26	Jhamieka S. Greenwood	2183468
EPA 353.2 Rev. 2.0	07/16/2020			07/21/2020 08:57	Beverly Y. Sanders	2183466
	07/16/2020			07/21/2020 08:58	Beverly Y. Sanders	2183467
	07/16/2020			07/21/2020 08:59	Beverly Y. Sanders	2183468
EPA 365.1 Rev. 2.0	07/16/2020	07/20/2020 13:21	Yen Ta	07/21/2020 11:06	Lipi Saha	2183466
	07/16/2020	07/20/2020 13:21	Yen Ta	07/21/2020 11:11	Lipi Saha	2183467
	07/16/2020	07/20/2020 13:21	Yen Ta	07/21/2020 11:12	Lipi Saha	2183468
EPA 365.1 Rev. 2.0 dissolved	07/16/2020			07/16/2020 16:02	Carlos Miranda	2183470
	07/16/2020			07/16/2020 16:04	Carlos Miranda	2183471
	07/16/2020			07/16/2020 17:44	Carlos Miranda	2183469
SM 2320 B-2011	07/16/2020			07/21/2020 22:09	Dale L. Simmons	2183463
	07/16/2020			07/21/2020 22:22	Dale L. Simmons	2183464
	07/16/2020			07/21/2020 22:34	Dale L. Simmons	2183465
SM 2540 D-2011	07/16/2020			07/17/2020 19:29	Madeline Gruver	2183463, 2183464, 2183465
SM 4500 F-C-2011	07/16/2020			07/21/2020 22:09	Dale L. Simmons	2183463
	07/16/2020			07/21/2020 22:22	Dale L. Simmons	2183464
	07/16/2020			07/21/2020 22:34	Dale L. Simmons	2183465
SM 5310 B-2011	07/16/2020			07/17/2020 22:11	David Boose	2183466
	07/16/2020			07/17/2020 22:26	David Boose	2183467
	07/16/2020			07/17/2020 23:07	David Boose	2183468