Chemical Analysis Report

WQAP-2017-02-21-04

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

Event Description: **RUN 1**
Request ID: **RQ-2017-02-20-60**
Customer: **WQAP**
Project ID: **SMP**

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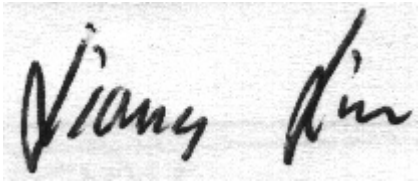
Certified by: Liang Lin, Environmental Administrator

Date Certified: 02-MAR-2017 16:19



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 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: Spring Bayou (Anclote River Complex) **Collection Date/Time: 02/20/2017 11:00**

Field ID: G5SW0078 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1874181	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P320213	
	SM 2320 B-97	Total Alkalinity	136		mg CaCO3/L	P320412	
	SM 2540 D-97	TSS	3	U	mg/L	P320621	
	SM 4500 F-C-97	Fluoride	0.92		mg F/L	P320421	
1874185	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P320321	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P320432	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P320352	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P320294	
	SM 5310 B-00	Organic Carbon	4.6		mg C/L	P320486	
1874189	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P320208	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Pitt River **Collection Date/Time: 02/20/2017 12:20**

Field ID: G5SW0029 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1874182	EPA 180.1 Rev. 2.0	Turbidity	1.8		NTU	P320213	
	SM 2320 B-97	Total Alkalinity	157		mg CaCO3/L	P320412	
	SM 2540 D-97	TSS	9	I	mg/L	P320621	
	SM 4500 F-C-97	Fluoride	0.68		mg F/L	P320421	
1874186	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P320321	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P320432	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.020		mg N/L	P320352	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P320294	
	SM 5310 B-00	Organic Carbon	5.9		mg C/L	P320486	
1874190	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320208	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: GOM SE **Collection Date/Time: 02/20/2017 12:50**

Field ID: G5SW0061 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1874183	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P320213	
	SM 2320 B-97	Total Alkalinity	156		mg CaCO3/L	P320412	
	SM 2540 D-97	TSS	3	U	mg/L	P320622	
	SM 4500 F-C-97	Fluoride	0.77		mg F/L	P320421	
1874187	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P320321	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P320432	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P320352	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P320294	
	SM 5310 B-00	Organic Carbon	5.9		mg C/L	P320486	
1874191	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320208	

Field ID: G5SW0061 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: GOM N **Collection Date/Time: 02/20/2017 14:30**

Field ID: G5SW0120 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1874184	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P320213	
	SM 2320 B-97	Total Alkalinity	159		mg CaCO3/L	P320412	
	SM 2540 D-97	TSS	3	U	mg/L	P320622	
	SM 4500 F-C-97	Fluoride	0.65		mg F/L	P320421	
1874188	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P320606	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.54		mg N/L	P320432	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.019		mg N/L	P320352	
	EPA 365.1 Rev. 2.0	Total-P	0.007	I	mg P/L	P320294	
	SM 5310 B-00	Organic Carbon	5.1		mg C/L	P320486	
1874192	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320208	

Ref. Method and Comment:
SM 2540 D-97: 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: P320213

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320321

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320606

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320432

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320352

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320294

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320208

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

Reference Method: SM 2320 B-97
Batch ID: P320412

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

Reference Method: SM 2540 D-97
Batch ID: P320621

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P320622

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P320421

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P320486

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: P320321

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320606

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320606

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320432

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: P320352

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320294

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320208

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

Reference Method: SM 2320 B-97
Batch ID: P320412

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P320421

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.6		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P320486

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874020	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320606

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874188	Ammonia-N	103	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320432

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874713	Kjeldahl Nitrogen	96.3	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320352

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874167	NO2NO3-N	101	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320294

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874187	Total-P	91.2	93.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320208

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874180	O-Phosphate-P	98.8	98.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P320421

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874009	Fluoride	94.8	95.5	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P320486

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1874110	Organic Carbon	95.2	94.8	P/P	85 - 115

Quality Assurance Report
Precision

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P320213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874165	Turbidity	3.84	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874020	Ammonia-N	0.0270	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320606

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874188	Ammonia-N	1.54	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320432

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874713	Kjeldahl Nitrogen	2.65	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320352

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874167	NO2NO3-N	5.59	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874187	Total-P	2.11	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320208

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874180	O-Phosphate-P	0.0816	Spike	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P320412

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874009	Total Alkalinity	0.231	Sample	P	0 - 4.8

Quality Assurance Report
Precision

Reference Method: SM 4500 F-C-97
Batch ID: P320421

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874009	Fluoride	0.473	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P320486

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1874110	Organic Carbon	0.376	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A74619
Included Lab Sample IDs: 1874189, 1874190, 1874191, 1874192

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A74620
Included Lab Sample IDs: 1874181, 1874182, 1874183, 1874184

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A74655
Included Lab Sample IDs: 1874185, 1874186, 1874187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	101	P/P	90 - 110
Ammonia-N	102	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A74669
Included Lab Sample IDs: 1874185, 1874186, 1874187, 1874188

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A74682
Included Lab Sample IDs: 1874185, 1874186, 1874187, 1874188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	97.8	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A74682
Included Lab Sample IDs: 1874185, 1874186, 1874187, 1874188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	98.5	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A74690
Included Lab Sample IDs: 1874181, 1874182, 1874183, 1874184

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A74690
Included Lab Sample IDs: 1874181, 1874182, 1874183, 1874184

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.0	98.6	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A74718
Included Lab Sample IDs: 1874185, 1874186, 1874187, 1874188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	96.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A74749
Included Lab Sample IDs: 1874185, 1874186, 1874187, 1874188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	97.9	P/P	90 - 110
Kjeldahl Nitrogen	97.9	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A74758
Included Lab Sample IDs: 1874188

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	103	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity					3.84	
EPA 350.1 Rev. 2.0	Ammonia-N	103	102	102			0.0270
	Ammonia-N	99.6	103	101			1.54

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	96.3	99.6			2.65
EPA 353.2 Rev. 2.0	NO2NO3-N	104	101	108			5.59
EPA 365.1 Rev. 2.0	Total-P	96.2	91.2	93.2			2.11
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	98.8	98.7			0.0816
SM 2320 B-97	Total Alkalinity	103				0.231	
SM 4500 F-C-97	Fluoride	96.6	94.8	95.5			0.473
SM 5310 B-00	Organic Carbon	96.8	95.2	94.8			0.376

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1874181, 1874182, 1874183, 1874184
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1874185, 1874186, 1874187, 1874188
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1874185, 1874186, 1874187, 1874188
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1874185, 1874186, 1874187, 1874188
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1874185, 1874186, 1874187, 1874188
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1874189, 1874190, 1874191, 1874192
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1874181, 1874182, 1874183, 1874184
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1874181, 1874182, 1874183, 1874184
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1874181, 1874182, 1874183, 1874184
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1874185, 1874186, 1874187, 1874188

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	02/21/2017			02/21/2017 15:21	Sima Feizi	1874181, 1874182, 1874183, 1874184
EPA 350.1 Rev. 2.0	02/21/2017			02/22/2017	Sofia Elnemr	1874185, 1874186, 1874187
	02/21/2017			02/27/2017	Sofia Elnemr	1874188
EPA 351.2 Rev. 2.0	02/21/2017	02/24/2017	Adrian Shelby	02/27/2017	Joseph Suarez	1874185, 1874186, 1874187, 1874188
EPA 353.2 Rev. 2.0	02/21/2017			02/23/2017	Beverly Y. Sanders	1874185, 1874186, 1874187, 1874188
EPA 365.1 Rev. 2.0	02/21/2017	02/22/2017	Vijayalakshmi Reddy	02/23/2017	Lipi Saha	1874185, 1874186, 1874187, 1874188
EPA 365.1 Rev. 2.0 dissolved	02/21/2017			02/21/2017 15:34	Julia Storbeck	1874189, 1874190
	02/21/2017			02/21/2017 15:35	Julia Storbeck	1874191
	02/21/2017			02/21/2017 15:36	Julia Storbeck	1874192
SM 2320 B-97	02/21/2017			02/23/2017	Dale L. Simmons	1874181, 1874182, 1874183, 1874184
SM 2540 D-97	02/21/2017			02/23/2017	Yijie Li	1874181, 1874182, 1874183, 1874184
SM 4500 F-C-97	02/21/2017			02/23/2017	Dale L. Simmons	1874181, 1874182, 1874183, 1874184
SM 5310 B-00	02/21/2017			02/24/2017	Julie Michelle Frank	1874185, 1874186, 1874187, 1874188