

Chemical Analysis Report

WQAP-2017-03-01-02

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

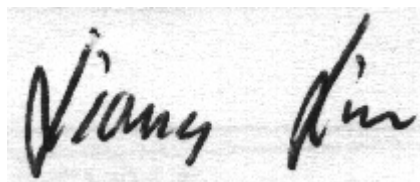
Event Description: **Lake Istokpoga**
Request ID: **RQ-2017-02-06-02**
Customer: **WQAP**
Project ID: **SPPROJECTS**

Send Reports to:
FL Dept. of Environmental Protection
2295 Victoria AVE
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 15-MAR-2017 13:30

A handwritten signature in black ink, appearing to read "Liang Lin", is written over a light gray, textured background.

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: LAKE ISTOKPOGA ALGAE CEN

Collection Date/Time: 02/28/2017 09:40

Field ID: G4SD0156

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876385	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P320747	
	SM 2120 B	Color (true)	75	A	PCU	P320757	
	SM 2540 D-97	TSS	20		mg/L	P321219	
1876389	EPA 350.1 Rev. 2.0	Ammonia-N	0.0078		mg N/L	P321051	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P320815	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P320991	
	EPA 365.1 Rev. 2.0	Total-P	0.083		mg P/L	P320927	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P320899	
1876393	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P320762	
	dissolved						

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: LAKE ISTOKPOGA ALGAE NE

Collection Date/Time: 02/28/2017 09:50

Field ID: G4SD0151

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876386	EPA 180.1 Rev. 2.0	Turbidity	7.5		NTU	P320747	
	SM 2120 B	Color (true)	74		PCU	P320757	
	SM 2540 D-97	TSS	17		mg/L	P321219	
1876390	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P321051	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P320815	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P320991	
	EPA 365.1 Rev. 2.0	Total-P	0.072		mg P/L	P320929	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P320899	
1876394	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P320762	
	dissolved						

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: LAKE ISTOKPOGA ALGAE SE

Collection Date/Time: 02/28/2017 09:20

Field ID: G4SD0154

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876387	EPA 180.1 Rev. 2.0	Turbidity	9.4		NTU	P320747	
	SM 2120 B	Color (true)	74		PCU	P320757	
	SM 2540 D-97	TSS	19		mg/L	P321220	
1876391	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P321051	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P320815	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P320991	
	EPA 365.1 Rev. 2.0	Total-P	0.080		mg P/L	P320929	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P320899	
1876395	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P320763	
	dissolved						

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: LAKE ISTOKPOGA ALGAE S

Collection Date/Time: 02/28/2017 09:00

Field ID: G4SD0153

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1876388	EPA 180.1 Rev. 2.0	Turbidity	9.3		NTU	P320747	
	SM 2120 B	Color (true)	74		PCU	P320757	
	SM 2540 D-97	TSS	20		mg/L	P321220	
1876392	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P321051	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P320883	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P320991	
	EPA 365.1 Rev. 2.0	Total-P	0.079		mg P/L	P320929	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P320899	
1876396	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P320763	

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: P320747

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321051

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320815

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320883

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320991

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320927

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320929

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320762

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320763

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

Reference Method: SM 2120 B
Batch ID: P320757

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2540 D-97
Batch ID: P321219

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P321220

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 5310 B-00
Batch ID: P320899

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: P321051

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320815

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320815

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320883

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320927

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320929

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.4		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320762

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320763

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

Reference Method: SM 5310 B-00
Batch ID: P320899

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876389	Ammonia-N	93.2	95.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320815

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876346	Kjeldahl Nitrogen	109	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876175	Kjeldahl Nitrogen	104	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876389	NO2NO3-N	107	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876305	Total-P	105	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320929

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876426	Total-P	101	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876310	O-Phosphate-P	96.3	98.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876395	O-Phosphate-P	96.5	97.4	P/P	90 - 110

Reference Method: SM 5310 B-00
Batch ID: P320899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1876173	Organic Carbon	98.6	99.8	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P320747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876378	Turbidity	3.19	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P321051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876389	Ammonia-N	1.80	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320815

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876346	Kjeldahl Nitrogen	2.90	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P320883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876175	Kjeldahl Nitrogen	0.216	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876389	NO2NO3-N	1.89	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876305	Total-P	4.25	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P320929

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876426	Total-P	4.67	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876310	O-Phosphate-P	1.80	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P320763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876395	O-Phosphate-P	0.928	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P320757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876385	Color (true)	0.465	Sample	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P320899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1876173	Organic Carbon	1.11	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 180.1 Rev. 2.0
Run ID: A74813
Included Lab Sample IDs: 1876385, 1876386, 1876387, 1876388

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

Reference Method: SM 2120 B
Run ID: A74814
Included Lab Sample IDs: 1876385, 1876386, 1876387, 1876388

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	95.3	94.7	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A74815
Included Lab Sample IDs: 1876393, 1876394, 1876395, 1876396

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

Reference Method: SM 5310 B-00
Run ID: A74870
Included Lab Sample IDs: 1876389, 1876390, 1876391, 1876392

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A74890

Included Lab Sample IDs: 1876389, 1876390, 1876391

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.7	96.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A74900

Included Lab Sample IDs: 1876392

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A74901

Included Lab Sample IDs: 1876389, 1876390, 1876391, 1876392

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A74902

Included Lab Sample IDs: 1876389, 1876390, 1876391, 1876392

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A74921

Included Lab Sample IDs: 1876389, 1876390, 1876391, 1876392

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.8	97.7	P/P	90 - 110
Ammonia-N	97.3	96.8	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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				3.19	
EPA 350.1 Rev. 2.0	Ammonia-N	104	93.2	95.2		1.80
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	109	104		2.90
	Kjeldahl Nitrogen	105	104	104		0.216
EPA 353.2 Rev. 2.0	NO2NO3-N	106	107	105		1.89
EPA 365.1 Rev. 2.0	Total-P	104	105	100		4.25
	Total-P	96.4	101	106		4.67
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5	96.3	98.5		1.80
	O-Phosphate-P	102	96.5	97.4		0.928
SM 2120 B	Color (true)				0.465	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	Precision
			LCS	SMP
SM 5310 B-00	Organic Carbon	100	98.6 99.8	MS 1.11

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1876385, 1876386, 1876387, 1876388
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1876389, 1876390, 1876391, 1876392
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1876389, 1876390, 1876391, 1876392
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1876389, 1876390, 1876391, 1876392
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1876389, 1876390, 1876391, 1876392
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1876393, 1876394, 1876395, 1876396
SM 2120 B / E31780	True Color measured at 450 nm	1876385, 1876386, 1876387, 1876388
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1876385, 1876386, 1876387, 1876388
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1876389, 1876390, 1876391, 1876392

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	03/01/2017			03/01/2017 15:14	Sima Feizi	1876385, 1876386, 1876387, 1876388
EPA 350.1 Rev. 2.0	03/01/2017			03/06/2017	Sofia Elnemr	1876389, 1876390, 1876391, 1876392
EPA 351.2 Rev. 2.0	03/01/2017	03/02/2017	Adrian Shelby	03/03/2017	Joseph Suarez	1876389, 1876390, 1876391
	03/01/2017	03/03/2017	Adrian Shelby	03/06/2017	Joseph Suarez	1876392
EPA 353.2 Rev. 2.0	03/01/2017			03/06/2017	Beverly Y. Sanders	1876389, 1876390, 1876391, 1876392
EPA 365.1 Rev. 2.0	03/01/2017	03/03/2017	Vijayalakshmi Reddy	03/06/2017	Lipi Saha	1876389, 1876390, 1876391, 1876392
EPA 365.1 Rev. 2.0 dissolved	03/01/2017			03/01/2017 14:34	Julia Storbeck	1876395
	03/01/2017			03/01/2017 15:19	Julia Storbeck	1876393
	03/01/2017			03/01/2017 15:20	Julia Storbeck	1876394
	03/01/2017			03/01/2017 15:21	Julia Storbeck	1876396
SM 2120 B	03/01/2017			03/01/2017 16:46	Julie Michelle Frank	1876385
	03/01/2017			03/01/2017 16:47	Julie Michelle Frank	1876386, 1876387
	03/01/2017			03/01/2017 16:48	Julie Michelle Frank	1876388
SM 2540 D-97	03/01/2017			03/03/2017	Yijie Li	1876385, 1876386, 1876387, 1876388
SM 5310 B-00	03/01/2017			03/02/2017	Julie Michelle Frank	1876389, 1876390, 1876391, 1876392