

Chemical Analysis Report

NW-DIST-2017-10-11-01

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

Event Description: **Lake Sampling WBID 61A 204A**

Request ID: **RQ-2017-10-09-65**

Customer: **NW-DIST**

Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government st
Suite 208A
Pensacola, FL 32502-5794
Attn: Michael King

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 02-NOV-2017 15:43



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: Sand Hammock Pond, Center

Collection Date/Time: 10/10/2017 12:30

Field ID: G3NW0077

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1935623	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P333192	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P333256	
		Sulfate	0.20	U	mg SO4/L	P333260	
	SM 2120 B	Color (true)	16	A	PCU	P333199	
	SM 2320 B-97	Total Alkalinity	4.5		mg CaCO3/L	P333537	
	SM 2540 C-97	TDS	15	U	mg/L	P333562	
	SM 2540 D-97	TSS	2	U	mg/L	P333544	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P333540	
1935625	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P333447	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37		mg N/L	P333583	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P333488	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P333300	
	SM 5310 B-00	Organic Carbon	4.3		mg C/L	P333899	
1935627	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P333215	

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: Blue Pond, Center

Collection Date/Time: 10/10/2017 13:40

Field ID: G3NW0070

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1935624	EPA 180.1 Rev. 2.0	Turbidity	0.75		NTU	P333192	
	EPA 300.0 Rev. 2.1	Chloride	2.9		mg Cl/L	P333256	
		Sulfate	0.85		mg SO4/L	P333260	
	SM 2120 B	Color (true)	5.2	I	PCU	P333199	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P333537	
	SM 2540 C-97	TDS	15	U	mg/L	P333562	
	SM 2540 D-97	TSS	2	U	mg/L	P333544	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P333540	
1935626	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P333447	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.20	I	mg N/L	P333583	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P333488	
	EPA 365.1 Rev. 2.0	Total-P	0.005	I	mg P/L	P333364	
	SM 5310 B-00	Organic Carbon	2.4		mg C/L	P333899	
1935628	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P333215	

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: P333192

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333256

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333260

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333447

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333583

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333488

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333300

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333364

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333215

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

Reference Method: SM 2120 B
Batch ID: P333199

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P333537

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

Reference Method: SM 2540 C-97
Batch ID: P333562

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P333544

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P333540

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P333899

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: P333256

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333260

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333447

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333583

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333583

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333488

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: P333300

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: P333364

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333215

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

Reference Method: SM 2320 B-97
Batch ID: P333537

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P333540

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.0		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P333899

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333256

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333256

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935541	Chloride	101		P	90 - 110
1935623	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935541	Sulfate	99.3		P	90 - 110
1935623	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333447

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935625	Ammonia-N	99.7	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333583

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935625	Kjeldahl Nitrogen	96.5	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333488

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935625	NO2NO3-N	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935611	Total-P	97.8	96.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333364

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935683	Total-P	101	99.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935628	O-Phosphate-P	98.0	97.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P333540

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935543	Fluoride	98.1	99.9	P/P	91 - 105

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P333899

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1935588	Organic Carbon	103		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P333192

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935581	Turbidity	1.67	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333256

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935541	Chloride	1.01	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P333260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935541	Sulfate	0.462	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P333447

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935625	Ammonia-N	1.06	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P333583

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935625	Kjeldahl Nitrogen	4.08	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P333488

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935625	NO2NO3-N	1.43	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333300

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935611	Total-P	0.768	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P333364

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935683	Total-P	1.22	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P333215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935628	O-Phosphate-P	0.717	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P333199

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935623	Color (true)	4.68	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P333537

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935543	Total Alkalinity	0.490	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P333562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935610	TDS	0.182	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P333540

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935543	Fluoride	1.48	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P333899

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1935588	Organic Carbon	0.154	Spike	P	0 - 20

Quality Assurance Report Precision

* 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 300.0 Rev. 2.1
Run ID: A79473
Included Lab Sample IDs: 1935623, 1935624

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	107	107	P/P	90 - 110
Chloride	108	106	P/P	90 - 110
Sulfate	103	102	P/P	90 - 110
Sulfate	104	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A79495
Included Lab Sample IDs: 1935623, 1935624

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

Reference Method: SM 2120 B
Run ID: A79497
Included Lab Sample IDs: 1935623, 1935624

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	104	102	P/P	85 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A79502
Included Lab Sample IDs: 1935627, 1935628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.7	99.7	P/P	90 - 110
O-Phosphate-P	99.5	98.4	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A79581
Included Lab Sample IDs: 1935625, 1935626

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A79597
Included Lab Sample IDs: 1935625, 1935626

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A79598
Included Lab Sample IDs: 1935625, 1935626

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.2	95.5	P/P	90 - 110
Total-P	99.5	101	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A79625
Included Lab Sample IDs: 1935623, 1935624

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

Reference Method: SM 4500 F-C-97
Run ID: A79625
Included Lab Sample IDs: 1935623, 1935624

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.6	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A79735
Included Lab Sample IDs: 1935625, 1935626

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.8	95.8	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A79756
Included Lab Sample IDs: 1935625, 1935626

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	97.3	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	LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity				1.67	
EPA 300.0 Rev. 2.1	Chloride	102	101 104		1.01	
	Sulfate	100	99.3 102		0.462	
EPA 350.1 Rev. 2.0	Ammonia-N	106	99.7 101			1.06
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.2	96.5 102			4.08
EPA 353.2 Rev. 2.0	NO2NO3-N	104	104 106			1.43
EPA 365.1 Rev. 2.0	Total-P	103	97.8 96.9			0.768
	Total-P	103	101 99.6			1.22
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	98.0 97.3			0.717
SM 2120 B	Color (true)				4.68	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
SM 2320 B-97	Total Alkalinity	102			0.490	
SM 2540 C-97	TDS				0.182	
SM 4500 F-C-97	Fluoride	97.0	98.1 99.9			1.48
SM 5310 B-00	Organic Carbon	98.0	103			0.154

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1935623, 1935624
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1935623, 1935624
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1935623, 1935624
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1935625, 1935626
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1935625, 1935626
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1935625, 1935626
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1935625, 1935626
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1935627, 1935628
SM 2120 B / E31780	True Color measured at 450 nm	1935623, 1935624
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1935623, 1935624
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1935623, 1935624
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1935623, 1935624
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1935623, 1935624
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1935625, 1935626

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	10/11/2017			10/11/2017 16:38	DeAsia Armster	1935623, 1935624
EPA 300.0 Rev. 2.1	10/11/2017			10/11/2017	Julia Storbeck	1935623
	10/11/2017			10/12/2017	Julia Storbeck	1935624
EPA 350.1 Rev. 2.0	10/11/2017			10/16/2017	Sofia Elnemr	1935625, 1935626
EPA 351.2 Rev. 2.0	10/11/2017	10/18/2017	Adrian Shelby	10/20/2017	Joseph Suarez	1935625, 1935626
EPA 353.2 Rev. 2.0	10/11/2017			10/17/2017	Beverly Y. Sanders	1935625, 1935626
EPA 365.1 Rev. 2.0	10/11/2017	10/13/2017	Sima Feizi	10/17/2017	Lipi Saha	1935625, 1935626
EPA 365.1 Rev. 2.0 dissolved	10/11/2017			10/11/2017 14:56	Megan Treadwell	1935628
	10/11/2017			10/11/2017 15:35	Megan Treadwell	1935627
SM 2120 B	10/11/2017			10/11/2017 16:13	Julia Storbeck	1935623
	10/11/2017			10/11/2017 16:18	Julia Storbeck	1935624
SM 2320 B-97	10/11/2017			10/17/2017	Dale L. Simmons	1935623, 1935624
SM 2540 C-97	10/11/2017			10/13/2017	DeAsia Armster	1935623, 1935624
SM 2540 D-97	10/11/2017			10/13/2017	DeAsia Armster	1935623, 1935624
SM 4500 F-C-97	10/11/2017			10/17/2017	Dale L. Simmons	1935623, 1935624
SM 5310 B-00	10/11/2017			10/23/2017	Ping Hua	1935625, 1935626