Chemical Analysis Report

SO-DIST-2018-05-17-01

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

Event Description: **Myakka Lakes**
Request ID: **RQ-2018-05-14-44**
Customer: **SO-DIST**
Project ID: **SMP**

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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: LakeMyakka(Upper)Middle **Collection Date/Time: 05/16/2018 10:15**

Field ID: G3SD0133 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1993430	EPA 180.1 Rev. 2.0	Turbidity	28		NTU	P345530	
	EPA 300.0 Rev. 2.1	Chloride	36		mg Cl/L	P345684	
		Sulfate	500		mg SO4/L	P345687	
	SM 2120 B	Color (true)	49		PCU	P345518	
	SM 2320 B-97	Total Alkalinity	9.3		mg CaCO3/L	P345912	
	SM 2540 C-97	TDS	870		mg/L	P345966	
	SM 2540 D-97	TSS	44		mg/L	P345807	
	SM 4500 F-C-97	Fluoride	0.32		mg F/L	P345915	
1993432	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P345850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.1		mg N/L	P345622	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P345735	
	EPA 365.1 Rev. 2.0	Total-P	0.33		mg P/L	P345662	
	SM 5310 B-00	Organic Carbon	20		mg C/L	P345777	
1993434	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.10		mg P/L	P345527	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Chloride: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: LakeMyakka(Lower)Middle **Collection Date/Time: 05/16/2018 12:15**

Field ID: G3SD0107 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1993431	EPA 180.1 Rev. 2.0	Turbidity	38		NTU	P345530	
	EPA 300.0 Rev. 2.1	Chloride	44		mg Cl/L	P345685	
		Sulfate	550		mg SO4/L	P345688	
	SM 2120 B	Color (true)	45		PCU	P345518	
	SM 2320 B-97	Total Alkalinity	32		mg CaCO3/L	P345912	
	SM 2540 C-97	TDS	928		mg/L	P345966	
	SM 2540 D-97	TSS	74		mg/L	P345807	
	SM 4500 F-C-97	Fluoride	0.31		mg F/L	P345915	
1993433	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P345850	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.9		mg N/L	P345622	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P345735	
	EPA 365.1 Rev. 2.0	Total-P	0.28		mg P/L	P345662	
	SM 5310 B-00	Organic Carbon	24		mg C/L	P345777	
1993435	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.017		mg P/L	P345527	

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P345530

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: P345684

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345685

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345687

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345688

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P345850

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P345622

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345735

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P345662

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P345527

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2120 B
Batch ID: P345518

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P345912

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

Reference Method: SM 2540 C-97
Batch ID: P345966

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P345807

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P345915

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P345777

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: P345684

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345685

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345687

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345687

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345688

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P345850

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P345622

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345735

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P345662

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P345527

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

Reference Method: SM 2320 B-97
Batch ID: P345912

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P345915

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.9		P	91 - 105

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P345777

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.9		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993304	Chloride	95.4		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345685

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993456	Chloride	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993304	Sulfate	97.6		P	90 - 110
1993350	Sulfate	97.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345688

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993456	Sulfate	100		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P345850

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993366	Ammonia-N	98.8	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P345622

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993365	Kjeldahl Nitrogen	101	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993357	NO2NO3-N	96.5	97.0	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P345662

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993366	Total-P	101	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P345527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993429	O-Phosphate-P	97.6	95.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P345915

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993351	Fluoride	94.7	94.1	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P345777

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1993428	Organic Carbon	94.0	96.1	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P345530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993427	Turbidity	4.39	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993304	Chloride	0.257	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345685

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993456	Chloride	2.70	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P345688

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993456	Sulfate	2.12	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P345850

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993366	Ammonia-N	1.41	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P345622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993365	Kjeldahl Nitrogen	3.96	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P345735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993357	NO2NO3-N	0.517	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P345662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993366	Total-P	2.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P345527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993429	O-Phosphate-P	1.44	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P345518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993309	Color (true)	2.72	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P345912

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993351	Total Alkalinity	0.289	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P345966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993456	TDS	3.31	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 2540 D-97
Batch ID: P345807

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993456	TSS	0.0	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P345915

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993351	Fluoride	0.474	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P345777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1993428	Organic Carbon	1.49	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: SM 2120 B
Run ID: A83981
Included Lab Sample IDs: 1993430, 1993431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A83983
Included Lab Sample IDs: 1993434, 1993435

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.3	98.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A83984
Included Lab Sample IDs: 1993430, 1993431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A84015
Included Lab Sample IDs: 1993430, 1993431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	99.7	P/P	90 - 110
Chloride	99.2	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A84015
Included Lab Sample IDs: 1993430, 1993431

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A84080
Included Lab Sample IDs: 1993432, 1993433

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

Reference Method: SM 5310 B-00
Run ID: A84096
Included Lab Sample IDs: 1993432, 1993433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.9	97.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A84116
Included Lab Sample IDs: 1993432, 1993433

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A84126
Included Lab Sample IDs: 1993432, 1993433

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A84131
Included Lab Sample IDs: 1993432, 1993433

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

Reference Method: SM 2320 B-97
Run ID: A84146
Included Lab Sample IDs: 1993430, 1993431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.3	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A84146
Included Lab Sample IDs: 1993430, 1993431

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

* 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					4.39	
EPA 300.0 Rev. 2.1	Chloride	97.7	95.4			0.257	
	Chloride	98.4	99.3			2.70	
	Sulfate	98.8	97.6	97.1			
	Sulfate	101	100			2.12	
EPA 350.1 Rev. 2.0	Ammonia-N	99.7	98.8	100			1.41
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	101	105			3.96
EPA 353.2 Rev. 2.0	NO2NO3-N	101	96.5	97.0			0.517
EPA 365.1 Rev. 2.0	Total-P	98.2	101	98.6			2.31
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103	97.6	95.7			1.44
SM 2120 B	Color (true)					2.72	
SM 2320 B-97	Total Alkalinity	102				0.289	
SM 2540 C-97	TDS					3.31	
SM 2540 D-97	TSS					0.0	
SM 4500 F-C-97	Fluoride	95.9	94.7	94.1			0.474
SM 5310 B-00	Organic Carbon	94.9	94.0	96.1			1.49

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1993430, 1993431
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1993430, 1993431
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1993430, 1993431
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1993432, 1993433
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1993432, 1993433
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1993432, 1993433
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1993432, 1993433
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1993434, 1993435
SM 2120 B / E31780	True Color measured at 450 nm	1993430, 1993431
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1993430, 1993431
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1993430, 1993431
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	1993430, 1993431
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1993430, 1993431
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1993432, 1993433

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	05/17/2018			05/17/2018 17:09	William L. Brown IV	1993430, 1993431
EPA 300.0 Rev. 2.1	05/17/2018			05/19/2018 03:31	Lipi Saha	1993430
	05/17/2018			05/19/2018 05:18	Lipi Saha	1993431
EPA 350.1 Rev. 2.0	05/17/2018			05/22/2018 11:03	Ping Hua	1993432
	05/17/2018			05/22/2018 11:04	Ping Hua	1993433
EPA 351.2 Rev. 2.0	05/17/2018	05/21/2018 12:00	Tanya Welborn	05/23/2018 15:43	Joseph Suarez	1993432
	05/17/2018	05/21/2018 12:00	Tanya Welborn	05/23/2018 15:45	Joseph Suarez	1993433
EPA 353.2 Rev. 2.0	05/17/2018			05/22/2018 12:01	Lauren Bottorf	1993432
	05/17/2018			05/22/2018 12:02	Lauren Bottorf	1993433
EPA 365.1 Rev. 2.0	05/17/2018	05/21/2018 13:05	Sima Feizi	05/23/2018 12:59	Beverly Y. Sanders	1993432
	05/17/2018	05/21/2018 13:05	Sima Feizi	05/23/2018 13:01	Beverly Y. Sanders	1993433
EPA 365.1 Rev. 2.0 dissolved	05/17/2018			05/17/2018 15:55	Megan Treadwell	1993434
	05/17/2018			05/17/2018 15:56	Megan Treadwell	1993435
SM 2120 B	05/17/2018			05/17/2018 14:26	Tanya Welborn	1993430
	05/17/2018			05/17/2018 14:27	Tanya Welborn	1993431
SM 2320 B-97	05/17/2018			05/24/2018 02:34	Dale L. Simmons	1993430
	05/17/2018			05/24/2018 02:44	Dale L. Simmons	1993431
SM 2540 C-97	05/17/2018			05/18/2018 16:00	William L. Brown IV	1993430, 1993431
SM 2540 D-97	05/17/2018			05/18/2018 16:00	William L. Brown IV	1993430, 1993431
SM 4500 F-C-97	05/17/2018			05/24/2018 02:34	Dale L. Simmons	1993430
	05/17/2018			05/24/2018 02:44	Dale L. Simmons	1993431
SM 5310 B-00	05/17/2018			05/21/2018 17:27	Megan Treadwell	1993432
	05/17/2018			05/21/2018 18:00	Megan Treadwell	1993433