Chemical Analysis Report

CEN-DIST-2017-02-14-03

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

Event Description: **Lady Lk/Lake Blue Springs**
Request ID: **RQ-2017-02-06-53**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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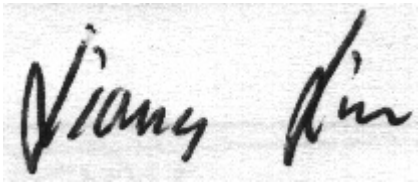
Certified by: Liang Lin, Environmental Administrator

Date Certified: 08-MAR-2017 13:27



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: Blue Springs (Lake County) @ Weir **Collection Date/Time: 02/13/2017 12:05**

Field ID: G1CE0024 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1872604	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P319840	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P320748	
		Sulfate	9.2		mg SO4/L	P320749	
	SM 2120 B	Color (true)	2.5	U	PCU	P319845	
	SM 2320 B-97	Total Alkalinity	105		mg CaCO3/L	P320108	
	SM 2540 C-97	TDS	166		mg/L	P320455	
	SM 2540 D-97	TSS	2	I	mg/L	P320385	
	SM 4500 F-C-97	Fluoride	0.078	I	mg F/L	P320111	
1872606	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P320018	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.082	I	mg N/L	P319860	
	EPA 353.2 Rev. 2.0	NO2NO3-N	3.0		mg N/L	P320174	
	EPA 365.1 Rev. 2.0	Total-P	0.034		mg P/L	P319962	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P320006	
1872608	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.034		mg P/L	P319831	

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: Lady Lake @ Center of North Lobe **Collection Date/Time: 02/13/2017 11:00**

Field ID: G4CE0139 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1872605	EPA 180.1 Rev. 2.0	Turbidity	4.9		NTU	P319840	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P320748	
		Sulfate	7.5		mg SO4/L	P320749	
	SM 2120 B	Color (true)	20		PCU	P319845	
	SM 2320 B-97	Total Alkalinity	1.9	I	mg CaCO3/L	P320108	
	SM 2540 C-97	TDS	54		mg/L	P320455	
	SM 2540 D-97	TSS	3	I	mg/L	P320385	
	SM 4500 F-C-97	Fluoride	0.051	I	mg F/L	P320111	
1872607	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P320018	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.84		mg N/L	P319860	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.062		mg N/L	P320174	
	EPA 365.1 Rev. 2.0	Total-P	0.019		mg P/L	P319962	
	SM 5310 B-00	Organic Carbon	6.4		mg C/L	P319910	
1872609	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P319831	

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: P319840

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: P320748

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P320749

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320018

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P319860

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320174

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P319962

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P319831

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

Reference Method: SM 2120 B
Batch ID: P319845

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P320108

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P320455

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P320385

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P320111

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P319910

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Reference Method: SM 5310 B-00
Batch ID: P320006

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: P320748

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P320749

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320018

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P319860

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: P319860

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320174

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P319962

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P319831

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.9		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P320108

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

Reference Method: SM 4500 F-C-97
Batch ID: P320111

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.4		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P319910

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.8		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P320006

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P320748

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: P320748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872535	Chloride	102		P	90 - 110
1872536	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P320749

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872535	Sulfate	99.7		P	90 - 110
1872536	Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872546	Ammonia-N	92.4	97.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P319860

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872502	Kjeldahl Nitrogen	107	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872545	NO2NO3-N	104	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P319962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872644	Total-P	96.1	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P319831

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872397	O-Phosphate-P	96.9	97.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P320111

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872640	Fluoride	101	101	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P319910

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872537	Organic Carbon	93.8	94.8	P/P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P320006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1872606	Organic Carbon	94.0	95.8	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P319840

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872610	Turbidity	5.57	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P320748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872535	Chloride	0.0333	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P320749

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872535	Sulfate	0.0711	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P320018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872546	Ammonia-N	3.95	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P319860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872502	Kjeldahl Nitrogen	1.38	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P320174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872545	NO2NO3-N	0.800	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P319962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872644	Total-P	0.321	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P319831

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872397	O-Phosphate-P	0.476	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P319845

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872639	Color (true)	2.50	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P320108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872640	Total Alkalinity	0.161	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P320455

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872485	TDS	6.29	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P320111

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872640	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P319910

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872537	Organic Carbon	0.557	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P320006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1872606	Organic Carbon	1.95	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 365.1 Rev. 2.0 dissolved
Run ID: A74465
Included Lab Sample IDs: 1872608, 1872609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.2	P/P	90 - 110
O-Phosphate-P	101	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A74468
Included Lab Sample IDs: 1872604, 1872605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	97.0	97.5	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A74469
Included Lab Sample IDs: 1872604, 1872605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	103	P/P	85 - 115

Reference Method: SM 5310 B-00
Run ID: A74499
Included Lab Sample IDs: 1872607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.8	96.1	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A74535
Included Lab Sample IDs: 1872606

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A74538
Included Lab Sample IDs: 1872606, 1872607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.8	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A74542
Included Lab Sample IDs: 1872606, 1872607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.8	98.0	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-97
Run ID: A74571
Included Lab Sample IDs: 1872604, 1872605

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

Reference Method: SM 4500 F-C-97
Run ID: A74571
Included Lab Sample IDs: 1872604, 1872605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A74582
Included Lab Sample IDs: 1872606, 1872607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A74601
Included Lab Sample IDs: 1872606, 1872607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A74765
Included Lab Sample IDs: 1872604, 1872605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	107	P/P	90 - 110
Sulfate	101	93.0	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					5.57	
EPA 300.0 Rev. 2.1	Chloride	104	102	101		0.0333	
	Sulfate	99.8	99.7	99.1		0.0711	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	92.4	97.3			3.95
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	107	105			1.38
EPA 353.2 Rev. 2.0	NO2NO3-N	107	104	105			0.800
EPA 365.1 Rev. 2.0	Total-P	95.0	96.1	95.8			0.321
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	96.9	97.7			0.476
SM 2120 B	Color (true)					2.50	
SM 2320 B-97	Total Alkalinity	103				0.161	

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
SM 2540 C-97	TDS					6.29	
SM 4500 F-C-97	Fluoride	98.4	101	101			0.0
SM 5310 B-00	Organic Carbon	93.8	93.8	94.8			0.557
	Organic Carbon	94.8	94.0	95.8			1.95

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1872604, 1872605
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1872604, 1872605
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1872604, 1872605
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1872606, 1872607
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1872606, 1872607
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1872606, 1872607
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1872606, 1872607
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1872608, 1872609
SM 2120 B / E31780	True Color measured at 450 nm	1872604, 1872605
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1872604, 1872605
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1872604, 1872605
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1872604, 1872605
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1872604, 1872605
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1872606, 1872607

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	02/14/2017			02/14/2017 15:27	Julie Michelle Frank	1872604, 1872605
EPA 300.0 Rev. 2.1	02/14/2017			02/28/2017	Ping Hua	1872604, 1872605
EPA 350.1 Rev. 2.0	02/14/2017			02/16/2017	Sofia Elnemr	1872606, 1872607
EPA 351.2 Rev. 2.0	02/14/2017	02/15/2017	Adrian Shelby	02/16/2017	Joseph Suarez	1872606, 1872607
EPA 353.2 Rev. 2.0	02/14/2017			02/21/2017	Beverly Y. Sanders	1872606, 1872607
EPA 365.1 Rev. 2.0	02/14/2017	02/16/2017	Adrian Shelby	02/20/2017	Lipi Saha	1872606, 1872607
EPA 365.1 Rev. 2.0 dissolved	02/14/2017			02/14/2017 15:16	Julia Storbeck	1872608
	02/14/2017			02/14/2017 15:25	Julia Storbeck	1872609
SM 2120 B	02/14/2017			02/14/2017 16:49	Julie Michelle Frank	1872604
	02/14/2017			02/14/2017 16:50	Julie Michelle Frank	1872605
SM 2320 B-97	02/14/2017			02/19/2017	Dale L. Simmons	1872604, 1872605
SM 2540 C-97	02/14/2017			02/17/2017	Yijie Li	1872604, 1872605
SM 2540 D-97	02/14/2017			02/17/2017	Yijie Li	1872604, 1872605
SM 4500 F-C-97	02/14/2017			02/19/2017	Dale L. Simmons	1872604, 1872605
SM 5310 B-00	02/14/2017			02/15/2017	Julie Michelle Frank	1872607
	02/14/2017			02/16/2017	Julie Michelle Frank	1872606