

Chemical Analysis Report

NE-DIST-2017-05-02-01

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

Event Description: **LSJR Southside**
Request ID: **RQ-2017-04-24-28**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way W
Suite 100
Jacksonville, FL 32256-7577
Attn: Nicole Frederick

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 26-MAY-2017 14:40

A handwritten signature in black ink, appearing to read "Liang Lin", on a light-colored 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: Butcher Pen Creek @ Wesconnet Rd

Collection Date/Time: 05/01/2017 10:05

Field ID: G2NE0768050117

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1895182	EPA 180.1 Rev. 2.0	Turbidity	4.4	A	NTU	P324454	
	EPA 300.0 Rev. 2.1	Chloride	390		mg Cl/L	P324790	
		Sulfate	59		mg SO4/L	P324793	
	SM 2120 B	Color (true)	46	A	PCU	P324413	
	SM 2320 B-97	Total Alkalinity	139		mg CaCO3/L	P325144	
	SM 2540 C-97	TDS	896		mg/L	P324878	
	SM 2540 D-97	TSS	4	I	mg/L	P324927	
	SM 4500 F-C-97	Fluoride	0.24		mg F/L	P325148	
1895184	EPA 350.1 Rev. 2.0	Ammonia-N	0.26		mg N/L	P324525	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.93		mg N/L	P324534	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P324607	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P324540	
	SM 5310 B-00	Organic Carbon	9.7		mg C/L	P324517	
1895186	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.058		mg P/L	P324409	

Sample Location: McCoy @ McDuff

Collection Date/Time: 05/01/2017 12:30

Field ID: G2NE0889050117

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1895183	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P324454	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P324790	
		Sulfate	47		mg SO4/L	P324793	
	SM 2120 B	Color (true)	17		PCU	P324413	
	SM 2320 B-97	Total Alkalinity	162		mg CaCO3/L	P325152	
	SM 2540 C-97	TDS	268		mg/L	P324878	
	SM 2540 D-97	TSS	2	U	mg/L	P324927	
	SM 4500 F-C-97	Fluoride	0.24		mg F/L	P325154	
1895185	EPA 350.1 Rev. 2.0	Ammonia-N	0.080		mg N/L	P324525	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P324534	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.043		mg N/L	P324607	
	EPA 365.1 Rev. 2.0	Total-P	0.090		mg P/L	P324540	
	SM 5310 B-00	Organic Carbon	5.4		mg C/L	P324517	
1895187	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.051		mg P/L	P324409	

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P324454

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: P324790

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324793

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324525

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324534

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324607

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324540

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324409

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

Reference Method: SM 2120 B
Batch ID: P324413

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P325144

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

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P325152

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

Reference Method: SM 2540 C-97
Batch ID: P324878

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P324927

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P325148

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P325154

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P324517

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: P324790

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324793

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324525

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324525

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324534

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324607

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: P324540

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: P324409

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

Reference Method: SM 2320 B-97
Batch ID: P325144

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

Reference Method: SM 2320 B-97
Batch ID: P325152

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

Reference Method: SM 4500 F-C-97
Batch ID: P325148

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.7		P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P325154

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.4		P	92 - 103

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-00
Batch ID: P324517

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895455	Chloride	101		P	90 - 110
1895456	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895455	Sulfate	102		P	90 - 110
1895456	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324525

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895264	Ammonia-N	104	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324534

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895168	Kjeldahl Nitrogen	94.5	95.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324607

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895214	NO2NO3-N	103	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324540

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895185	Total-P	98.0	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324409

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895234	O-Phosphate-P	96.4	94.5	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P325148

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1894180	Fluoride	99.4	98.8	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P325154

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1896336	Fluoride	95.1	96.4	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P324517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1894856	Organic Carbon	98.2	98.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P324454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895182	Turbidity	2.49	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895455	Chloride	0.0934	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895455	Sulfate	8.56	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324525

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895264	Ammonia-N	0.645	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895168	Kjeldahl Nitrogen	0.755	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324607

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895214	NO2NO3-N	1.88	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324540

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895185	Total-P	5.62	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324409

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895234	O-Phosphate-P	1.99	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P324413

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895182	Color (true)	5.89	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P325144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1894180	Total Alkalinity	0.132	Sample	P	0 - 4.8

Reference Method: SM 2320 B-97
Batch ID: P325152

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1896336	Total Alkalinity	0.472	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P324878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895150	TDS	7.73	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P324927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895150	TSS	7.69	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P325148

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1894180	Fluoride	0.483	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P325154

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1896336	Fluoride	0.960	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P324517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1894856	Organic Carbon	0.144	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: A76127
Included Lab Sample IDs: 1895186, 1895187

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.1	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A76130
Included Lab Sample IDs: 1895182, 1895183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	99.2	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A76139
Included Lab Sample IDs: 1895182, 1895183

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A76148
Included Lab Sample IDs: 1895182, 1895183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	105	105	P/P	90 - 110
Sulfate	104	98.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A76159

Included Lab Sample IDs: 1895184, 1895185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.2	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A76160

Included Lab Sample IDs: 1895184, 1895185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	104	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A76178

Included Lab Sample IDs: 1895184, 1895185

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A76208

Included Lab Sample IDs: 1895184, 1895185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	104	105	P/P	90 - 110
Total-P	105	104	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A76363

Included Lab Sample IDs: 1895182

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	104	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A76363

Included Lab Sample IDs: 1895182

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

Reference Method: SM 2320 B-97

Run ID: A76364

Included Lab Sample IDs: 1895183

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

Reference Method: SM 4500 F-C-97

Run ID: A76364

Included Lab Sample IDs: 1895183

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A76388
Included Lab Sample IDs: 1895184, 1895185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.8	95.6	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				2.49	
EPA 300.0 Rev. 2.1	Chloride	104	101 101		0.0934	
	Sulfate	100	102 102		8.56	
EPA 350.1 Rev. 2.0	Ammonia-N	103	104 105			0.645
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.3	94.5 95.6			0.755
EPA 353.2 Rev. 2.0	NO2NO3-N	107	103 105			1.88
EPA 365.1 Rev. 2.0	Total-P	103	98.0 105			5.62
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	96.4 94.5			1.99
SM 2120 B	Color (true)				5.89	
SM 2320 B-97	Total Alkalinity	104			0.132	
	Total Alkalinity	103			0.472	
SM 2540 C-97	TDS				7.73	
SM 2540 D-97	TSS				7.69	
SM 4500 F-C-97	Fluoride	98.7	99.4 98.8			0.483
	Fluoride	94.4	95.1 96.4			0.960
SM 5310 B-00	Organic Carbon	97.2	98.2 98.5			0.144

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1895182, 1895183
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1895182, 1895183
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1895182, 1895183
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1895184, 1895185
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1895184, 1895185
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1895184, 1895185
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1895184, 1895185
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1895186, 1895187
SM 2120 B / E31780	True Color measured at 450 nm	1895182, 1895183
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1895182, 1895183
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1895182, 1895183
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1895182, 1895183

Reference Method Descriptions

Method / DoH Cert #	Description	<u>Associated Samples</u>
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1895182, 1895183
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1895184, 1895185

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	05/02/2017			05/02/2017 17:37	Blanca Fach	1895182, 1895183
EPA 300.0 Rev. 2.1	05/02/2017			05/06/2017	Ping Hua	1895182, 1895183
EPA 350.1 Rev. 2.0	05/02/2017			05/03/2017	Julie Michelle Frank	1895184, 1895185
EPA 351.2 Rev. 2.0	05/02/2017	05/04/2017	Adrian Shelby	05/09/2017	Joseph Suarez	1895184, 1895185
EPA 353.2 Rev. 2.0	05/02/2017			05/04/2017	Beverly Y. Sanders	1895184, 1895185
EPA 365.1 Rev. 2.0	05/02/2017	05/04/2017	Adrian Shelby	05/05/2017	Christopher Armour	1895184, 1895185
EPA 365.1 Rev. 2.0 dissolved	05/02/2017			05/02/2017 14:44	Lipi Saha	1895186
	05/02/2017			05/02/2017 14:45	Lipi Saha	1895187
SM 2120 B	05/02/2017			05/02/2017 16:10	Julia Storbeck	1895182
	05/02/2017			05/02/2017 16:12	Julia Storbeck	1895183
SM 2320 B-97	05/02/2017			05/10/2017	Dale L. Simmons	1895182
	05/02/2017			05/11/2017	Dale L. Simmons	1895183
SM 2540 C-97	05/02/2017			05/03/2017	Yijie Li	1895182, 1895183
SM 2540 D-97	05/02/2017			05/03/2017	Yijie Li	1895182, 1895183
SM 4500 F-C-97	05/02/2017			05/10/2017	Dale L. Simmons	1895182
	05/02/2017			05/11/2017	Dale L. Simmons	1895183
SM 5310 B-00	05/02/2017			05/03/2017	Julie Michelle Frank	1895184, 1895185