Chemical Analysis Report

NE-DIST-2017-05-03-01

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**

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 26-MAY-2017 13:30

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: Williamson Cr. @ Jammes Rd. **Collection Date/Time: 05/02/2017 08:10**

Field ID: Williamson Cr. @ Jammes Rd. Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1895642	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P324597	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P324965	
		Sulfate	16		mg SO4/L	P324968	
	SM 2120 B	Color (true)	39		PCU	P324503	
	SM 2320 B-97	Total Alkalinity	85		mg CaCO3/L	P325237	
	SM 2540 C-97	TDS	148		mg/L	P325015	
	SM 2540 D-97	TSS	3	I	mg/L	P325257	
	SM 4500 F-C-97	Fluoride	0.083	I	mg F/L	P325275	
1895644	EPA 350.1 Rev. 2.0	Ammonia-N	0.10		mg N/L	P324531	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P324757	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P324674	
	EPA 365.1 Rev. 2.0	Total-P	0.073		mg P/L	P324543	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P324626	
1895646	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.069		mg P/L	P324557	

Ref. Method and Comment:
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Fishing Cr. @ Wesconnett **Collection Date/Time: 05/02/2017 09:40**

Field ID: Fishing Cr. @ Wesconnett Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1895643	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P324597	
	EPA 300.0 Rev. 2.1	Chloride	26		mg Cl/L	P324965	
		Sulfate	18		mg SO4/L	P324968	
	SM 2120 B	Color (true)	39		PCU	P324503	
	SM 2320 B-97	Total Alkalinity	104	A	mg CaCO3/L	P325237	
	SM 2540 C-97	TDS	188		mg/L	P325016	
	SM 2540 D-97	TSS	3	I	mg/L	P325257	
	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P325275	
1895645	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P324531	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.44		mg N/L	P324757	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.029		mg N/L	P324674	
	EPA 365.1 Rev. 2.0	Total-P	0.065		mg P/L	P324543	
	SM 5310 B-00	Organic Carbon	8.0		mg C/L	P324626	
1895647	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.053		mg P/L	P324557	

Ref. Method and Comment:
SM 5310 B-00: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P324597

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: P324965

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324968

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324531

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324757

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324674

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324543

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324557

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

Reference Method: SM 2120 B
Batch ID: P324503

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P325237

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: P325015

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P325016

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P325257

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P325275

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P324626

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: P324965

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324968

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	94.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324531

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324757

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: P324757

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324674

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324543

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324557

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.6		P	90 - 110

Reference Method: SM 2320 B-97
Batch ID: P325237

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

Reference Method: SM 4500 F-C-97
Batch ID: P325275

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.5		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P324626

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.0		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324965

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895492	Chloride	96.7		P	90 - 110
1895642	Chloride	96.8		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895492	Sulfate	93.3		P	90 - 110
1895642	Sulfate	95.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324531

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1892142	Ammonia-N	107	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324757

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895673	Kjeldahl Nitrogen	101	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324674

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895602	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895645	Total-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324557

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895496	O-Phosphate-P	97.9	98.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Batch ID: P325275

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1895643	Fluoride	102	102	P/P	91 - 105

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P324597

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895617	Turbidity	2.05	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324965

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895492	Chloride	1.15	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P324968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895492	Sulfate	1.89	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P324531

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1892142	Ammonia-N	1.62	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P324757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895673	Kjeldahl Nitrogen	0.779	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P324674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895602	NO2NO3-N	0.990	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P324543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895645	Total-P	0.764	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P324557

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895496	O-Phosphate-P	0.540	Spike	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P324503

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895672	Color (true)	12.1	Sample	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P325237

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895643	Total Alkalinity	0.358	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P325015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895492	TDS	8.11	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P325016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895618	TDS	5.15	Sample	P	0 - 10

Reference Method: SM 2540 D-97
Batch ID: P325257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895618	TSS	6.67	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P325275

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895643	Fluoride	0.480	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P324626

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1895504	Organic Carbon	0.255	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: A76157
Included Lab Sample IDs: 1895642, 1895643

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.2	100	P/P	85 - 115

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A76160
Included Lab Sample IDs: 1895644, 1895645

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A76165
Included Lab Sample IDs: 1895646, 1895647

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.4	97.3	P/P	90 - 110
O-Phosphate-P	99.9	99.4	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A76176
Included Lab Sample IDs: 1895642, 1895643

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: SM 5310 B-00
Run ID: A76189
Included Lab Sample IDs: 1895644, 1895645

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.0	94.2	P/P	90 - 110
Organic Carbon	98.6	98.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A76200
Included Lab Sample IDs: 1895644, 1895645

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A76208
Included Lab Sample IDs: 1895644, 1895645

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	104	106	P/P	90 - 110
Total-P	106	103	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A76269
Included Lab Sample IDs: 1895642, 1895643

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	102	P/P	90 - 110
Chloride	102	101	P/P	90 - 110
Sulfate	97.2	96.3	P/P	90 - 110
Sulfate	98.0	97.2	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-97
Run ID: A76396
Included Lab Sample IDs: 1895642, 1895643

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

Reference Method: SM 4500 F-C-97
Run ID: A76418
Included Lab Sample IDs: 1895642, 1895643

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	100	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					2.05	
EPA 300.0 Rev. 2.1	Chloride	97.9	96.7	96.8		1.15	
	Sulfate	94.2	93.3	95.3		1.89	
EPA 350.1 Rev. 2.0	Ammonia-N	102	107	105			1.62
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	101	99.3			0.779
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100	102			0.990
EPA 365.1 Rev. 2.0	Total-P	106	101	102			0.764
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.6	97.9	98.5			0.540
SM 2120 B	Color (true)					12.1	
SM 2320 B-97	Total Alkalinity	103				0.358	
SM 2540 C-97	TDS					8.11	
	TDS					5.15	
SM 2540 D-97	TSS					6.67	
SM 4500 F-C-97	Fluoride	98.5	102	102			0.480
SM 5310 B-00	Organic Carbon	97.0					0.255

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1895642, 1895643
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1895642, 1895643
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1895642, 1895643
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1895644, 1895645
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1895644, 1895645
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1895644, 1895645
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1895644, 1895645

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1895646, 1895647
SM 2120 B / E31780	True Color measured at 450 nm	1895642, 1895643
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1895642, 1895643
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1895642, 1895643
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1895642, 1895643
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1895642, 1895643
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1895644, 1895645

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	05/03/2017			05/03/2017 16:36	Blanca Fach	1895642, 1895643
EPA 300.0 Rev. 2.1	05/03/2017			05/09/2017	Ping Hua	1895642, 1895643
EPA 350.1 Rev. 2.0	05/03/2017			05/03/2017	Julie Michelle Frank	1895644, 1895645
EPA 351.2 Rev. 2.0	05/03/2017	05/08/2017	Adrian Shelby	05/10/2017	Joseph Suarez	1895644, 1895645
EPA 353.2 Rev. 2.0	05/03/2017			05/05/2017	Beverly Y. Sanders	1895644, 1895645
EPA 365.1 Rev. 2.0	05/03/2017	05/04/2017	Adrian Shelby	05/05/2017	Christopher Armour	1895644, 1895645
EPA 365.1 Rev. 2.0 dissolved	05/03/2017			05/03/2017 14:28	Anthony C. Onicha	1895647
	05/03/2017			05/03/2017 15:01	Anthony C. Onicha	1895646
SM 2120 B	05/03/2017			05/03/2017 15:46	Julia Storbeck	1895642
	05/03/2017			05/03/2017 15:47	Julia Storbeck	1895643
SM 2320 B-97	05/03/2017			05/12/2017	Dale L. Simmons	1895642, 1895643
SM 2540 C-97	05/03/2017			05/05/2017	Yijie Li	1895642, 1895643
SM 2540 D-97	05/03/2017			05/05/2017	Yijie Li	1895642, 1895643
SM 4500 F-C-97	05/03/2017			05/15/2017	Dale L. Simmons	1895642, 1895643
SM 5310 B-00	05/03/2017			05/03/2017	Julie Michelle Frank	1895644
	05/03/2017			05/04/2017	Julie Michelle Frank	1895645